THE INITIAL VALIDATION OF THE

BALANCED LIFE INVENTORY

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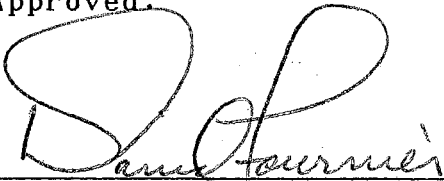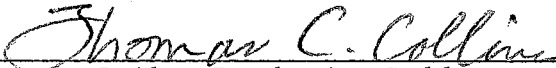the Degree of
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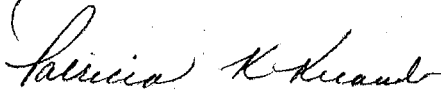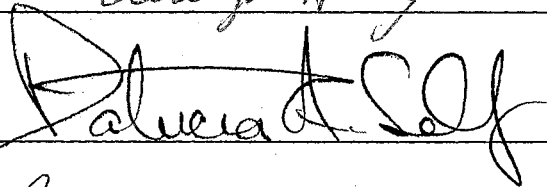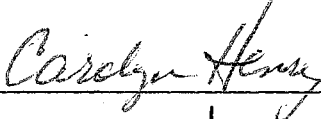
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The Initial Validation Of The

Balanced Life Inventory

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Abstract

The purpose of this study was the initial validation of the Balanced Life Inventory (BLI) which contains seven subscales: Family, Friends, Faith, Fortune, Fun, Fitness and Satisfaction. The sample consisted of 143 subjects. Results suggest that the subscales have acceptable reliability for research purposes with reported Cronbach's alpha estimates ranging from .76 on the FAITH scale to .93 on the FAMILY scale. Other scale reliability estimates were: FRIENDS (.83), FORTUNE (.82), FITNESS (.79), and SATISFACTION (.86). Subjects' self-ratings were correlated with their corresponding BLI scale scores at the $p<.001$ level of significance. Discriminate validity was documented by each subscale's ability to detect differences in subjects on one or more hypothesized background characteristics. The BLI subsales were correlated with previously established scales with related constructs. Each of the BLI scales correlated at the $p<.001$ level with at least one of their corresponding validation scales.

Introduction

The priorities established by families vary from household to household. Investments of personal resources such as time, energy, and money in each priority area are attempts to attain a level of life satisfaction (Dixon & Dixon, 1991). A shifting of priorities within a family is an attempt to maintain a certain balance of priorities for an optimal level of functioning within the family, while allowing for change and growth (Bedeian, Burke & Moffett, 1988; Hall, 1990).

Equivalent investments in each life priority are not necessary for maintaining a sense of life satisfaction. While families may be perceived as being out of balance to an observer, their priorities and methods of dealing with life circumstances may necessitate a unique adaptation which is quite functional for their situation, irrespective of other families' functioning (Baird, 1988; Stantberg & Worthing, 1992).

The family is a complex system with many subsystems interacting from within while simultaneously being affected by many outside influences. Due to this complexity of relationships, it becomes necessary for a diagnostician to determine which of the many possible aspects of family he/she may wish to assess. It is assumed that any one instrument will not be able to assess all aspects of the

family (Cromwell, Olson, & Fournier, 1976).

The assessment of a particular family on any number of possible dimensions is helpful to the clinician as he/she diagnoses a family's situation. The tools selected for such a diagnosis should provide a current assessment of the family on relevant family issues and dimensions.

A systemic approach to studying the family allows for a diversity of tools and techniques for examining the status of a family at any given point in time as well as assessing changes across time. Tools and techniques for assessing various systems levels have been and continue to be developed (Fredman & Sherman, 1987).

Background of the Problem

Previous measures have attempted to assess dimensions of the family including the concept of balance. One example is the "Family Adaptability And Cohesion Evaluation Scales III", (FACES). Moderation, or balance, of adaptability and cohesion is a central hypothesis derived from the Circumplex Model and addressed by FACES III (Olson, Russell & Sprenkle, 1983).

The dimensions of adaptability and cohesion as assessed by FACES III are two of many potential interrelated aspects which influence the quality of life in a family. Other scales assess attitudes, personality traits, communication effectiveness, and other such items of interest which could affect the family (Fredman & Sherman, 1987).

The number of dimensions, their combinations, and their relationships to each other appear to be limitless. The

instrument developed as a part of this study will propose a combination of dimensions assessing life satisfaction in six selected areas as perceived by participating subjects. The dimensions utilized in this study provide a unique combination not available in another instrument to date. The instrument was developed to provide an opportunity for individuals to assess their perception of life satisfaction related to family (Spanier, 1976; Glenn, 1990), friends (Scott, 1979; Staples, 1981; Ward, 1979), faith (Starr & Carnes, 1972; Curran, 1984), fortune (Cockrum & White, 1985), physical fitness (Stein, 1983; Stinnett, 1983), fun and recreation (Curran, 1983), as well as their overall life satisfaction. Development of an instrument assessing this combination of dimensions can provide a valuable perspective in family assessment.

<u>Statement of the Problem</u>

Marital satisfaction is one of the most widely researched topics in family studies (Spanier, 1976; Glenn, 1990). Quality of life, a global indicator of satisfaction, is a reflection of several dimensions of individual perspectives, priorities, and experiences. Dimensions of life satisfaction from the literature include leisure (Curran, 1983), friendship networks (Howard, 1978; Curran, 1983; Gubrium, 1975; National Opinion Research Center, 1979; Scott, 1979; Staples, 1981; Ward, 1979), family (Barnhill & Lonzo, 1978; Bowman, 1983; Deutscher, 1959; Howard, 1978),

spiritual life (Bachrach, 1980; Bowman, 1983; Curran, 1984; Starr & Carns, 1972; Stinnett, 1983), work and societal relations (Bailyn, 1970; Cockrum & White, 1985; Crouter, 1984; Curran, 1983; Hill, 1981; Hiller & Philliber, 1982; Hornung & McCullough, 1981; Houseneckt & Macke, 1981; Howard, 1978), and health issues (Cargon & Milko, 1982; Pearlin & Johnson, 1977; Stein, 1983; Stinnett, 1983; Verbrugge, 1979). The balance or imbalance among several selected priorities at any given time in a person's life may have an effect on individual life satisfaction and satisfaction within the family (Curran, 1983; Stinnett, 1983; Sussman & Steinmetz, 1987). The need for the construction of an instrument which would determine whether possible balance/imbalance among the above dimensions are related to general life satisfaction precipitated this study.

The construction of such an instrument, with a related profile, provides a visual representation of internalized perspectives when assessing dimensions of life satisfaction. The dimensions identified for this study were called "Family", "Friends", "Fortune", "Faith", "Fun", "Fitness" and "Satisfaction." Assessments from these dimensions are presented in a visual model that is intended to provide a means for individuals to assess whether particular imbalances in their lives are transitional or typify a functional state of existence for their lives. A

multidimensional instrument of this nature may assist clients and therapists in identifying sources of general satisfaction and dissatisfaction. Changes in one priority would have an effect in the other areas measured. The balance need not be symmetrical. Diversity of perspective relating to general life satisfaction of individuals may be examined. The need for an instrument to assess the past and present, real or ideal balance of life priorities is met through the construction and validation of this assessment tool.

The purpose of this study was the initial validation of the Balanced Life Inventory (BLI), which is an expansion of the Balanced Life Inventory (BLI) reported in this study in the form of a pilot project. The instrument is designed as a self-report inventory. The original BLI had 76 items measuring six subscales. The revised BLI has 84 items measuring seven subscales. The subscales are scored from an answer sheet and graphically drawn on a profile form which gives a visual description of the balance between the subscales.

Theoretical Rationale

The concept of balance is commonly found within the framework of systems theory applied to the family. The systems perspective suggests that stability and growth are two necessary aspects of family functioning. Understanding the relationships of selected dimensions of life

satisfaction could lead to growth of individual members while helping to maintain a certain degree of stability for the whole family (Phillips, 1980).

Stress management, as theorized by Selye (Allen, 1983), also suggests that physiological homeostasis is to be maintained as stressors are introduced into a person's life (Schafer, 1987). When life gets out of balance to an extreme extent, stress levels rise sometimes dramatically. Discovering the balance in a person's life can lead to learning and employing better coping skills, thus managing stress in a healthy manner (Allen, 1983).

Literature Review

Historically, instrument development has been directed towards individual assessment. Instruments designed specifically for family assessments were few. Family clinicians who used instruments such as the self-report type used instruments developed for the individual. They applied their findings to the family when possible (Cromwell, Olson, & Fournier, 1976). Psychometric procedures, particularly those used in scale construction related to the establishment of estimates of reliability and validity, have been utilized in family studies in the construction of instruments which are used for assessing whole family systems.

There are literally hundreds of tools used as instruments assessing a wide variety of concepts related to

family life. Instruments are used to measure various units of family systems including individual family members, marital dyads, partial families, or whole family units. Cromwell et al., (1976) identified by method and unit of assessment many of the instruments used as diagnostic measures in marital and family therapy.

Other compilations have been made of family assessment tools by Robinson and Shavers (1973) in "Measures of Social Psychological Attitudes." More than 125 listings were categorized by the constructs assessed by various tools. The main categories included the measurement of self-esteem and related constructs; internal-external locus of control; alienation and anomia; authoritarianism, dogmatism and related measures; other socio-political attitudes; values; general attitudes toward people; religious attitudes; and methodological scales.

More recent compilations of instruments for family measurement have been accomplished by Fredman and Sherman (1987) in which 35 currently used family assessment tools were described. In Touliatos, Perlmutter, and Straus's (1990) "Handbook of Family Measurement Techniques," more than 1,000 instruments are listed with brief descriptions of each. References are included which provide current researchers with the necessary information needed to locate instruments of interest.

The availability of such extensive lists of diagnostic

tools assists in the identification of measures appropriate for systemic assessment. There are a number of instruments used in family literature which measure balance. The Family Adaptability and Cohesion Evaluation Scale III (FACES III) is used to measure cohesion, adaptability, and communication in families. Extreme scores on each dimension are possible as well as moderate or balanced scores on the dimensions. There are many families who function very well whose scores may appear extreme to an observer. FACES was developed as a tool for clinical diagnosis and for specifying treatment goals with couples and families. Couples and whole families may use the instrument to assess their family as it is now or as they would like it ideally (Olson, 1979).

The Taylor-Johnson Temperament Analysis (T-JTA) is an instrument which assesses nine personality traits in relation to their opposites. Examples are measures of "depressive" to "light hearted" and "expressive-responsive" to "quiet". A symmetrical balance is not preferred. Some extreme scores are viewed as desirable. It is an intrapersonal personality inventory used widely in pre-marital, marital, career, and adolescent counseling. It is also helpful in assessing interpersonal issues such as communications, power structures in families, social compatibility, as well as examining trait patterns (Taylor & Morrison, 1984).

There are also observational assessments done by

clinicians using such techniques as the Kvebeck Family

Sculpture Technique (Cromwell, Fournier, & Kvebeck, 1980).

Figures are placed on the board in such a manner as to

describe closeness and other qualities of family relations.

They are placed by individuals and by whole families as the

family REALLY is or as they would like their family to be

IDEALLY. Who controls the sculpturing (decision making)

when done by consensus? Are decisions made through sharing

concerns with input from each family member, or is the

placement controlled by one or two members of the family to

the exclusion of some? Balance, in terms of family members'

influence is assessed by asking such questions.

Each of the existing instruments described here

contributes greatly to the diagnostic process. The

instruments do well in assessing specific relationships,

traits, or characteristics. The problem is that none is as

comprehensive as it could be in assessing the whole person

as it interrelates with the various aspects of the person's

life and life experiences.

More comprehensive tools have been constructed

providing a life view tapping many relationships and their

effects on one another. One such assessment tool is the

Prepare-Enrich Inventories. The Prepare-Enrich Inventories

(Olson, Fournier, & Druckman, 1982; Olson, Fournier, &

Druckman, 1979) as described by Fredman and Sherman (1987),

contain the following categories or subscales: Idealistic

Distortion, Realistic Expectations, Marital Satisfaction, Personality Issues, Communication, Conflict Resolution, Financial Management, Leisure Activities, Sexual Relationship, Children and Marriage, Family and Friends, Equalitarian Roles and Religious Orientation. These inventories are described as a comprehensive package of materials and procedures designed to meet the needs of professionals engaged in marriage preparation, marriage enrichment, and marriage therapy. These inventories are among the more comprehensive assessment tools available for couple assessment.

The Handbook of Measurements For Marriage And Family Therapy includes a description of instruments developed or revised since 1975. Certain directions for marriage and family instrumentation were described by the authors, Fredman and Sherman (1987). Those directions included a powerful thrust towards higher standards and greater rigor in research and practice. This is being promoted by professional associations, journal editors, the increasing number of family therapy doctoral programs in the universities, and state licensing laws.

The use of the instruments being developed and revised each year are of help to the researcher and the clinician to help gain insight into the family process and to help in improving family relationships and the quality of family life. The quality of the tools and the extent of what is

being measured is improving constantly. The use of instruments does help to evaluate and promote the therapeutic process.

Methodology

The purpose of this study is the initial validation of Balanced Life Inventory. There are seven subscales included in the Balanced Life Inventory. At this time, no other previously constructed instrument uses this exact combination of subscales. Therefore, it is not possible to correlate this instrument with any other single previously constructed measure.

The procedures used in the development of the Balanced Life Inventory are an extension and modification of those used by Spanier (1976) in the development of the Dyadic Adjustment Scale. Procedures used in this study include: the use of inter-rater judges who examined the original list of items for content validity; frequency distribution analysis and elimination of all items with low variance and high skewness; statistical procedures were used to examine differences in means between groups of subjects; and items were factor analyzed to assess the adequacy of the definitions used to describe the subscales.

Design

This study combined correlational and comparative designs as the data collected from the Balanced Life Inventory were correlated with previously developed scales

measuring similar constructs. Further correlational data were used to evaluate differences between demographic groups sampled. Descriptive data were generated in relation to subjects' gender, marital status, age, educational level, income level and numbers of children. The seven subscales: Family, Friends, Faith, Fortune, Fitness, Fun and Satisfaction will be used as a measure of both Balance and Satisfaction. A visual representation of the design follows.

Insert Figure 1 about here

A pilot study was conducted on the Balanced Life Inventory. A non-probability purposive sample of 101 subjects was used representing various ages, marital status, educational levels, and with varying numbers of children. Cronbach's alpha estimates of reliability on each subscale ranged from Fitness (.55) to Family (.77). The Guttman split-half reliability coefficients ranged from Fitness (.48) to Family (.76). The Spearman split-half reliability coefficients ranged from Fitness (.46) to Family (.77).

There were several changes made in the Balanced Life Inventory following the pilot study. Each item was analyzed in terms of the frequency of each response choice. Items skewed by responss of 80% or more in one direction were evaluated in terms of clarity and content.

Four judges, college professors of english, psychology, and education, were given a list of the subscale categories along with a definition of each. Each judge was asked to evaluate items by placing them in the category they individually determined they should be placed. Further examination of items followed when two or more judges suggested an item be placed in a category other than where it had previously been designated. Twelve items were then placed in alternative subscales. Eight new items were also created so that each subscale would contain fourteen items.

The response choices were examined with a number of alternative response formats being considered. It was determined that greater differences in subjects' perceptions might be identified with a broader range of response choices. A six-choice response format was adopted with choices ranging from "almost always true" (coded 1) to "almost always false" (coded 6).

Instrumentation

Definition of Terms

Measuring balance, by means of administering the Balanced Life Inventory, involves measuring seven subscales and interpreting their relationship to each other. The seven subscales are defined as follows:

Family is the degree of support, level of communication, closeness and love between the respondent and their immediate or extended family.

Friends is the degree one believes that his/her friends are available as a part of his/her supportive network, understanding, taking him/her seriously, stability of friendships and time spent with friends.

Faith is the degree of trust in God, friends, acquaintances, levels of optimism and feelings regarding one's self.

Fortune is the level of satisfaction with one's occupation, level of education, financial security, intelligence and experiencing of life's rewards.

Fitness is how one views his/her own physical health, levels of exercise, nutrition, sleep habits, thought processes, personal appearance, energy levels, amounts of aches and pains, and overall concerns about his/her health.

Fun is the amounts and types of fun and recreation one experiences as a part of his/her life-style, including time taken for relaxation, hobbies, laughter, and vacations.

Satisfaction is defined by the amount of fulfillment one expresses in certain designated items on each of the seven subscales.

The Balanced Life Inventory assesses each of the above constructs. Following are sample items from each subscale: "I often have trouble communicating with members of my family" (Family), "My friends do not care as much about me as I do about them (Friends), "Trusting others is usually difficult for me" (Faith), "I am as intelligent as most

others in my social world (Fortune), "I have adequate energy for the work I do on a regular basis" (Fitness), "My family has fun together on a regular basis" (Fun).

Balance as related to the Balanced Life Inventory is defined by the relationships between Family, Friends, Faith, Fortune, Fitness, Fun and Satisfaction as interpreted by the clinician with data from the Balanced Life Inventory Profile. The profile is a visual description of the relationships of the subscales. A model of the profile is on the following page.

Insert Figure 2 about here

Scale Description

There were eighty-four total items on the Balanced Life Inventory with fourteen items on each of the first six subscales. Items were answered by indicating responses on an answer sheet. Response choices range on a six-choice format from "almost always true" to "almost always false." The answer sheet contains a place for background information as well as a place for the respondent to answer each of the eighty-four items. The theoretical range of raw scores for each of the subscales was 14 to 84.

The four items from each subscale used to measure satisfaction were scored in a similar manner. The theoretical range of raw scores for the Satisfaction scale

was 24 to 144.

Validation Survey

A supplemental research questionnaire was constructed which measured similar constructs as the Balanced Life Inventory (BLI). This instrument was composed of previously established scales with high reliability and validity. The items from each of the scales selected were given to each subject. Scores from the supplemental questionnaire were correlated with the corresponding BLI scores. Following are descriptions of the scales used in the supplemental research questionnaire.

The Family and Friends scale from the Enrich Inventory was used in the validation survey (Olson, Fournier, & Druckman, 1982). It has a reported reliability of .79 (Alpha). ENRICH is used extensively by marriage counselors and clergy in marriage and family counseling. All ENRICH items used in the research survey were scored on a five point Likert type scale with scores ranging from "strongly agree" (1) to "disagree strongly" (5). A nine item version of the Cohesion scale from the Family Adaptability And Cohesion Evaluation Scales (FACES) (Olson, Portner, & Lavee, 1985), as described earlier, was also correlated with the BLI Family scores. Scores on the Family Hardiness Index were also correlated with the BLI Family subscale. This scale measures the characteristic of hardiness as a stress resistance and adaptation resource in family which would

function as a buffer or mediating factor in mitigating the effects of stressors and demands, and a facilitation of family adjustment and adaptation over time. The reported reliability of this scale is .82.

The Family and Friends scale from ENRICH, as described earlier, with a reliability reported at .79, and the Perceived Social Support-Friends (PSS-F) scales were correlated with the BLI Friends scale (Procidano & Heller, 1983). The Perceived Social Support-Friends scale has a reported reliability of .90. This scale is a measure of feelings and experiences which occur to most people in their relationships with friends (Procidano & Heller, 1983). This scale's twenty items were used.

The Religiosity scale from the Moos Family Environment Scale: Form R developed by Rudolph Moos was used and correlated with the scores on the BLI Faith scale. The Religious Orientation scale from the ENRICH were also used and correlated with the BLI Faith scale. The reported reliability of the Religious Orientation scale is .84.

The BLI Fortune scale scores were correlated with the Financial Management scale from ENRICH and with the Status Concern Scale (Robinson & Shaver, 1973). The scales reliability estimates were reported at .82 and .78 respectively. The Status Concern Scale attempts to measure attitudes toward status and mobility, that is, the value placed on symbols of status and in the attainment of higher

status (Robinson & Shaver, 1973).

The BLI Fitness scale was correlated with the Physical
Symptoms subscale of the Health and Stress Profile (HSP)
Scales (Stewart & Olson, 1988). The reported reliability of
this scale is .83. This scale measures health items related
to sleep, exercise, eating schedules, weight, overuse of
alcohol or smoking, and emotional stability. Scores are
based on a five point Likert type scoring with response
choices ranging from "almost never" (low) to "very often"
(high). The BLI Fitness scores were also correlated with
the Body Cathexis Scale which had reported split-half
reliabilities of .78 (males) and .83 (females) (Robinson &
Shaver, 1973). Twelve of the forty items dealing with
health issues were selected. They were scored on a five-
point Likert type scale from "very satisfied" (1) to "very
dissatisfied" (5).

The BLI Fun scale was correlated with scores from the
Leisure subscale on ENRICH. The reported reliability
estimate for this scale is .71. The 7 items from the
Recreation scale, a subscale of the Family Environment Scale
(F.E.S.), were also used and correlated with the BLI Fun
scale. These items were scored on a three point scale
ranging from "true or mostly true" (1) to "false or mostly
false" (3).

The BLI Satisfaction scale was correlated with the
Satisfaction scale from ENRICH. The reported reliability of

this scale is .86. All ten items were used and scored on a five point Likert type scale as described earlier. Various areas of marital satisfaction are assessed such as personality, personal habits, communication, decision making, conflict resolution, financial position, leisure activities, expressions of affection, religious beliefs and extended family relationships. The BLI Satisfaction scale was also correlated with the Depression scale on the Taylor Johnson Temperament Analysis (Taylor & Morrison, 1984). This instrument was described earlier. The reported reliability estimate of this scale were .86 for Guttman's split-half reliability.

Sample

The sample was selected to obtain descriptive and inferential statistics concerning the appropriate content of test items and not for the purpose of obtaining statistics describing a population of respondents. Given the empirical goal of sampling item content for instrument development purposes, the use of non-probability sampling was appropriate (Nunnally, 1967). The sample used in the present study was a purposive non-probability sample. No attempt was made to randomly select a group representative of a particular population for the purpose of generating predictions regarding a larger population. The use of purposive samples made it impossible to generalize beyond the characteristics of the group being studied or to

interpret findings by this study beyond the selected sample
(Kitson, Sussman, Williams, Zeehandelaar, Shickmaster, &
Steinburger, 1982). The non-probability sample used
included subjects selected from settings such as classrooms,
civic organizations, or neighborhoods that were readily
available to the researcher. Subjects were volunteers or
persons available to the researcher due to their mutual
involvement in some activity or group. The sample used in
this study was selected for the purpose of establishing
reliability and validity of the instrument.

Respondents were at least 17 years old and included
both males and females. Demographics requested on the
answer sheet included gender, marital status, age,
educational level, income level, and numbers of children.
The sample consisted of adult persons from college, church,
and the general public. The entire sample consisted of
volunteers.

The sample involved 143 subjects, a number greater than
ten times the number of items on each subscale, a minimum
standard recommended to provide an adequate sampling when
gathering data for the purpose of studying the content of
test items (Nunnally, 1967). The age of the subjects ranged
from 17 to 70. There were 70 males and 65 females.
Included were 73 single persons, 53 married, and 10 who
indicated they were either separated or divorced. The
occupations of participants were evenly divided between

white collar (46), blue collar (44) and students (43).
These and other demographics are listed in Table 1.

Insert Table 1 about here

Data Collection

Data collection was accomplished by having each of the
volunteer subjects answer the eighty-four test items
following precise instructions appearing on the answer
sheet. The background information requested appeared on
back of the answer sheet. Each subject was also requested
to complete a supplemental instrument constructed from
instruments with established reliability sufficient to use
for criterion-related validation. The items were presented
in the order presented above. All data collected were coded
by the researcher and assistants. All code sheets were
keypunched and then verified by comparing the original
questionnaires to the computer printouts.

Frequency Distribution

Each of the six subscales were reported with resulting
average scores. A table of the central tendency, standard
deviation and the theoretical and actual ranges of scores
for each subscale are reported in Table 2.

Insert Table 2 about here

The mean scores for each subscale are reported for the following subgroups: gender; age; marital status; number of children; educational level; income level; age of oldest child; and age of youngest child.

Statistics for Establishing Scale Reliability

Several types of reliability were reported in an attempt to establish the overall reliability of the instrument. Alpha reliability coefficients, Spearman-Brown and Guttman split-half reliability estimates were reported for each of the BLI subscales.

Item Analysis

The mean and standard deviation of each item was reviewed. Each scale's alpha reliability statistics were established and included a breakdown identifying the relative contribution of each item to the overall reliability of the scale.

Statistics for Establishing Scale Validity

Content Validity

A panel of four judges have previously examined each item on the Balanced Life Inventory. They made independent judgments as to which of the six identified constructs each item measures. Refinement or deletion of items was then made when two or more of the judges identified a particular

item as measuring a different construct than the scale construction had suggested.

Construct Validity

Factor analysis of the BLI scales was conducted. The purpose of this statistic was to determine the best linear combination of all scale items. Key statistics measured item communality, factor eigenvalues, and percentage of explained variance. This analysis was conducted on each of the seven subscales.

In addition, existing scales with established construct validity were correlated with the Balanced Life Inventory. These instruments were those included in the supplemental questionnaire as previously described.

Results

Each subscale category in the BLI had 14 items. Ten reflecting substantive issues and 4 reflecting satisfaction. The resulting scores ranged from 14-84. The four items from each of the six subscales assessing satisfaction were combined to create a separate score for satisfaction. The number of items, mean, standard deviation, theoretical range, actual range, range, mode and median scores for all versions of the six BLI subscales and satisfaction are reported in Table 3.

Insert Table 3 about here

Scale Reliability

Scale reliabilities were calculated using Cronbach's Alpha, Guttman Split-Half and Spearman Brown Equal Length reliability coefficients. Since the results were similar, only the Cronbach's alpha reliabilities for each of the 4, 10 and 14 item versions of each scale are reported on Table 3. The range of Alpha reliability ranged from .76 on the Faith scale to .93 on the Family scale. Other scale reliabilities' were: Friends (.83), Fortune (.82), Fitness (.79), Fun (.78), And Satisfaction (.86).

Scale Validity

Content validity was examined by having a panel of four inter-rater judges examine each item of the BLI. They made judgments as to which of the six identified scales each item would be placed. Refinement or deletion of items was then made when two or more of the inter-rater judges disagreed on the placement of items into categorical constructs. Criterion related validity was studied by comparing the self-rating scores on scale constructs respondents made with their corresponding scores on each of the BLI scales. Table 4 presents the results. Every correlation was at the $p < .001$ level.

Insert Table 4 about here

Correlations were also made comparing the BLI scores with their corresponding validation scale. Table 5 summarizes these results. All correlations were at the $p < .001$ level of significance with the exception of the Leisure-ENRICH scale which correlated with the BLI Fun scale at the $p < .002$ level of significance. The Status Concern Scale had a negative correlation of $-.16$ with the BLI Fortune scale suggesting that the scales measured different constructs.

Insert Table 5 about here

Reliability estimates are also reported for the validation scales. Cronbach's alpha, Guttman's lower bound, and Spearman's equal length estimates are reported in Table 6.

Insert Table 6 about here

Discriminate Validity

The respondents had a wide range of actual scores on all subscales, indicating that each of the subscales are capable of identifying differences between subjects. Each of the subscales did identify significant differences on one or more subject characteristics. Tables 7 and 8 report the results.

Insert Tables 7 & 8 about here

Factor Analysis

Factor analysis was run on each of the seven subscales to determine how many constructs each subscale measured. It was hypothesized that each subscale would measure only one construct. The results of this procedure are found in Tables 9 and 10. Factors with eigenvalues of 1 or more were identified. The items used in the FAMILY scale were found to only measure one construct. The other combinations of items used in the various BLI subscales were found to be measuring more than one construct as follows; FRIENDS (2), FAITH (3), FORTUNE (2), FITNESS (3), FUN (2), and SATISFACTION (7). The examination of the Scree plots, however, did not support the findings that there was more than one factor on the FRIENDS, FAITH, FORTUNE, FITNESS, and FUN subscales. The second or second and third factors with eigenvalues of 1 or more were not strong enough to identify them as constructs. Eigenvalues, percent of variance accounted for, and alpha are reported in Tables 9 and 10.

Insert Tables 9 & 10 about here

Discussion and Conclusions

Future refinements and research on the BLI could

benefit from a detailed analysis of the reliability and factor analysis results. The alpha reliability is already sufficient on all scales, ranging from .76 to .93, for research purposes. Administration of the BLI to a clinical sample for discriminate validity purposes would be very helpful in determining whether the instrument can identify differences between these groups of individuals.

It is suggested that data collection continue so that a large enough sample can be obtained to do an oblique rotation factor analysis on the whole instrument. The number of subjects required will be much greater than the sample presently used.

It appears that the BLI is capable of assessing individuals on the variables selected. Some encouraging aspects of the validation results to this point are the high correlations between the self-ratings of respondents with their scores on the BLI scales, the Cronbach's alpha results, the correlations between the BLI subscales and the validation scales and the prospects of improving the results of factor analysis through the elimination of the least effective items from each scale.

The revised instrument may be used as an assessment tool in counseling individuals, couples, or whole families. The profile is designed to provide a snapshot view of a family on the dimensions being assessed. It may be taken as an assessment of the family as it is or as persons would

like their family to be ideally. The instrument may also be used to combine individual profiles into a composite profile to provide an assessment of whole groups of persons who operate as a unit. Examples of such groups would be church groups, sales groups in such places as insurance agencies or fraternal oriented groups. Programming to meet needs of such groups may be influenced by such assessments.

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FAMILY


FRIENDS


FAITH


FORTUNE


FITNESS


FUN
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BALANCE

SATISFACTION

Note: definition of terms are
found on pages 18-19.

Independent Variables   Dependent Variables
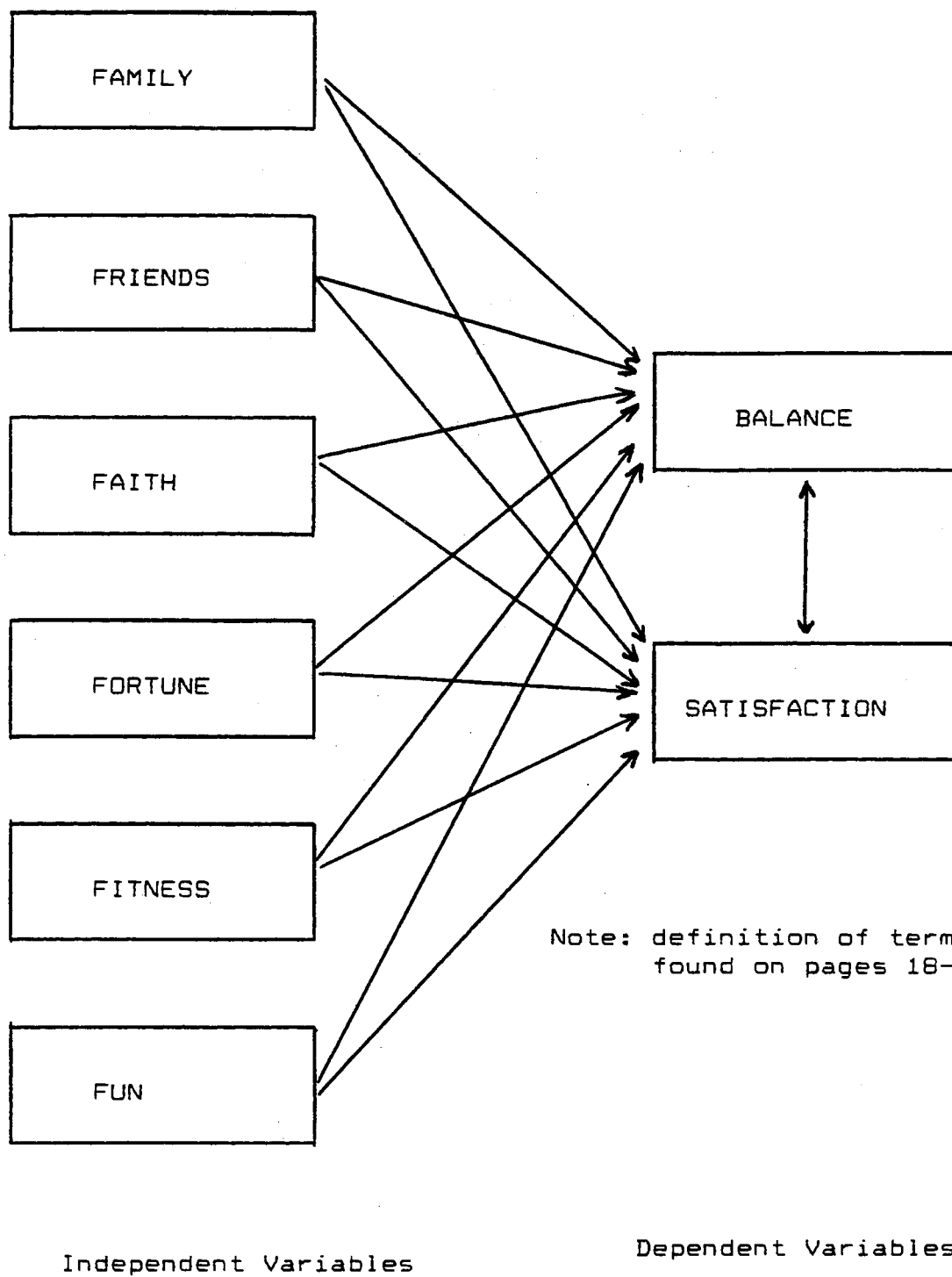
Figure 1. Proposed Variable Interrelationships
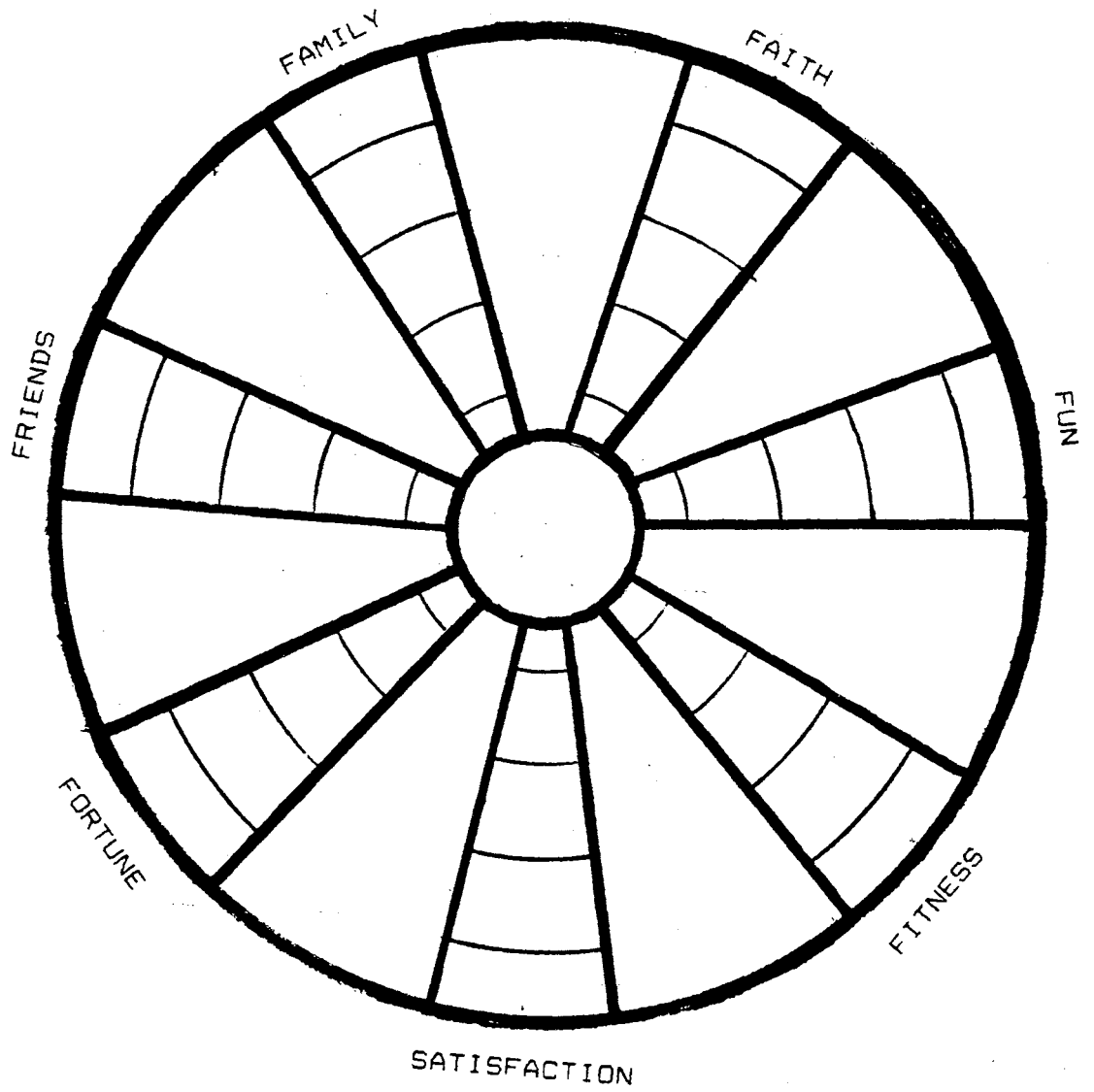
Figure 2. Balanced Life Inventory Profile

Table 1

Selected Background Characteristics of the Sample (N=143)

Characteristics	n	%
Gender of Respondents		
Male	70	52
Female	65	48
Age of Respondents		
20 years or younger	44	32
21-30 years	38	28
32-45 years	31	30
46-70 years	23	18
Marital Status		
Single	73	54
Married	53	39
Separated or		
Divorced	10	7
Occupation		
White Collar	46	35
Blue Collar	44	33
Student	43	32
Income Level		
Very comfortable	5	4
Comfortable	85	63
Uncomfortable	36	26
Very Uncomfortable	9	7
Education of Respondents		
High School or less	18	13
Some College	68	50
College Degree	50	37
Number of Children		
No Children	94	69
1-2 children	32	24
3 or more children	10	8
Age of Youngest Child		
1-11 years	14	25
13-20 years	19	34
21-39 years	21	41
Age of Oldest Child		
7 years or younger	18	34
8-19 years	18	34
21-50 years	17	32

Table 2

BLI Reliability and Empirical Scale Characteristics (14 & 24 item Scales)

	DESCRIPTIVE STATISTICS								RELIABILITY		
Scale Name	n of Items	M	SD	Theo-retical Range	Actual Range	Range	Mode	Median	Cron-bach's Alpha	Spear-man's Split-Half	Guttman
Family	14	57.0	11.8	14-84	26-81	53	54	56	.97	.90	.90
Friends	14	48.7	7.2	14-84	29-67	38	45	49	.82	.80	.79
Faith	14	55.6	6.5	14-84	37-68	31	57	57	.78	.81	.81
Fortune	14	51.3	7.7	14-84	30-71	41	51	51	.81	.70	.70
Fitness	14	50.0	6.2	14-84	29-73	44	46	50	.81	.79	.78
Fun	14	44.7	5.0	14-84	34-56	22	44	45	.78	.77	.77
Satisfaction	24	85.1	9.7	24-144	60-111	51	87	87	.87	.89	.89

Guttman (1945) Coefficient representing the lower bound of true reliability.

Table 3

Descriptive Statistics and Reliability For All 3 Version of the BLI Subscales and Satisfaction

Scale Name	n of Items	M	SD	Theoretical Range	Actual Range	Range	Mode	Median	Cronbach's Alpha
Family (Total)	14	57.0	11.8	14-84	76-81	53	54	56	.97
Family (Content)	10	41.6	9.4	10-60	16-60	44	36	41	.86
Family (Satisfaction)	4	17.9	4.6	4-24	4-24	20	23	19	.84
Friends (Total)	14	48.7	7.2	14-84	29-67	38	45	49	.82
Friends (Content)	10	41.8	6.5	10-60	25-56	31	39	42	.71
Friends (Satisfaction)	4	12.8	3.6	4-24	9-24	15	17	17	.50
Faith (Total)	14	55.6	6.5	14-84	37-68	31	57	57	.78
Faith (Content)	10	46.1	6.0	10-60	28-58	30	49	47	.72
Faith (Satisfaction)	4	16.2	3.3	4-24	8-24	16	16	16	.50
Fortune (Total)	14	51.3	7.7	14-84	30-71	41	51	51	.81
Fortune (Content)	10	37.9	7.4	10-60	13-59	46	34	37	.75
Fortune (Satisfaction)	4	17.5	3.6	4-24	9-24	15	20	18	.59
Fitness (Total)	14	50.0	6.2	14-84	29-73	44	46	50	.81
Fitness (Content)	10	38.4	7.6	10-60	16-59	43	45	42	.71
Fitness (Satisfaction)	4	15.8	3.8	4-24	4-23	19	17	16	.56
Fun (Total)	14	44.7	5.0	14-84	34-56	22	44	45	.78
Fun (Content)	10	41.7	7.5	10-60	18-57	39	45	42	.74
Fun (Satisfaction)	4	13.3	3.5	4-24	4-24	20	11	13	.52

Table 4

Association of BLI Scales with Respondents Self Ratings

BLI Scale	Self Rating	n of Subjects	Correlation Coefficient	Probability
Family	Family	135	.70	P < .001
Friends	Friends	135	.43	P < .001
Faith	Faith	135	.45	P < .001
Fortune	Fortune	135	.41	P < .001
Fitness	Fitness	135	.41	P < .001
Fun	Fun	135	.51	P < .001
Satisfaction	Satisfaction	134	.60	P < .001

Table 5

Association of BLI Scales with Validation Scales

BLI Scales	Validation Scales	n of Subjects	Correlation Coefficient	Probablity
Family	Friends-Enrich	128	.41	P<.001
	Family Hardiness*	143	.75	P<.001
	FACES**	143	.76	P<.001
Friends	Friends-Enrich	143	.37	P<.001
	Perceived Social Support-Friends	141	.49	P<.001
Faith	Moos-Religiosity	142	.26	P<.001
	Religion-Enrich	85	.49	P<.001
Fortune	Financial Management-Enrich	129	.47	P<.001
	Status Concern***	141	-.16	P<.02
Fitness	Physical Symptoms****	130	.52	P<.001
	Body Cathexis*****	115	.62	P<.001
Fun	Leisure-Enrich	124	.25	P<.002
	Moos-Recreation	115	.41	P<.001
Satisfaction	Satisfaction-Enrich Taylor Johnson-Depression	85	.61	P<.001
		142	.72	P<.001

* Family Hardiness Scale   *** Status Concern Scale   ***** Body Cathexis Scale
** 9 Item Version of Cohesion Scale **** Physical Symptoms Scale

Table 6

Reliability Of Validation Scales

BLI Scales	Validation Scales	Cronbach's Alpha	Guttman's Lower Bound	Spearman's Brown Equal Length
Family	Friends-Enrich	.75	.74	.74
	Family Hardiness	.77	.67	.67
	FACES*	.93	.88	.90
Friends	Friends-Enrich	.75	.74	.74
	Perceived Social Support-Friends	.83	.74	.83
Faith	Moos-Religiosity	.70	.43	.43
	Religion-Enrich	.79	.86	.88
Fortune	Financial Management-Enrich	.82	.85	.87
	Status Concern**	.82	.75	.75
Fitness	Physical Symptoms***	.70	.83	.84
	Body Cathexis****	.90	.90	.94
Fun	Leisure-Enrich	.61	.59	.60
	Moos-Recreation	.76	.78	.78
Satisfaction	Satisfaction-Enrich Taylor Johnson-Depression	.80	.80	.83
		.88	.88	.88

* 9 Item Version of Cohesion Scale *** Physical Symptoms Scale
** Status Concern Scale   **** Body Cathexis Scale

Table 7

Mean Comparisons on Background Characteristics for the 14 item BLI

Characteristic	n of cases	Family	Friends	Faith	Fortune	Fitness	Fun	Satisfac -tion
Gender:								
Male	70	M=55.6	M=47.6	M=55.4	M=50.4	M=49.9	M=45.2	M=84.8
Female	65	M=58.3	M=49.8	M=55.6	M=52.7	M=50.4	M=44.4	M=85.4
		F=1.68	F=3.19	F=.02	F=2.93	F=.21	F=.84	F=.14
		P=NS	P=NS	P=NS	P=NS	P=NS	P=NS	P=NS
Age: 20 and younger	44	M=55.2	M=46.1	M=52.8	M=50.4	M=49.7	M=45.6	M=83.5
21-30 years	38	M=57.3	M=48.3	M=55.5	M=52.2	M=49.2	M=45.0	M=84.6
32-45 years	31	M=55.6	M=49.2	M=57.5	M=50.5	M=50.1	M=44.0	M=84.8
46-70 years	23	M=60.8	M=52.9	M=57.9	M=53.8	M=52.3	M=44.4	M=89.5
		F=1.23	F=4.95	F=4.74	F=1.23	F=1.25	F=.67	F=2.05
		P=NS	P=.002	P=.003	P=NS	P=NS	P=NS	P=NS
Marital Status:								
Single	73	M=56.4	M=47.2	M=53.7	M=50.4	M=48.7	M=45.1	M=83.6
Married	53	M=57.6	M=50.5	M=57.5	M=52.7	M=52.0	M=44.3	M=87.1
Separated or	10	M=55.4	M=48.0	M=57.9	M=52.7	M=49.6	M=46.3	M=85.7
Divorced		F=.22	F=3.17	F=6.32	F=1.39	F=4.44	F=.83	F=2.01
		P=NS	P=NS	P=.002	P=NS	P=.01	P=NS	P=NS
Occupation:								
White Collar	46	M=60.3	M=50.3	M=57.3	M=50.9	M=49.2	M=43.0	M=86
Blue Collar	44	M=55.0	M=49.3	M=56.7	M=52.1	M=51.8	M=45.7	M=86.4
Student	43	M=54.7	M=46.2	M=52.6	M=51.3	M=49.6	M=45.8	M=83.2
		F=3.19	F=4.08	F=7.16	F=.26	F=2.22	F=4.6	F=1.41
		P=.04	P=.01	P=.001	P=NS	P=NS	P=.01	P=NS

Table 7 (Continued)

Characteristic	n of cases	Family	Friends	Faith	Fortune	Fitness	Fun	Satisfac-tion
Number of Children:								
No children	94	M=56.9	M=47.6	M=54.8	M=51.3	M=49.5	M=45.3	M=84.8
1 or 2 children	32	M=55.0	M=50.2	M=56.4	M=50.8	M=50.4	M=43.5	M=84.8
3 or more children	10	M=62.5	M=52.6	M=59.1	M=55.5	M=54.1	M=45	M=89.7
		F=1.50	F=3.40	F=2.33	F=1.49	F=2.42	F=1.5	F=1.17
		P=NS	P=.03	P=NS	P=NS	P=NS	P=NS	P=NS
Age of Youngest Child:								
1-11 years	14	M=56.6	M=49.9	M=57.5	M=54.1	M=52.6	M=45.1	M=87.8
13-20 years	19	M=55.4	M=48.9	M=56.7	M=49.9	M=50.3	M=43.8	M=83.8
20 years and older	21	M=60.2	M=54.0	M=59.1	M=53.5	M=51.47	M=44.8	M=89.2
		F=.79	F=4.37	F=.88	F=1.51	F=.49	F=.37	F=1.57
		P=NS	P=.01	P=NS	P=NS	P=NS	P=NS	P=NS
Age of Oldest Child:								
1-7 years	18	M=59.5	M=50.4	M=59.9	M=53.6	M=52.4	M=46.28	M=89.0
8-19 years	18	M=54.7	M=48.8	M=56.4	M=49.7	M=49.5	M=43.16	M=84.2
21-39 years	17	M=58.7	M=52.9	M=57.3	M=54.0	M=52.5	M=44.2	M=87.8
		F=.89	F=2.77	F=1.77	F=1.83	F=1.21	F=1.75	F=1.22
		P=NS	P=NS	P=NS	P=NS	P=NS	P=NS	P=NS
Income:								
Very Comfortable	5	M=62.4	M=50.4	M=62.4	M=62.4	M=55.6	M=48.4	M=94.6
Comfortable	85	M=58.5	M=49.4	M=56.1	M=53.2	M=50.8	M=45.0	M=86.2
Uncomfortable	36	M=54.2	M=47.2	M=54.1	M=47.7	M=48.7	M=43.3	M=82.6
Very Uncomfortable	9	M=48.8	M=43.4	M=51.7	M=45.1	M=45.7	M=47.6	M=78.6
		F=2.95	F=2.54	F=3.78	F=11.72	F=3.88	F=3.13	F=4.3
		P=.03	P=NS	P=.01	P=.001	P=.01	P=.02	P=.01
Education:								
High School or less	18	M=59.4	M=49.7	M=55.16	M=51.0	M=50.1	M=45.1	M=85.9
Some College	68	M=56.3	M=47.3	M=54.5	M=52.3	M=50.4	M=45.5	M=85.4
College Degree	50	M=56.7	M=49.8	M=56.9	M=50.6	M=49.3	M=44.0	M=84.5
		F=.48	F=2.01	F=1.99	F=.72	F=.63	F=1.33	F=.15
		P=NS	P=NS	P=NS	P=NS	P=.01	P=NS	P=NS

Table 8

Mean Comparisons on Background Characteristics for the 10 item BLI

Characteristic	n of cases	Family	Friends	Faith	Fortune	Fitness	Fun	Satisfac-tion
Gender:								
Male	70	M=42.1	M=43.3	M=45.5	M=39.0	M=39.8	M=38.0	M=84.7
Female	65	M=44.9	M=45.5	M=43.8	M=41.1	M=39.2	M=37.9	M=86.7
		F=2.04	F=3.07	F=.06	F=1.98	F=.14	F=.01	F=.64
		P=NS	P=NS	P=NS	P=NS	P=NS	P=NS	P=NS
Age: 20 and younger	44	M=41.8	M=42.5	M=41.2	M=36.8	M=39.5	M=38.8	M=83.1
21-30 years	38	M=43.8	M=44.8	M=43.3	M=41.1	M=38.5	M=38.2	M=84.7
32-45 years	31	M=42.8	M=44.2	M=44.9	M=39.7	M=39.0	M=35.7	M=84.8
46-70 years	23	M=45.9	M=47.0	M=45.9	M=44.8	M=41.7	M=39.1	M=92.4
		F=.69	F=1.87	F=4.29	F=5.22	F=.74	F=1.27	F=2.16
		P=NS	P=NS	P=.01	P=.001	P=NS	P=NS	P=NS
Marital Status:								
Single	73	M=42.9	M=43.7	M=41.9	M=37.9	M=38.7	M=38.6	M=83.5
Married	53	M=44.2	M=45.0	M=45.7	M=42.5	M=40.3	M=36.7	M=88.3
Separated or	10	M=41.5	M=44.8	M=44.9	M=42.1	M=40.6	M=40.0	M=85.2
Divorced		F=.31	F=.46	F=5.20	F=5.22	F=.64	F=1.31	F=1.58
		P=NS	P=NS	P=.01	P=.01	P=NS	P=NS	P=NS
Occupation:								
White Collar	46	M=46.9	M=46.3	M=45.8	M=41.3	M=39.9	M=37.7	M=89.1
Blue Collar	44	M=41.3	M=43.7	M=44.0	M=40.7	M=40.4	M=37.7	M=85.3
Student	43	M=41.4	M=42.8	M=40.9	M=37.8	M=38.7	M=38.3	M=82.4
		F=3.74	F=2.68	F=6.26	F=2.15	F=.45	F=.07	F=2.35
		P=.02	P=NS	P=.002	P=NS	P=NS	P=NS	P=NS

Table 8 (Continued)

Characteristic	n of cases	Family	Friends	Faith	Fortune	Fitness	Fun	Satisfac-tion
Number of Children:								
No children	94	M=43.2	M=44.1	M=42.9	M=39.3	M=39.5	M=38.8	M=84.9
1 or 2 children	32	M=41.8	M=44.7	M=44.5	M=40.0	M=38.7	M=35.2	M=84.9
3 or more children	10	M=48.8	M=45.2	M=48.0	M=46.3	M=42.4	M=39.0	M=94.2
		F=1.46	F=.16	F=2.94	F=3.27	F=.73	F=2.94	F=1.85
		P=NS	P=NS	P=.05	P=.04	P=NS	P=.05	P=NS
Age of Youngest Child:								
1-11 years	14	M=44.5	M=44.5	M=45.1	M=42.3	M=39.2	M=36.3	M=87.5
13-20 years	19	M=42.4	M=43.4	M=44.3	M=39.6	M=39.2	M=35.4	M=85.2
20 years and older	21	M=45.6	M=48.3	M=48.5	M=45.1	M=42.0	M=39.8	M=93.1
		F=.39	F=2.30	F=2.12	F=1.89	F=.64	F=1.63	F=1.28
		P=NS	P=NS	P=NS	P=NS	P=NS	P=NS	P=NS
Age of Oldest Child:								
1-7 years	18	M=47.1	M=46.8	M=47.6	M=43.3	M=40.9	M=38.9	M=91.9
8-19 years	18	M=41.7	M=43.7	M=44.9	M=39.4	M=39.1	M=34.4	M=85.0
21-39 years	17	M=44.8	M=45.8	M=45.8	M=43.8	M=40.5	M=37.9	M=89.2
		F=1.08	F=.79	F=.69	F=1.61	F=.24	F=1.69	F=.92
		P=NS	P=NS	P=NS	P=NS	P=NS	P=NS	P=NS
Income:								
Very Comfortable	5	M=49.0	M=47.8	M=49.4	M=50.4	M=41.6	M=43.6	M=97.6
Comfortable	85	M=45.2	M=45.1	M=44.8	M=42.1	M=40.5	M=39.2	M=88.3
Uncomfortable	36	M=40.3	M=43.4	M=41.3	M=35.8	M=38.9	M=35.3	M=81.0
Very Uncomfortable	9	M=34.9	M=37.4	M=38.4	M=31.9	M=30.3	M=33.3	M=70.9
		F=3.90	F=3.49	F=5.67	F=12.53	F=4.44	F=4.44	F=6.95
		P=.01	P=.01	P=.001	P=.001	P=.005	P=.005	P=.002
Education:								
High School or less	18	M=45.5	M=43.4	M=42.4	M=38.4	M=40.8	M=38.8	M=87.2
Some College	68	M=42.7	M=43.8	M=42.9	M=39.8	M=39.4	M=38.5	M=85.3
College Degree	50	M=43.3	M=45.3	M=45.1	M=40.8	M=39.2	M=37.0	M=85.3
		F=.43	F=.73	F=1.90	F=.53	F=.26	F=.65	F=.13
		P=NS	P=NS	P=NS	P=NS	P=NS	P=NS	P=NS

Table 9

Unrotated and First Rotated Factor Loadings on the Balanced Life Inventory Scales

Family		Friends			Faith			Fortune			Fitness			Fun		
Items	Factor 1 Loading	Items	Unrotated	Factor 1 Loading	Items	Unrotated	Factor 1 Loading	Items	Unrotated	Factor 1 Loading	Items	Unrotated	Factor 1 Loading	Items	Unrotated	Factor 1 Loading
43	.86	44	.65	.76	63	.61	.75	34	.65	.86	81	.59	.80	12	.62	.77
49	.83	56	.62	.71	74	.68	.69	40	.67	.78	82	.72	.79	42	.55	.71
19	.82	20	.58	.70	45	.53	.65	10	.56	.76	5	.58	.60	30	.66	.69
37	.80	32	.72	.67	33	.55	.59	28	.63	.47	35	.53	.58	36	.60	.65
31	.79				39	.60	.48	22	.61	.44				76	.58	.42
25	.76	79	.63	.11							17	.54	.06			
55	.74	76	.69	.05	57	.48	.09	58	.54	.04	47	.49	-.05	70	.45	-.03
84	.72	26	.69	.33	51	.46	.07	46	.77	.46	65	.64	-.31	60	.71	.33
77	.70	38	.72	.49	71	.72	49	72	.39	-.04	83	.77	.53	66	.49	.05
61	.69	14	.60	.42				4	.43	.04				18	.62	.23
		62	.55	.39	68	.38	-.05	52	.72	.50	29	.48	.08	24	.61	.36
					15	.66	.33				41	.52	.10			

Eigenvalue (First Factor)	6.07			4.07			3.29			3.70			3.50			3.52
Percentage Variance	60.8			40.7			33.0			37.0			35.0			35.2
Cronbach's Alpha	.93			.83			.76			.82			.79			.78

Table 10

Factor Analysis Of Satisfaction Scale

Unrotated Factor Loadings

Items	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
37	.71	-.35	-.22	.11	-.32	.04	.16
55	.70	-.19	-.26	.18	.04	-.21	.01
46	.70	.16	-.07	-.16	.09	-.13	-.25
28	.79	-.17	.03	-.02	.08	-.22	-.14
49	.65	-.52	-.14	.18	.05	.10	.15
32	.64	-.21	.08	.10	-.44	.15	-.03
66	.61	.15	-.24	-.06	.35	-.22	-.12
63	.60	.11	-.03	-.28	-.25	.01	-.12
70	.58	.37	-.17	-.07	-.16	-.13	.12
14	.57	.07	.41	-.04	-.11	-.10	.31
84	.55	-.50	-.15	.17	.19	-.09	.15
45	.50	.38	-.13	-.41	-.03	-.01	.21
39	.48	-.16	.02	-.45	.32	.27	-.37
35	.45	.39	-.01	.36	-.15	.19	-.24
5	.39	.40	-.14	.38	.39	.19	.13
79	.41	-.04	.68	.21	.04	.11	.06
68	.25	-.32	.56	-.13	.40	-.34	-.05
56	.42	.21	.50	-.05	-.27	-.35	-.21
82	.31	.43	.08	.58	.16	-.10	-.10
4	.43	.09	-.16	-.19	-.04	.69	-.21
76	.38	.31	.09	-.30	.18	-.01	.59

Eigenvalue	6.14	1.89	1.54	1.40	1.15	1.04	1.01
Percentage Of Variance	29.20	9.0	7.3	6.7	5.5	5.0	4.8
Cronbach's Alpha	.86						

Table 10 (Continued)

Items	Factor 1 Family	Factor 2 Satis- faction	Factor 3 Fitness	Factor 4 Friends	Factor 5 Fun	Factor 6 Fortune	Factor 7 Faith	BLI Cate- gory
49	.84	.12	.04	-.04	.04	.12	.21	Family
37	.82	.04	-.01	.20	.13	.28	-.09	Family
84	.76	.22	.05	-.09	.03	-.10	.17	Family
55	.68	.35	.24	.11	.10	.02	-.10	Family
32	.56	-.01	.02	.43	.02	.42	-.06	Friends
39	.13	.76	-.15	.05	.04	.15	.24	Faith
66	.27	.63	.33	-.01	.24	.01	-.07	Fun
46	.24	.60	.22	.26	.20	.23	-.03	Fortune
28	.48	.48	.11	.29	.08	.03	.11	Fortune
82	.03	.05	.79	.20	-.01	-.07	-.00	Fitness
5	.11	.09	.73	-.20	.27	.11	.10	Fitness
35	.09	.05	.59	.28	-.03	.41	-.06	Fitness
56	-.02	.23	.10	.80	.08	-.02	.08	Friends
14	.29	.02	.09	.49	.46	-.01	.27	Friends
76	.05	.06	.07	.02	.83	-.03	.14	Fun
45	.04	.31	.04	.13	.65	.27	-.15	Faith
70	.19	.14	.27	.18	.45	.41	-.17	Fun
4	.10	.17	.09	-.13	.10	.82	.17	Fortune
63	.22	.34	-.03	.36	.25	.39	-.09	Faith
68	.09	.16	-.07	.02	-.00	.08	.86	Faith
79	.17	-.08	.23	.47	.09	.01	.62	Friends

Eigenvalue	6.14	1.89	1.54	1.40	1.15	1.04	1.01	
Percentage Of Variance	29.20	9.0	7.3	6.7	5.5	5.0	4.8	
Cronbach's Alpha	.86							

APPENDICES

Appendix A

Introduction

The priorities established by families vary from household to household. Investments of personal resources such as time, energy, and money in each priority area are attempts to attain a level of life satisfaction (Dixon, & Dixon, 1991). As individual family members perceive satisfaction in one area, they may invest more in that area or make adjustments with a goal of attaining satisfaction in other areas (Bedeian, Burke, & Moffett, 1988). This shifting of priorities is an attempt to maintain a certain balance of priorities for an optimal level of functioning within family, friendship, or work relationships while allowing for change and growth (Hall, 1990).

Equal or balanced investments in each life priority are not necessary for maintaining a sense of life satisfaction. What one perceives to be his/her life satisfaction on a number of dimensions may appear as a balanced prioritizing of life, while others may appear to be unbalanced (Baird, 1988). While families may be perceived as being quite out of balance to a casual observer, their priorities and methods of dealing with their life circumstances may necessitate a unique profile which is quite functional for their situation, irrespective of other families' functioning (Stantberg & Worthing, 1992).

Amounts of change must also be allowed for families to develop. Families are very complex systems with its many subsystems interacting from within and dealing with the many outside influences. Due to this complexity of relationships, it becomes necessary for a diagnostician to determine which of the many possible aspects of family to assess. It is assumed that any one instrument will not be able to assess all aspects of the family (Cromwell, Olson, & Fournier, 1976).

The assessment of a particular family on multiple dimensions is helpful to the clinician as he/she diagnoses a family's particular situation. The chosen tools used for such a diagnosis will hopefully provide a current assessment of the family on relevant family issues and dimensions.

The systems approach to studying the family allows for a diversity of tools and techniques for examining the status of a family at any given point in time as well as assessing changes across time. Tools and techniques for assessing various systems levels have been and continue to be developed (Fredman & Sherman, 1987).

<center>Background of the Problem</center>

Previous measures which have attempted to assess various dimensions of the family including the concept of balance. One example is the <u>Family Adaptation and Cohesion Evaluation Scales III</u>, (FACES), developed by David H. Olson, Joyce Portner, and Yoav Lavee which was constructed as an

instrument to measure the balance of the families' levels of adaptability and cohesion. Moderation, or balance, of adaptation and cohesion is the underlying theoretical ideal behind FACES III (Olson, Russell & Sprenkle, 1983).

The dimensions, adaptability, and cohesion as assessed by FACES III are only two possible dimensions of interrelated aspects which might influence the quality of life in a family. Other scales assess attitudes, personality traits, communication effectiveness, and other such items of interest which would affect the family (Fredman & Sherman, 1987).

The number of dimensions, their combinations, and their relationships to each other appear to be limitless. The instrument developed as a part of this study will propose a combination of dimensions assessing life satisfaction in those selected areas as perceived by participating subjects.

Statement of the Problem

Marital satisfaction has been one of the most widely researched topics in family studies (Spanier, 1976; Glenn, 1990). Quality of life, a global indicator of satisfaction, is a reflection of several dimensions of individual perspectives, priorities, and experiences. Dimensions of life satisfaction from the literature include leisure (Curran, 1983), friendship networks (Howard, 1978; Curran, 1983; Gubrium, 1975; National Opinion Research Center, 1979; Scott, 1979; Staples, 1981; Ward, 1979), family (Barnhill &

Lonzo, 1978; Bowman, 1983; Deutscher, 1959; Howard, 1978),

spiritual life (Bachrach, 1980; Bowman, 1983; Curran, 1984;

Starr & Carns, 1972; Stinnett, 1983), work and societal

relations (Bailyn, 1970; Cockrum & White, 1985; Crouter,

1984; Curran, 1983; Hill, 1981; Hiller & Philliber, 1982;

Hornung & McCullough, 1981; Houseneckt & Macke, 1981;

Howard, 1978), and health issues (Cargon & Milko, 1982;

Pearlin & Johnson, 1977; Stein, 1983; Stinnett, 1983;

Verbrugge, 1979). The balance or imbalance among several

selected priorities at any given time in a person's life may

have an effect on individual life satisfaction and

satisfaction within the family (Curran, 1983; Stinnett,

1983; Sussman & Steinmetz, 1987). There is a need for the

construction of an instrument to determine whether possible

balance/imbalance among the above dimensions are related to

general life satisfaction.

The construction of such an instrument, with a related

profile, would provide a visual representation of

internalized maps when assessing dimensions of life

satisfaction. The dimensions identified for this study are

called "Family", "Friends", "Fortune", "Faith", "Fun",

"Fitness", and "Satisfaction". Assessments from these

dimensions will be presented in a visual model that is

intended to provide a means for individuals to assess

whether particular imbalances in their lives are

transitional or are a normal and functional state of

existence for their lives. A multidimensional instrument of this nature could assist clients and therapists in identifying sources of general satisfaction and dissatisfaction. Changes in one priority would have an effect in the other areas measured. The balance need not be symmetrical. Equifinality in relation to general life satisfaction of individuals may be examined. The need for an instrument to assess the past and present, real or ideal balance of life priorities will be met through the construction and validation of such an assessment tool.

Statement of Purpose

The purpose of this study will be the initial validation of the Balanced Life Inventory, which is an expansion of the Balanced Life Inventory (B.L.I.) reported in this study in the form of a pilot project. The B.L.I. has been administered to persons attending family life seminars, stress management classes, singles' seminars, and to some persons in counseling situations. The instrument is designed as a self-report questionnaire. The B.L.I. originally had 76 items measuring six sub-scales. The sub-scales are scored from an answer sheet and graphically drawn on a profile form which gives a visual description of the balance between the sub-scales.

The Balanced Life Inventory, taken by individuals, may assess the individual's perspective of his/her past, present, or ideal life. When results of individual profiles

are combined with results of other individuals, they may be used by averaging results to form a composite profile. This approach may assist therapists in diagnosing whole families. Organizations may use the instrument in assessing program needs. The instrument may also be used by respondents as a measure of their view of another person.

Questions to be Answered

The following set of questions were investigated as this study was conducted.

1. Can the sub-scales Family, Friends, Faith, Fortune, Fitness, and Fun be found to be both valid and reliable measurements of their related constructs?

2. Will the overall satisfaction score on the Balanced Life Inventory be found to be both valid and reliable?

3. Will there be differences in the scores of subjects by number and age of their children?

4. Will there be a difference in the scores by marital status?

5. Will there be differences in the scores of subjects by gender?

6. Will there be differences in the scores of subjects by age?

7. Will there be differences in the scores of subjects by income levels?

8. Will there be differences in the scores of

subjects by educational levels?

Conceptual Hypotheses

The following hypotheses were developed from the research questions presented earlier.

I. The sub-scales Family, Friends, Faith, Fortune, Fitness and Fun will meet minimum standards for reliability.

II. The overall Satisfaction Scale will be found to be both valid and reliable in the assessment of balance in individuals.

III. There will be a difference in the scores by marital status.

IV. There will not be a difference in the scores of participants by gender.

V. There will be a difference in scores of participants by age.

VI. There will be a difference in the scores of participants by income level.

VII. There will be differences in the scores of participants by educational levels.

Appendix B

Literature Review

Theoretical Overview

Wolman (1989) suggests that the concept of balance is a cognitive system which results when there is consistency in the relationship between either objects, persons, or an object and a person, and an individual's evaluation of them. In family systems the term balance is often used in terms of equilibrium. Wolman (1989) suggests that equilibrium is balance, noting that "equilibrium is a stable or balanced condition within a system as in homeostasis" (p. 116).

Balancing the responsibilities of the various areas of family life has become an increasingly important issue for families especially when both husbands and wives have to go to work (Hansen, 1991). This has been a major issue in the recent past as one half century ago single women dominated the female work force and the employment pattern of women followed an "M" shape (Shank, 1988).

With the current pressures on the time of family members balancing the many areas of life results in frustration for many who have too much to do and too little time in which to do all that needs to be done (Lewis & Cooper, 1987). The role-related tensions families experience tend to result in marital dissatisfaction (Staines, Pleck, Shepard, & O'Conner, 1978; White, Booth, & Edwards, 1986).

Familial support is extremely important in helping working couples cope with their stress. Of equal importance is the support they receive from their supervisors on the job (Galinsky & Stein, 1990). Work schedules lead to additional problems as families attempt to find time for all the activities they would like to be enjoying. They experience role overload leading them to attempt to stagger work schedules to accommodate the conflicts in time schedules (Presser, 1987).

There has been a proliferation of material written on the balancing of family priorities (Hansen, 1991). In a resource review Hansen (1991) lists books, videos, and reports that could serve families and therapists as families attempt to cope with the balancing of their lives (Ulrick & Dunne (1986). Strategies used by employed women to cope include reducing time spent doing household chores, giving up leisure time, and planning special parent child activities (Piotrokowski et al., 1987).

The support of family and friends, work satisfaction, time spent in leisure-time fun and recreation, efforts to maintain physical fitness, while holding on to the "anchors" of life are all attempts to cope with modern day stresses family members are experiencing (Schafer, 1987). The "anchors" Schafer (1987) mentions are long standing beliefs such as personal religion, strength of relationships with family and friends and good health.

Family Theory of Stress

Families' ability to cope with crises situations has been studied since early in the 1900's during and after the world wars. As families attempt to cope with the imbalances that happen with extreme circumstances, attitudes, or crises situations a perception of imbalance or disequilibrium often occurs. This often leads to family stress. The ABCX model of family stress was developed by Hill (1949, 1958). The A factor in Hill's model refers to the actual hardship or stressors the family is experiencing. The effects of the stressor depends largely upon how the family defines the stressor. The stressors may one of several types or may be a result of a pile-up of many stressors which the family experiences either simultaneously or over a period of time.

Typical types of stressors family might experience may be (1) accession involving the addition of a family member as through marriage or child bearing (Kline, 1989), (2) dismemberment which involves the loss of a family member through such things as death (Norris, 1987) or divorce (Rolland, 1990), and (3) loss of family morale and/or structure as when someone in the family is in violation of the family system's rules or boundaries (Phillips, 1980). All of these types of stressors tend to create a state of imbalance in a family. Many of the stressors families experience are "normative stressors." These are the kinds of hardships that the family may expect to experience in the

normal events of the family life cycle. Such events as having children, the child going to school, a child leaving home are examples of normative stressors. When changes come into the family system stress and a feeling of imbalance or disequilibrium are quite normal and are to be expected (Schafer, 1987).

Other hardships families experience are what are called "unpredictable stressors." Such things as sudden illness, a house burning down, a car accident, or being robbed are examples of unpredictable stressors. These events also create an imbalance or state of disequilibrium in the family (Patterson, 1990).

The B factor in Hill's model of family stress has to do with the families assessment of resources available to cope with the stressor (A factor). Such things as family cohesiveness and adaptability are evaluated at this point. Some families are more resilient than others and have more resources that will assist them in meeting crisis situations. Some families have individual members who have more personal resources for coping with stress than others. The family's social support received from extended family members and friends will also be assessed at this point. Family members financial, educational, and health factors will also be taken into account when evaluating their resources for dealing with hardships (Schafer, 1987).

The C factor in Hill's model has to do with the meaning

the family attaches to the stressor. It becomes necessary
for the issues to be clarified. Good communication between
family members may become quite helpful as the situation is
discussed which may assist in decreasing emotional burdens
the family members carry during times of hardship. It also
becomes necessary to encourage the family unit to carry on
individual and family well-being.

The X factor is the degree of the crisis experience.
Is the hardship extreme, mild, temporary, or long term?
This leads to the point of implementing the coping skills
the family has to deal with the crisis.

The outcomes of experiencing these times of hardship,
stress, imbalance or disequilibrium may take one of two
directions. The first is bonadaptation represented by
families who have adapted well and have actually become
stronger, more unified, and have experienced a successful
progression through a period of crisis. The second is
maladaptation represented by families who experience
deterioration of family integrity. Often individual family
members lose autonomy by relying on outside help. The
family becomes hurt developmentally. It may even
disintegrate to the point of separation or divorce as a
result of maladaptation.

Often a family's level of adaptation is examined as
they go through the process of experiencing crisis
situations. A family's ability to adapt is equal to it

level of satisfaction on a number of levels family life. Marital satisfaction and satisfaction in child development are examples of areas examined to help in determining the level of adaptability of a particular family (Kline, 1989).

Regenerative families are families who tend to be most adaptive. The report high levels of satisfaction on different levels of family life. They are families who build individual and family strengths. These regenerative families have high levels of coherence with emphasis on acceptance, loyalty, pride, and faith in management of stress and strain. Their levels of hardiness are higher with emphasis on internal strengths and durability. Their locus of control is internal. They have found a sense of meaning in life, are involved in activities, have a commitment to learn and explore and are open to new challenges and experiences. They also have family integrity indicating the family has a sense of purpose and know who they are.

Regenerativity will depend upon the family's strength of resources over time. Adaptation levels vary over time. There are instruments described later that measure many of the variables of family life.

Systems Theory Applied To The Family

The concept of balance is commonly found within the framework of systems theory applied to the family. The systems approach to studying families suggests that

stability and growth are both necessary for healthy individuals and for a healthy family. Discovering the balance/imbalance in family members' lives could lead to growth of individual members while helping to maintain a certain degree of stability for the whole family (Phillips, 1980).

Stress Management

Stress management, as theorized by Hans Selye, also suggests that homeostasis is to be maintained as stressors are introduced into a person's life (Schafer, 1987). Coping skills are to be learned and applied to maintain a degree of normal living. When life gets out of balance to an extreme extent, stress levels rise sometimes dramatically. Discovering the balance in a person's life can lead to learning and employing better coping skills, thus managing stress in a healthy manner (Allen, 1983).

One of the concepts involved in the symbolic interaction view of the family suggests that reality is as perceived by the person making the assessment. In self report assessment tools, respondents' perception is the primary objective. Their perception, as recorded by their responses to the items is their reality. Allowing subjects to see the relationships of the various concepts being assessed could prove very enlightening to them and give clinicians direction for treatment strategies and interventions.

Historical Development Of Family Studies And Balance

The following description of the development of family research and balance is included to emphasize the growing complexity of family research since 1900. The concept of balance in relation to the various areas of family life has become an important issue for contemporary families.

Family life has become increasingly complex during the past one hundred years. Study of the family has necessitated the development of family theory and scientific investigation of various aspects of family life with the goal of improving family life. The complexity of issues has lead to an emphasis on balanced living through balanced life-styles. The following historical perspective of developing family theory will help to underscore the complex issues and need for balance within the family systems theoretical framework.

There have been various methods of developing family theories. Two common ways have been through gaining "understanding" and "positivism." Positivism applies scientific methods of research to family studies. The trend since 1900 has been more towards positivism in family studies and in the development of family theories (Martindale, 1960).

Between 1900 and 1950 the emphasis was on developing theories of the middle range. These theories take two or more propositions, link them together, and thus attempt to

explain some function of the family. With the onset of
empirical research and the positivistic approach, another
trend included the use of math in the language of theory.
This happens as data collected are coded and calculated in
the research process. This led to "stock taking" as a
method of theory development (Rossi, 1956). According to
Thomas and Wilcox (1987), developing middle range theories,
the use of math in the language of theory and stock taking
are all trends that remain to this day in the development of
family theories.

The contributors to theory development have been many.
They have been social reformers, social workers,
sociologists, and social psychologists. From the turn of
the century, the social reformers wanted the family
preserved as it existed at that time. Families were more
rural, patriarchal and the family was seen as the center of
child development. This was viewed by the social reformers
as good and from their point of view, the way things should
remain (Howard, 1981).

There were some major contributions being made during
this period in Europe. The works of Piaget (1926, 1929,
1932) and Freud (1938) influenced the American family field.
The flow of intellectual ideas was described as coming from
Europe to America (Stryker, 1972).

The sociologists dealt more with studying social
problems of the day and tended to take a more evolutionary

view of the family. They viewed the family as adapting to
the larger order of things. For example, adapting to larger
social systems. The looked for social knowledge and saw the
family changing to adapt to the social changes of the day.

Social workers intervened with a more clinical approach
of doing diagnosis, which led to treatment of families.
This helped the sociologists and social psychologists
obtain data which could be used in doing further empirical
research.

Some contributors to family theories out of the field
of social psychology were William James, Charles Cooley, W.
I. Thomas, and Florian Znaniecki (Martindale, 1960).
Cooley, in particular, looked at primary groups, which he
identified as peer groups, neighborhood gangs, and the
family. These social psychologists studied how ideas of the
self applied to society and the formation of these primary
groups.

The stock taking method of research continued and
resulted in development of "a tradition of introspection and
reassessment" (Howard, 1975). The stock-taking articles of
Hill (1951, 1955), Hill, Katz, and Simpson (1957), Foote
(1957), Goode (1959), Hill and Hansen (1960), Sussman
(1968), Christensen (1964), and Broderick (1971), with the
theory construction work in the 1970's (Burr, 1973; Burr et
al., 1979; Goode, Hopkins, and McClure, 1971), stressed the
importance of conceptual frameworks, empirical findings,

generalizations, variables, propositions, and ultimately a view of theory as integrated sets of propositions (Sussman & Steinmetz, 1987).

The world wars impacted the studies of families as families had to adjust to the stresses of war and the great losses they experienced. Angel (1936), Cavan and Ranck (1938), Morgan (1939) studied the adaptation of families to these crises. Furthermore, the great depression produced what was called the "fragile family" indicating the family was a declining institution in response to such social trauma. The National Council on Family Relations and the American Association of Marriage and Family Therapists were started during this period of time. A definition of family was written by Ernest Burgess: "a unit of interacting personalities." During the years from 1950 and on into the 1970's there was a continuing process of redefining Ruben Hill's work on conceptual frameworks. In the 1970's Wesley R. Burr started getting family scholars together to express what conceptual frameworks they used and to draw their empirical data together. Middle range theories were produced and the theory construction process of relating conceptual frameworks together with real world issues led to the identification of some leading conceptual frameworks. Nye and Berardo (1966) were great contributors to this process as they wrote concerning the emerging conceptual frameworks in family analysis.

Ruben Hill (1951), identified the major conceptual
frameworks as the (1) institutional, (2) structural, (3)
interactional-role analysis, (4) learning-developmental, and
(5) household economics. He later (1964) listed (1)
interactional, (2) situational, (3) structural-functional,
(4) institutional, and (5) developmental as the major
conceptual frameworks. The interactional approaches
concerned with immediate social situation context to
understand the family, while the situational approach looks
more at the environment. The two approaches were later
combined to form the symbolic-interacting approach (Stryker,
1972). The structural-functional view studies the family in
a social system (the macro view) and also examines the
family as an individual unit (the micro view). The
institutional approach views the family as a social
institution. The developmental (family developmental
theory) looks at the individual family development. This
approach integrates principles of sociology and child
development.

Household economics, which later became "ecosystems"
and learning-maturation were two more approaches not
included in Hill's 1960 article. Household economics
studied how to manage family resources in relation to larger
systems. It was not founded on empirical research, but
emphasized how cultural systems influence family behavior.
The learning maturation approach stemmed from social

learning theory. The approach spent too much emphasis on the individual and appeared to lose interest in family theory. It studied how individuals develop over time and how family influences individual social development.

After 1964 Symbolic Interaction, Family Developmental and Structural-Functional were identified as the three major conceptual frameworks. Broderick (1971) identified the same three approaches and added Balance, Game, Exchange, and General Systems theories to the list of major approaches. General Systems theory is the most popular theoretical approach used in family therapy in the 1980's and continues to the present. Since 1980 Symbolic-Interaction, Exchange, and Systems Theories have been the leading conceptual frameworks in studying the family.

The Balance theory (Broderick, 1971) or more modestly the Balance Principle grew out of Fritz Heider's work in the 40's (Heider, 1946) and Newcomb's work in the 1950's (Newcomb, 1953). The literature was based on the following proposition: in any situation involving two persons (A and B) and an object (X) about which both have important attitudes there is a tendency toward symmetry in the triangular system. The influences tend to come from the attitudes of liking that one person has toward X. If, for example, a wife has an attitude of preference for X that the husband does not hold, the influence of that liking will often persuade the husband to also like X.

The same principle may hold true in the establishing of life priorities in the family. If work becomes very important to a member of the family to the exclusion of fun and recreation, this may influence other members of the family to also hold work at a higher priority level than fun and recreation. The usefulness of the idea is in predicting the directions of adjustment in the case of asymmetrical or discrepant combinations of priorities among family members.

Empirical Review of Concepts

Instrument Development

Instrument development historically has been directed towards individual assessment. The instruments used in family assessments were few. Family clinicians who used self report instruments generally used instruments developed for the individual. They applied their findings to the family when possible (Cromwell, Olson, & Fournier, 1976).

The instruments used in assessing families comes largely from the field of individual psychology. The specialized area of psychometrics has contributed much to present-day instrument development. The psychometric procedures, particularly those used in scale construction related to the establishment of estimates of reliability and validity, have been adapted to family studies and the more recent construction of instruments which are used for assessing whole family systems.

Previous Measures

There are literally hundreds of tools used as instruments assessing a wide variety of concepts related to family life. Instruments are used to measure various units of family systems. Instruments may be designed to measure individual family members, marital 42 dyads, partial families, or whole family units.

The focus of the instruments may be either intrapersonal or interpersonal. The type of test may be divided into subjective or objective type of tests. The objective evaluation may be of the non-projective intrapersonal or perceived interaction interpersonal type. Subjective evaluations may be identified as projective personality tests for intrapersonal purposes and inferred interaction for interpersonal assessments (Cromwell, Olson, & Fournier, 1976).

The methods most commonly used in assessment of all units of family stems are the self-report and the observation types of tools. Self-report methods include non-projective personality tests, projective personality tests, perceived interaction tests, and inferred interaction tests. Tools that are classified as observation in method include problem-solving tasks, decision-making tasks, conflict-resolution tasks, and naturalistic tasks.

Cromwell, Olson, and Fournier (1976) identified many of

the instruments used in each of the categories of existing diagnostic measures used in marital and family therapy by method and unit of assessment.

Other compilations have been made of family assessment tools by Robinson and Shavers (1973) in "Measures of Social Psychological Attitudes." The listings they provided were categorized by the constructs various tools assess. The main categories included the measurement of self-esteem and related constructs; internal-external locus of control; alienation and anomia; authoritarianism, dogmatism and related measures; other socio-political attitudes; values; general attitudes toward people; religious attitudes; and methodological scales. More than 125 scales are listed in Robinson and Shaver's book.

More recent compilations of instruments for family measurement have been accomplished by Friedman and Sherman (1987) in which 35 currently used family assessment tools were described. In Touliatos, Perlmutter, and Straus's (1990) "Handbook of Family Measurement Techniques," more than 1,000 instruments are listed with brief descriptions of each. References are included which provide current researchers with the necessary information needed to locate instruments of interest.

The availability of such extensive lists of diagnostic tools assists in the identification of measures of various

constructs possible. There are a number of instruments used
in family literature which measure balance. The Family
Adaptation and Cohesion Scale III (FACES III) is used to
measure cohesion, adaptability, and communication in
families. There are extremes on each dimension which
therapists view as dysfunctional or demonstrating an
impairment or inability to function as in poor
communications, or on other dimensions. Moderate or
balanced scores on the dimensions are preferred. FACES was
developed as a tool for clinical diagnosis and for
specifying treatment goals with couples and families.
Couples and whole families may use the instrument to assess
their family as it is now or as they would like to see it
ideally (Olson, 1979).

Olson, Russell and Sprenkle (1983) identified several
hypotheses that have been developed from their Circumplex
Model which relate to the concept of balance:

1. Couples/families with balanced (the two
central levels) cohesion and adaptability
will generally function more adequately across
the family life cycle than those at the
extremes of these dimensions;

2. Balanced family types have a larger behavioral
repertoire and are more able to change
compared with extreme family types;

3. If the normative expectations of a couple or family support behaviors extreme on one or both of the circumplex dimensions, they will function well as long as all family members accept these expectations;

4. Couples and families will function most adequately if there is a high level of congruence between the perceived and ideal descriptions for all family members;

5. Balanced couples/families will tend to have more positive communication skills than extreme families;

6. Positive communication skills will enable balanced couples/families to change their levels of cohesion and adaptability more easily than those at the extreme; and

7. To deal with situational stress and developmental changes across the family life cycle, balanced families will change their cohesion and adaptability, whereas extreme families will resist change over time.

The Taylor-Johnson Temperament Analysis (T-JTA) is an instrument which assesses nine personality traits in relation to their opposites. It is an intrapersonal personality inventory used widely in pre-marital, marital,

career, and adolescent counseling. It is also helpful in assessing interpersonal issues such as communications, power structures in families, social compatibility, as well as examining trait patterns. The points at which individuals score on the continuum with the extremes of dominant and submissive scale may indicate a measure of balance in the power structure of the family (Taylor & Morrison, 1984).

There are also observational assessments done by clinicians using such techniques as the Kvebeck Family Sculpturing Technique. During this assessment family members use figurines on a 1 X 1 meter board which is divided into a 10 x 10 grid. The figures are placed on the board in such a manner as to describe closeness and other qualities of family relations. They are placed by individuals and by whole families as the family REALLY is or as they would like their family to be IDEALLY. Who controls the sculpturing (decision making) when done by consensus? Are decisions made through sharing concerns with input from each family member, or is the placement controlled by one or two members of the family to the exclusion of some? Balance is again being assessed (Cromwell & Keeney, 1979).

Each of the existing instruments described here contributes greatly to the diagnostic process. The instruments do well in assessing specific relationships, traits, or characteristics. The problem is that none is as

comprehensive as it could be in assessing the whole person as it interrelates with the various aspects of the person's life and life experiences. A more comprehensive tool has been needed which would provide a life view tapping many relationships and their effects on one another.

The Prepare-Enrich Inventories, as described by Fredman and Sherman (1987), contain the following categories or sub-scales: Idealistic Distortion, Realistic Expectations, Marital Satisfaction, Personality Issues, Communication, Conflict Resolution, Financial Management, Leisure Activities, Sexual Relationship, Children and Marriage, Family and Friends, Equalitarian Roles, and Religious Orientation. These inventories are a comprehensive package of materials and procedures designed to meet the needs of professionals engaged in marriage preparation, marriage enrichment, and marriage therapy. These inventories are among the more comprehensive assessment tools available for couple assessment.

The Handbook of Measurements For Marriage and Family Therapy includes a description of instruments developed or revised since 1975. Certain directions for marriage and family instrumentation were described by the authors, Fredman and Sherman (1987). Those directions were as follows:

1. There is a powerful thrust towards higher standards and greater rigor in research and practice.

This is promoted by professional associations, journal editors, the increasing number of family therapy doctoral programs in the universities, and state licensing laws.

2. Family research centers and universities stimulate an obligation to publish. There is an explosion of new books and journals in the field.

3. The computer has made more sophisticated statistical and research designs possible for the development of instruments and the processing and analysis of data.

4. More instruments are being invented to deal with or assess very specific problems rather than general issues.

5. Several professional journals have begun to pay more attention to measurement and outcomes research. For example, The American Journal of Family Therapy introduced a section to describe and review tests.

6. Church-affiliated centers have taken strong steps in premarital therapy. They have the advantage that they can require some form of counseling as a prerequisite to a desired church ceremony. Such counseling or therapy can focus on normality and development rather than crisis and pathology. Many instruments in the Handbook Of Measurements For Marriage And Family Therapy (Fredman & Sherman, 1987)

were developed with a Lutheran population. Considerable

promise is shown by material developed in the Catholic

Church's premarital (Pre-Cana) and marital enrichment

(Cana) Conferences.

7. Videotape systems enable clients, especially

adolescents, to see themselves as others see them.

They also enable evaluators to measure interaction.

Videotape analysis, for all its time consumption, is on

the frontier of research.

Taking into consideration the directions instrument

development appears to be taking, Fredman and Sherman (1987)

also identified some needs in instrument development as

follows:

1. Studies are needed that demonstrate the predictive

validity of marital instruments rather than the not

very helpful ability distinguish between two presently

existing groups of satisfied and dissatisfied couples.

2. There is a need to develop instruments that are

not paper-and-pencil type, but are based on

standardized, structured interview techniques.

3. There remains the need to measure the family

system. The family is a system. Testing is a measure

of individual differences. Marriage and family testing

at one level thus remains a paradox or, at least, a

constant challenge.

4. A breakthrough remains to be made before the

videotape analysis inventory can be used by clinicians and marriage therapy educators. Unfortunately, interaction analysis requires an immense amount of training and time.

5. Some special instrumentation needs to be developed for specific use by the expert witness in divorce and custody procedures.

6. Greater recognition is needed of the influence of culture on behavior, values, satisfaction, and expected role.

7. There is some recognition of client reaction to the therapist. Instruments remain to be developed that would measure the effect of the therapist on the kind of therapeutics system evolved and upon the outcomes of the therapy.

8. Norm samples are needed that are not uniquely members of a specific religious, racial, social, or educational group.

9. Most popular family therapy theories, such as structural, strategic, and systemic approaches, find little use for tests and inventories in clinical practice. Test constructors need to demonstrate that the data obtainable by administration of such instruments are sufficiently different from or more accurate than or more time efficient than what is obtainable in the interview by a typically trained

practitioner.

The use of the instruments being developed and revised each year are of help to the researcher and the clinician to help gain insight into the family process and to help in improving family relationships and the quality of family life. The quality of the tools and the extent of what is being measured is improving constantly. The use of instruments does help to evaluate and promote the therapeutic process.

A technique is a tool, the value of which is in how it is used and if skill is or is not employed. Instruments are to be examined in light of the spirit of benefiting one's personality, theory, the ethics of the profession, and the specific needs of clients. Behavioral change consists of specific action, thoughts and feelings. Most techniques can be refined a adapted to meet such criteria (Sherman and Fredman, 1986).

Definition of Terms

Measuring balance, by means of administering the Balanced Life Inventory, involves measuring six sub-scales and interpreting their relationship to each other. The six sub-scales are defined as follows:

Family is the degree of support, level of communication, closeness, love between the respondent and their immediate or extended family. Curran (1983) listed satisfaction within the family as trait for a healthy

family.

Friends is the degree one feels his/her friends are available for him/her as a part of his/her supportive network, understanding, taking him/her seriously, stability of friendships, and time spent with friends. Families experiencing higher amounts of life satisfaction are ones with established networks of friends (Curran, 1983; Howard, 1978). Networks of friends are of continued importance throughout life (Gubrium, 1975; Scott, 1979). Friends contribute to life satisfaction for ethnic and non-married persons (Staples, 1979; Ward, 1979).

Faith the degree of trust in God, friends, acquaintances, levels of optimism, and feelings regarding one's self. Spiritual life contributes to the overall wellness of the family (Bowman, 1983). Curran (1983) states that healthy families share in common religious beliefs.

Fortune levels of satisfaction with one's occupation, level of education, financial security, intelligence, and experiencing of life's rewards (Cockrum & White, 1985). Career and family orientations to family member's work contribute to marital happiness (Bailyn, 1970). Predictors marital success and career success among dual-working couples have been researched by Hiller & Philliver (1982).

Fitness how one views his/her own physical health, levels of exercise, nutrition, sleep habits, thought

processes, personal appearance, energy levels, amounts of aches and pains, and overall concerns about his/her health. These issues have been studied among single persons (Cargon & Milko, 1982). Marital status, family stress and its relation to life satisfaction were studied by Pearlin and Johnson (1977).

Fun the amounts and types of fun and recreation one experiences as a part of his/her life-style, including time taken for relaxation, hobbies, laughter, and vacations. Curran (1983) identified healthy families as ones who take time on a regular basis for leisure-time activities.

Balance is the relationships between Family, Friends, Faith, Fortune, Fitness, and Fun as interpreted by viewing the respondents Balanced Life Inventory profiles. The balance or imbalance among several of these dimensions at any given time in a person's life may have an effect on individual life satisfaction and satisfaction within the family (Curran, 1983; Stinnett, 1983; Sussman & Steinmetz, 1987).

Satisfaction is defined by the amount of fulfillment one expresses in certain designated items on each of the six subscales.

Appendix C

Methodology

The purpose of this study was the initial validation of the Balanced Life Inventory (BLI). The BLI contains six subscales: Family, Friends, Fortune, Faith, Fitness, Fun, and Satisfaction. Since no previously constructed test uses this combination of subscales, it was not possible to correlate the instrument with previously validated measures.

The procedures used to develop the Balanced Life Inventory were an extension of those used by Spanier (1976) in the development of the Dyadic Adjustment Scale. These procedures are rigorous and highly regarded by methodologists. A modification procedure suitable for this study is described later in this section.

Design

This study combined correlational and comparative designs as the data collected for the Balanced Life Inventory were correlated with previously developed scales measuring similar constructs. Further correlational data were used to evaluate possible differences between demographic groups sampled. Descriptive data were generated in relation to subjects' gender, marital status, age, educational level, income level, and numbers of children. The resulting correlations were descriptive only of the sample selected and were interpreted accordingly.

The six subscales: Family, Friends, Faith, Fortune, Fitness, and Fun were used as independent variables and as a measure of both Balance and Satisfaction, which for the purposes of this study served as dependent variables. A visual representation of the design is on the following page.

Instrumentation

The Balanced Life Inventory assess the relationships of the following constructs. Each of the constructs serves as a sub-scale on the Balanced Life Inventory and are as follows:

FAMILY: The degree of support, level of communication, love between the respondent and his immediate or extended family. Sample Item: I often have trouble communicating with members of my family.

FRIENDS: The degree one feels that friends are available for him/her as a supportive network, depth of understanding demonstrated by friends, length of friendships, and the amount of time spent with friends. Sample Item: My friends do not care as much about me as I do about them.

FAITH: The degree one trusts in a supreme being, friends, acquaintances, levels of optimism, and feelings regarding one's self. Sample Item: Trusting others is usually difficult for me.

FORTUNE: Levels of satisfaction with one's

occupation, level of education, financial security, intelligence, and experiencing life's rewards. Sample Item: I am as intelligent as most others in my social world.

FITNESS: How the respondent views his/her own physical health, levels of exercise, nutrition, sleep habits, thought processes, personal appearance, energy levels, amounts of aches and pains, and overall concerns about his/her health. Sample Item: I have adequate energy for the work I do on a regular basis.

FUN: The amounts and types of leisure experiences one has as part of his/her life-style including time taken for vacations, relaxation, hobbies, and laughter. Sample Item: My family has fun together on a regular basis.

SATISFACTION: The amount of fulfillment respondents express on the twenty-four items selected to measure this dimension from each of the other subscales.

Balance as related to the Balanced Life Inventory was defined as the relationships between Family, Friends, Faith, Fortune, Fitness and Fun as interpreted by the clinician with data from the Balanced Life Inventory Profile. The profile is a visual description of the relationships of the subscales. A model of the profile is in Figure 2.

There are eighty-four total items on the Balanced Life Inventory. There are fourteen items on each of the six subscales. Items are answered by indicating responses on an answer sheet. Response choices range on a six-choice format

from "almost always true" to "almost always false." The answer sheet contains a place for background information as well as a place for the respondent to answer each of the eighty-four items. The theoretical range of raw scores for each of the subscales is 14 to 84. The four items from each subscale used to measure satisfaction are scored in a similar manner. The theoretical range of raw scores for the Satisfaction scale is 24 to 144.

A supplemental research questionnaire was constructed which measured similar constructs as the Balanced Life Inventory (BLI). This instrument was composed of previously established as reliable instruments. The items from each of the scales selected were given to each subject. The items are found in the research questionnaire in Apppendix G. Scores from the supplemental questionnaire were correlated with the corresponding BLI scores. Following are descriptions of the scales used in the supplemental research questionnaire.

The Family and Friends scale from the Enrich inventories was used in the validation survey. It has a reported reliability of .79 (Alpha). ENRICH is used extensively by marriage counselors and clergy in marriage and family counseling. All ENRICH items used in the research survey were scored on a five point Likert type scale with scores ranging from "strongly agree" (1) to "disagree strongly" (5). A nine item version of the

Cohesion scale from the Family Adaptation and Cohesion Evaluation Scales (FACES), as described earlier, was also correlated with the BLI Family scores. Scores the Family Hardiness Index were also correlated with the BLI Family subscale. This scale measures the characteristic of hardiness as a stress resistance and adaptation resource in family which would function as a buffer or mediating factor in mitigating the effects of stressors and demands, and a facilitation of family adjustment and adaptation over time. The reported reliability of this scale is .82.

The Family and Friends scale from ENRICH, as described earlier, with a reliability reported at .79, and the Perceived Social Support-Friends (PSS-F) scales were correlated with the BLI Friends scale. The Perceived Social Support-Friends scale has a reported reliability of .90. This scale is a measure of feelings and experiences which occur to most people in their relationships with friends (Procidano & Heller, 1983). This scale's twenty items were used.

The Religiosity scale from the Family Environment Scale: Form R developed by Rudolph Moos was used and correlated with the scores on the BLI Faith scale. The Religious Orientation scale from the ENRICH were also used and correlated with the BLI Faith scale. The reported reliability of the Religious Orientation scale is .84.

The BLI Fortune scale scores were correlated with the

Financial Management scale from ENRICH and with the Status
Concern Scale. The scales reliability estimates were
reported at .82 and .78 respectively. The Status Concern
Scale attempts to measure attitudes toward status and
mobility, that is, the value placed on symbols of status and
in the attainment of higher status (Robinson & Shaver,
1973).

The BLI Fitness scale was correlated with Health and
Stress Profile (HSP) Scales (Stewart & Olson, 1988). This
scale measures health items related to sleep, exercise,
eating schedules, weight, overuse of alcohol or smoking, and
emotional stability. Scores are based on a five point
Likert type scoring with response choices ranging from
"almost never" (low) to "very often" (high). The BLI
Fitness scores were also correlated with the Body Cathexis
Scale which had reported split-half reliabilities of .78
(males) and .83 (females). Twelve of the forty items
dealing with health issues were selected. They were scored
on a five-point Likert type scale from "very satisfied" (1)
to "very dissatisfied" (5).

The BLI Fun scale was correlated with scores from the
Leisure-ENRICH scales. The reported reliability estimate
for this scale is .71. The 7 items from the Recreation
scale, a subscale of the Family Environment Scale (F.E.S.),
were also used and correlated with the BLI Fun scale. These
items were scored on a three point Likert type scale ranging

from "true or mostly true" (1) to "false or mostly false" (3).

The BLI Satisfaction scale was correlated with the Satisfaction scale from ENRICH. The reported reliability of this scale is .86. All eleven items were used and scored on a five point Likert type scale as described earlier. Various areas of marital satisfaction are assessed such as personality, personal habits, communication, decision making, conflict resolution, financial position, leisure activities, expressions of affection, religious beliefs and extended family relationships. The BLI Satisfaction scale was also correlated with the Depression scale on the Taylor Johnson Temperament Analysis. This instrument was described earlier. The reported reliability estimate of this scale were .86 for Guttman's split-half reliability.

Subjects

The sample used in the present study was a purposive, nonprobability sample. The whole sample was used to establish the reliability of the BLI.
No attempt was made to randomly select a group representative of a particular population for the purpose of generating predictions regarding a larger population. The use of purposive samples made it impossible to generalize beyond the characteristics of the group being studied.

The interpretation of the data generated by this study was limited as descriptors of the selected sample alone

(Kitson, Sussman, Williams, Zeehandelaar, Shickmaster, & Steinburger, 1982). The nonprobability sample used included subjects selected from settings such as classrooms, organizations, or neighborhoods that were readily available to the researcher. Subjects were volunteers or persons known to the researcher due to their mutual involvement in some activity or group. The researcher is an instructor at a small liberals arts college in Oklahoma City, Oklahoma. Students of varying ages and backgrounds volunteered as subjects for this research project. The researcher also secured volunteer subjects from churches, retreats, and seminars where he was speaking during the time research data were being collected. The sample used in this study was selected for the purpose of establishing reliability and validity of the instrument.

The subjects used for this study came from non-clinical settings. Respondents were at least 18 years old and included both males and females. Demographics requested on the answer sheet included gender, marital status, age, educational level, income level, and numbers of children. The non-clinical sample consisted of adult persons from college, church, and the general public. The entire sample consisted of volunteers.

The sample involved 143 subjects. That size sample provided a number greater than ten times the number of items on each sub-scale, a minimum standard required to provide an

adequate sampling for statistical purposes.

Data Collection

Groups of prospective subjects were approached to act as volunteer subjects for this study. They were informed that only those 18 years and older would be accepted as subjects. Those who agreed to become subjects were given the opportunity of receiving results of the study and were guaranteed that their responses would be kept confidential and used only for the purpose of validating the Balanced Life Inventory. Those who agreed were given the questionnaires and the background form. As subjects completed the forms, they returned them to the researcher either in person or by mail. No individual asked for results of the study to sent to them. The researcher did commit to send copies of the final article to the various groups which participated.

Data collection was accomplished by having each of the volunteer subjects answer all eighty-four BLI test items following precise instructions appearing on the answer sheet. The background information requested appeared on the back of the answer sheet. Each subject was also requested to complete a supplemental instrument of 166 items constructed from instruments with established reliability of .50 or higher which is sufficient to use as a comparison instrument. The items were presented in the order presented above. Each subject was assigned an identification number

to insure confidentiality.

Data Processing and Coding

Data collection took place over an 8 month period from April to November, 1991. All data collected were coded by the researcher and his research assistants. All code sheets were keypunched into the Statistical Package for the Social Sciences (SPSS-X, 1988) program in the mainframe at Oklahoma State University. After the data were in computerized program format, the researcher verified the numbers by comparing the original questionnaires to the computer printouts. The initial computerized codebook provided a further check for coding errors.

Analysis of Data

Analysis of the data was completed using the Oklahoma State University computer center facilities. The statistical procedures were those included in the Statistical Package for the Social Sciences, Ed. X, (1983). The procedures available in this package were appropriate for the type of data being analyzed.

Frequency Distributions

Each of the six subscales were reported with resulting average scores. A table of the central tendency, standard deviation, the theoretical and actual ranges of scores for each sub-scale are provided in Tables 7 and 8. A goal of analysis to report mean scores for each sub-scale for the following sub-groups:

1) Gender,

2) Age (17-20, 21-30, 32-45 and 46-70),

3) Marital Status (Single, married, separated or divorced),

4) Number of Children (none, one or two, three or more),

5) Educational Level (high school or less, some college, college degree or more),

6) Income Level (very comfortable, comfortable, uncomfortable, very uncomfortable),

7) Occupation (white collar, blue collar, professional, student),

8) Age of oldest child,

9) Age of youngest child.

Statistics For Establishing Scale Reliability

Reliability is usually referred to as the consistency of scores obtained by the same persons when reexamined with the same test on different occasions, or with different sets of equivalent items, or under other variable examining conditions (Anastasi, 1982). Reliability is a measure of internal consistency when items within a test are compared with other items in the same test.

Even though test reliability has been suggested as essential, it was reported by Cromwell, Olson, and Fournier (1976) in a review of family measurement techniques, that only 56 percent of the 314 methods reviewed had even the

most fundamental types of reliability or validity reported. This lack of reporting of reliability is seldom tolerated within the natural sciences. The tests, such as those used in the behavioral sciences, are used in making major life decisions concerning the futures of individuals and their families, tests of reliability become even more important.

This study is an attempt to develop the BLI as an instrument which has reliability coefficients that meet or exceed minimum standards for a variety of purposes. Even when test conditions appear to be optimal, no attitudinal test is a perfectly reliable instrument. Every test should be accompanied by a statement of its reliability and which type of reliability coefficient was found. For example, when reliability coefficients are run, it should be stated whether the coefficient was a measure of internal consistency by way of a Spearman's split-half, Guttman's split-half, test-retest, interrater reliability, Cronbach's Alpha, or some other measure of reliability.

The purpose of establishing the reliability of the Balanced Life Inventory is to enhance its ability to produce consistently repeatable and accurate measurements of a test's identified constructs. When reliability coefficients have been established, then an approximate "true score" on each subscale may be estimated within certain error parameters.

The goal of establishing a reliable instrument is to

minimize the amount of error in the obtained scores. Several types of reliability are reported in an attempt to establish the Balanced Life Inventory as a reliable instrument.

Alpha Reliability Coefficient

Cronbach (1951, P. 297) stated that "any research based on measurement must be concerned with the accuracy or dependability or, as we usually call it, reliability of measurement. A reliability coefficient demonstrates whether the test designer was correct in expecting a certain collection of items to yield interpretable statements about individual differences".

Cronbach developed the coefficient alpha for a comprehensive and simply applied measure of reliability. The coefficient alpha provides statisticians with a coefficient over the entire scale being examined. It also gives a listing of the scale as the reliability is, or would be, with or without each of the individual items in the scale. This is extremely beneficial when attempting to increase the reliability of the scale. After the statistic has been run on a scale, the examiner may examine the scale in light of the possible higher reliability that would result if certain items were eliminated from the scale. Cronbach's alpha offers a listing of the items ranked in order of best to worst items as they effect the reliability of the instrument. With the elimination of the worst items

based on test reliability, the results will lead to a more
reliable instrument.

The most recent packages of software available to the
field of behavioral science have included Cronbach's alpha
as a statistical procedure and is found in the procedure
RELIABILITY. Following is the description of the procedure
as given in the Statistical Package for the Social Sciences
(SPSS-X, 1988), which is the statistical package used in
this study.

> The ALPHA model computes Cronbach's alpha
> and standardized items item alpha (Cronbach,
> 1951). If data are in dichotomous form,
> alpha is equivalent to reliability
> coefficient KR-20 (Kuder-Richardson-20).
> Coefficient alpha is the maximum likelihood
> estimate of the reliability coefficient if
> the parallel model is assumed to be true. If
> only two items are used, alpha is also equal
> to Guttman's split-half coefficient.

Nunnally (1967) states that Cronbach's alpha is the
best single measurement of reliability to use in test
development. Coefficient alpha squared is the hypothetical
correlation between a test score and errorless true score.

Alpha reliability coefficients are reported for each of
the subscales of the BLI. More than one Alpha estimate of
reliability is reported. One gives the whole scale

reliability estimate. Another estimate of reliability is reported which gives the Alpha reliability on each individual subscale. Additional runs omitting the items which contribute the least amount of reliability is reported which gives the highest reliability estimates Alpha may predict.

Alpha is a minimum likelihood estimate meaning that the actual reliability of a scale may be higher, but it will not usually be lower. An acceptable minimum standard for research purposes for establishing scale reliability is .55. It is hypothesized that each subscale of the BLI will be found to be reliable at or above the minimum standard as stated above.

Split-half Reliability Coefficient

Types of reliability used most often in assessing psychometric instruments include the "split-half" and "test-retest" reliability measures. Split-half reliability is a procedure which takes items from a test and correlates them with items from the same test. A common method for accomplishing this task is taking odd items and correlating them with the scores from the even items on the same scale. Split-half and test-retest methods are described in detail by leading psychometricians (Cronbach, 1951; Lord & Novick, 1968; Kerlinger, 1986; Guilford, 1954; Cronbach, 1984; Anastasi, 1982; and Isaac & Michael, 1987).

The Spearman-Brown formula is used as a substitute for

the "alternate forms" approach to reliability. Scale items become divided into two equal parts as if they were Forms A and Form B. The scores of the two halves of each subscale are correlated and the results are reported. The resulting coefficient estimates the reliability of the whole scale. In the case where a subscale might have an uneven number of items the program makes corrections in order to provide accurate statistics. The statistics yield a maximum estimate of scale reliability meaning that the actual scale reliability may be lower, but it will not be higher.

The Spearman-Brown formula is used to estimate reliability after a test has been shortened or lengthened. The nature of the test is assumed to be unchanged when applying this formula. If a test is increased greatly in length reliability may be affected as boredom may reduce test reliability. This is not the case in applying the formula to the Split-half procedure as the test is shortened for the correlation by one half of its original length.

Guttman Reliability Coefficient

The reliability estimates provided by the Guttman procedures are minimum likelihood estimates. The largest coefficient provided by this procedure is reported, and is intended to reflect a conservative estimation of true reliability.

Statistics For Establishing Scale Validity

An instrument may very well prove to be reliable, but

is it measuring what it is supposed to measure? Does the scale measure the identified constructs? Content, criterion-related, and construct validity are the three types of validity to be inferred as validity cannot be directly measured.

Content Validity

A panel of four judges have previously examined each item on the Balanced Life Inventory. They made independent judgments as to which of the six identified constructs each item measures. Refinement or deletion of items was then made when two or more of the interrator judges identified a particular item as measuring a different construct than the scale construction had suggested.

Construct Validity

Factor analysis of the BLI is reported. The purpose of this statistic was to determine the best linear combination of all scale items. Key statistics will measure item communality, factor eigen-values, and percentage of explained variance. This analysis was conducted on each of the six subscales.

Factor analysis is a means by which interrelationships among individual variables may be determined. Covariation among variables is assumed to be due to the presence of underlying common factors (Kim & Mueller, 1978; Norusis, 1988). Factor analysis is a very helpful tool for social and behavioral scientists in identifying underlying

psychological constructs (Cattell, 1962). Complicated correlation matrices are simplified through the use of factor analysis (Dachigan, 1982). This is done by grouping smaller subsets of "derived" variables or factors. All the information is still contained that was included in the original variables. The variables are broken down into separate independent dimensions to simplify the data.

Factor analysis procedures create a factor matrix. The original variables are places in rows with derived factors placed in columns (Kerlinger, 1985). Cells are created representing the factor loadings. Factor one is established in relation to a regression line that comes as close as possible to all of the points in the matrix. This factor accounts for a majority of the variance. Correlations must usually be between .3 to .4 or dropped out.

Eigenvalues is the amount of variation accounted for by a pattern (Kachigan, 1982). Eigenvalues determine how many factors will be retained. The rule of thumb is to only include factors that have an eigenvalue of at least 1.0. Most computer programs are set to default on 1.0 and will not assign as factors any variables accounting for less than that amount (Norusis, 1988).

Once factors are derived from the original set of variables, it is then possible to redefine the factors through a procedure called factor rotation. This is done in order to redistribute the explained variance among the newly

defined factors. This is done to delineate distinct clusters of relationships if they exist. The purpose of rotation procedures is to make the factors as different as possible. This procedure helps to determine which variables load high with which factors.

Once the factors are identified the next step is to name them. In this study it is hypothesized that the factors will be those of the subscales of the instrument: Family, Friends, Fortune, Faith, Fitness, Fun and Satisfaction as previously defined.

Operationalized Research Hypotheses

Using the above analysis several research hypotheses were tested as follows:

1. The subscales Family, Friends, Faith, Fortune, Fitness, Fun and Satisfaction were predicted to meet minimum research standards for reliability as measured by Alpha, Guttman, and Spearman-Brown estimates of scale reliability.

2. Differences in the scores of subjects by marital status were predicted on the subscales of the BLI determines by ANOVA tests.

3. No differences in the scores were predicted by gender as determined by ANOVA tests.

4. Differences in subjects' scores were predicted by age as determined by ANOVA tests.

5. Differences in subjects' scores were predicted by income level as determined by ANOVA tests.

6. Differences in subjects scores were predicted by educational levels as determined by ANOVA tests.

7. Differences in subjects' scores were predicted by numbers, and ages of children as determined by ANOVA tests.

8. Scores on the BLI FAMILY scale were predicted to be positively correlated with the scores on the Family & Friends (Enrich), Family Hardiness Scale, and the Family Adaptation and Cohesion Evaluation Scales.

9. Scores on the BLI FRIENDS scale were predicted to be positively correlated with the Family & Friends (Enrich), and Perceived Social Support-Friends scale.

10. Scores on the BLI FAITH scale were predicted to be positively correlated with the Religiosity (Moos), and Religion (Enrich) scores.

11. Scores on the BLI FORTUNE scale were predicted to be positively correlated with the Financial Management (Enrich), and the Status Concern Scales.

12. Scores on the BLI FITNESS scale were predicted to be positively correlated with the scores on the Physical Symptoms Scale, and the Body Cathexis Scale.

13. Scores on the BLI FUN scale were predicted to be positively correlated with the scores on the Leisure (Enrich), and Moos F.E.S. Fun scales.

14. Scores on the BLI SATISFACTION scale were predicted to be positively correlated with the scores on the Satisfaction (Enrich), and the Taylor-Johnson Temperament

Analysis Depression scales.

15. The self-rating scores were predicted to be positively correlated with their corresponding BLI scale.

16. Each of the BLI scales was predicted to have only one identified construct or factor with the exception of the SATISFACTION scale which was predicted to assess more than one identifiable construct.

Appendix D

Results And Discussion

The primary purpose of this study is the initial
validation of the Balanced Life Inventory (BLI). The BLI
consists of seven sub-scales; Family, Freinds, Faith,
Fortune, Fitness, Fun, and Satisfaction. This section will
summarize the demographics of the subjects used, the
analysis of data including the statistics used and outcomes
of a number of reliability and validity procedures.

Sample Characteristics

A sample size used for the validation of an instrument
has certain minimum standards. Ten times the number of
items in each scale is sufficient as a minimum standard for
a study of this type. A sample of 143 subjects was used in
this which meets the criteria. The goal in sample selection
was to find a cross section of adults with a variety of
characteristics to determine whether the instrument could
detect differences between groups of individuals. The
sample was a purposive nonprobability sample selected for
the sole purpose of validation of the BLI.

Table 1 is a summary of selected background
characteristics of individuals who participated in the
sample. A total of 143 subjects volunteered to participate

in the study, which consisted of 70 males (52%) and 65 females (48%).

The age of subjects ranged from late teens to retirement age. There were 44 subjects who were 20 or younger (32%), 38 were 21-30 years (38%), 31 were 32-45 years (30%), and 23 were 46 and older (18%).

The marital status of the subjects was divided into three groups. The majority of the subjects (73) were single (54%), 73 were married (39%), and 10 were either separated or divorced (7%).

The occupations of subjects consisted of 46 white collar workers (35%), 44 blue collar workers (44%), and 43 students (32%). Income level of the participants consisted of 5 who indicated they were very comfortable (4%), 85 were at a comfortable level (63%), 36 uncomfortable (26%), and 9 were very uncomfortable incomes (7%). There were 18 participants who had a high school or less education (13%), 68 who had some college (50%), and 50 who had 4 or more years of college education (37%).

The numbers of children respondents had ranged from none to 11. Ninety-four had no children (94%). There were 32 who had 1-2 children (24%), and 10 with 3 or more children (8%). The age of respondents' youngest child ranged from 1-39 with 14 having reporting their youngest between the ages of 1-11 years (25%), 19 with the youngest child from 13-20 (34%), and 21 with their youngest in the

ages 21-39 years (41%). The ages of respondents' oldest child ranged from 1-50. There were 18 who reported their oldest child to be 1-7 (34%), 18 with their oldest child 8-19 (34%), and 17 with their oldest child from 21-50 (32%).

Descriptive Statistics on the BLI

The Balanced Life Inventory was composed of 6 subscales with 14 items in each of the scales and one subscale with 24 items. Descriptive statistics of each scale is reported in Table 3. The 14 item scales had a theoretical range of scores from 6-84. The highest actual range was on the FAMILY scale of 55 with a high score of 81 and low of 26. The mean scores ranged from 44.7 on the FUN scale to 57.0 on the FAMILY scale. Standard deviations ranged from 5.0 on the FUN scale to 11.8 on the FAMILY scale. The SATISFACTION scale had a mean of 85.1, a range of 51 with a high score of 111 and a low score of 60. The standard deviation was 9.7 on the SATISFACTION scale. The mode and median scores are also reported for each subscale on Table 2.

Four items were deleted from each scale on the basis of their lack of contributions to Alpha. The purpose of deleting items was to make the instrument shorter and less time consuming when being administered. Descriptive statistics are reported on Table 3 for all 10 item BLI subscales. The SATISFACTION scale became a 21 item scale. Items 1, 2, 3, 6, 7, 8, 9, 11, 13, 16, 21, 23, 27, 48, 50, 53, 54, 59, 64, 67, 69, 73, 75, and 80 were deleted. The 10

item scales have a theoretical range from 10-60 and had an actual range of 11-60 which was reported on the FAMILY scale. The SATISFACTION scale has a theoretical range from 21-126 and had an actual range of 42-123. The means ranged from 38 on the FUN scale to 44.4 on the FRIENDS scale. The standard deviations of the 10 item scales ranged from 6.9 on the FAITH scale to 11.2 on the FAMILY scale. The mean on the SATISFACTION scale was 85.7 and the standard deviation was 14.7. Table 3 also reports the range, median and mode for all scales.

Tables 11 through 17 in the supplemental tables contain summaries of the BLI scales and item characteristics. The mean, standard deviation, standard error and reliability coefficients are listed for each of the scales. The item mean, standard deviation, standard error, median, mode, high score, low score, range, and rank are also listed. Item rank was determined by each item's contribution to Alpha.

<div align="center">Scale Reliabilities</div>

BLI Scales

Cronbach's alpha, Guttman Split-Half and Spearman Brown Equal Length reliability coefficients are reported on Table 6 for each of the BLI subscales having 10 items in each scale. Cronbach's alpha is a minimum likelihood estimate and is the reliability estimate used for discussion purposes. Nunally (1967) suggested that a .95 standard is the ideal when using scales for predictive purposes. A

reliability of .90 would be acceptable. He also stated that a reliability of .50 to .60 would be acceptable for research purposes. Since this research project was done for the purpose of scale validation the acceptable standard of .50 to .60 would be sufficient.

Cronbach's alpha on the 10 item scales ranged from .76 on FAITH to .93 on the FAMILY scale. Other scales Alpha were; FRIENDS (.83), FORTUNE (.82), FITNESS (.79), FUN (.78), and SATISFACTION (.86). Eliminating 4 items from each of the scales, reducing them from 14 to 10 items resulted in the following changes in each of the subscales: FAMILY (+.01) from .92 to .93, FRIENDS (+.01) from .82 to .83, FAITH (-.02) from .78 to .76, FORTUNE (+.01) from .81 to .82, FITNESS (-.02) from .81 to .79, FUN remained at .78, and SATISFACTION (-.01) from .87 to .86. Although reliabilities went down as a result of eliminating items on the FAITH, FITNESS, and SATISFACTION scales, it was decided that making the test 10 items instead of 14 would be worth the sacrifice of 1 to 2 points in reliability to make each subscale equal length and easier for respondents to take. The reliability of each scale remains at a level more than adequate for research purposes.

Guttman Split-Half on the 10 item scales ranged from FITNESS (.75) to FAMILY (.88). Other scales were as follows; FRIENDS (.83), FAITH (.84), FORTUNE (.82), FUN (.77), and SATISFACTION (.86).

Spearman-Brown equal length reliabilities on the 10 item scales ranged from FITNESS (.75) to FAMILY (.90). Other scales were; FRIENDS (.84), FAITH (.84), FORTUNE (.82), FUN (.77), and SATISFACTION (.88).

Validation Scales

Cronbach's alpha is reported on Table 6 for each of the validation scales. The reliability of the validation scales ranged from Leisure-ENRICH (.61) to the 9 item Cohesion Scale-FACES (.93). Alpha on the other validation scales were; Friends and Family-ENRICH (.75), Family Hardiness Scale (.77), Perceived Social Support (.83), Religiosity-Moos .70, Religion-ENRICH (.79), Financial Management-ENRICH (.82), Status Concern Scale (.82), Physical Symptoms Scale, Body Cathexis Scale (.42), Taylor-Johnson Depression (.88), and F.E.S. Fun-Moos (.76), and the Satisfaction-ENRICH (.80). The reliability of each of these scales was sufficient to use for the purpose of research.

Scale Validity

Content Validity

A panel of four interrator judges, professors of psychology, english, and education, examined each item of the BLI. They made judgments as to which of the six identified scales each item would be placed. Refinement or deletion of items was then made when two or more of the interrator judges disagreed on the placement of items into categorical constructs. This process was done as part of

the pilot study described in detail in Appendix H.

Criterion Related Validity

Correlations were run comparing the self-rating scores respondents made with their corresponding scores on each of the BLI scales. Table 4 presents the results. The number of subjects, correlation coefficients, and probabilities are listed for each of the correlations made. Each of the BLI subscales correlated extremely high with the corresponding self-rating scores. Every correlation produced a probability of .001.

Correlations were also made comparing the BLI scores with their corresponding validation scale. Table 5 reports the results. All correlations were at the $p = .001$ level of significance with the exception of FACES and the Leisure-ENRICH scale when correlated with the BLI Fun scale was at the $p=.002$ level of significance. The Status Concern Scale had a negative correlation of $-.16$ with the BLI Fortune scale indicating that the two scales measured different constructs.

Discriminate Validity

The purpose of statistical procedures to determine whether an instrument has discriminate validity is to see if the instrument can distinguish differences between groups of persons one might hypothesize would produce significantly different scores. Means, F ratios, and levels of significance for various subject characteristics are listed

on Tables 7 and 8 for the BLI 14 and 10 item scales (24 & 21 on SATISFACTION). These tables indicate the differences in means and their effects on significance levels after reducing the size of the scales.

Each BLI 14 item subscale detected significant differences between subjects on at least one characteristic. The FAMILY scale detected significant differences in the occupations of subjects $F(2,130)$, $= 3.19$, $p<.04$ and income levels $F(3,131)$, $= 2.95$, $p<.03$. There were significant differences on the FRIENDS scale in the age $F(3,132)$, $= 4.95$, $p<.002$, occupation $F(2,130)$, $= 4.08$, $p<.01$, number of children $F(2,133)$, $= 3.40$, $p<.03$), and age of youngest child $F(2,50)$, $= 4.37$, $p<.01$ categories. The FAITH scale detected differences in the age $F(3,132)$, $= 4.74$, $p<.003$, marital status $F(2,133)$, $= 6.32$, $p<.002$, occupation $F(2,130$, $= 7.16$, $p<.001$, and income $F(3,131)$, $= 3.78$, $p<.01$ characteristics of respondents. The FORTUNE scale found differences in the income $F(3,131) = 11.72$, $p<.001$ characteristic. The FITNESS scale detected differences in the marital status $F(2,133)$, $= 4.44$), $p<.01$ and in the income $F(3,131) = 3.88$), $p<.01$ characteristics. Significant differences were found in the occupation $F(2,130)$, $= 4.60$, $p<.01$ and income $F(3,131)$, $= 3.13$, $p<.02$ characteristics of the FUN scale. The SATISFACTION scale detected significant differences in the income $F(3,131)$, $= 4.30$, $p<.01$ characteristic.

After deleting 4 items from each of the subscales (3

from SATISFACTION) differences in means on each of the characteristics were run again. The results were as follows (see the continuations of Tables 8 & 9). The FAMILY scale detected differences in occupation $F(2,130)$, = 3.74, $p<.02$ and in income $F(3,131)$, = 3.90, $p<.01$. The FRIENDS scale detected significant differences in income $F(3,131)$, = 3.49, $p<.01$. The FAITH scale was able to detect differences in age $F(3,132)$, = 4.29, $p<.01$, marital status $F(2,132)$, = 5.20, $p<.01$, occupation $F(2,130)$, = 6.26, $p<.002$, number of children $F(2,133)$, = 2.94, $p<.05$, and income $F(3,131)$, = 5.67, $p<.001$. The FORTUNE scale detected significant differences in age $F(3,132)$, = 5.22, $p<.001$, marital status $F(2,133)$, = 5.22, $p<.01$, number of children $F(2,133)$, = 3.27, $p<.04$, and income $F(3,131)$, = 12.53, $p<.001$. The fitness scale detected differences in income $F(3,131)$, = 4.44, $p<.005$. The FUN scale detected differences in number of children $F(2,133)$, = 2.94, $p<.05$ and income $F(3,131)$, = 4.44, $p<.005$. The SATISFACTION scale detected differences in income $F(3,131)$, = 6.95, $p<.002$.

Construct Validity

Factor Analysis

Two factor analysis procedures were done on the entire BLI scale. The results indicated that there were too few subjects for a rotation to be completed.

Factor analysis was also done on each of the 7 subscales to see how many constructs each subscale

measured.   It was hypothesized that each subscale would measure only one construct.   The results of this procedure are found on Table 10.   Factors with eigenvalues of 1 or more were identified.   The items used in the FAMILY scale were found to only measure one construct.   The other combinations of items used in the various BLI subscales were found to be measuring more than one construct as follows; FRIENDS (2), FAITH (3), FORTUNE (2), FITNESS (3), FUN (2), and SATISFACTION (7).   The examination of the scree plots, however, did not support the findings that there was more than one factor on the FRIENDS, FAITH, FORTUNE, FITNESS, and FUN subscales.   The second or second and third factors with eigenvalues of 1 or more were not strong enough to identify them as constructs being measured.

In order to report the results of the factor analysis as conservatively as possible the following description of the factor loadings in regards to particular items are given.   This will detail the factor analysis where eigenvalues of 1 or greater were found in second and third factors.

Each subscale is theoretically measuring only one construct.   When factor analysis of a scale indicates that more than one construct is being measured, items measuring more than one construct must be identified.   Items with a factor loading of less than .50 in all factors should be eliminated so that each item will contribute to the total

percentage of variance accounted for by at least one of the item groupings in each factor.

The FAMILY scale only produced one factor with an eigenvalue of 6.07. This factor accounts for 60.8% of the variance of the construct being measured. With an alpha of .93 and only one factor being identified, it appears that the FAMILY scale is extremely reliable and valid.

Factor analysis of the FRIENDS scale identified 2 constructs being measured with eigenvalues of 4.07 and 1.16 respectively. Factor 1 accounted for 40.7% of the variance in the scale while factor 2 accounted for 11.6% of the variance. Cronbach's alpha is .83. By deleting 2 items from the scale (I14 & I82), whose factor loadings were <.50 on both factors, the scale should prove to be even more reliable and valid.

Factor analysis of the FAITH scale identified 3 factors with eigenvalues of 3.29, 1.35, and 1.20 respectively. Factor 1 accounted for 33% of the variance, factor 2 13.6%, and factor 3 12%. By deleting 1 item from the scale (I39), whose factor loadings was <.50, the validity of the scale should improve. The scale was found to be reliable with an alpha of .76.

Factor analysis on the FORTUNE scale identified 2 factors with eigenvlues of 3.70 and 1.60. Factor 1 accounted for 37% of the variance while factor 2 accounted for 16%. By eliminating 2 items (I28 & I22), whose factor

loadings were <.50 on both factors, the validity of the scale would improve. With Cronbach's alpha at .82 this scale could prove to be quite reliable and valid.

Factor analysis of the FITNESS scale identified 3 factors with eigenvalues of 3.50, 1.35, and 1.12. Factor 1 accounted for 35% of the variance while factors 2 and 3 accounted for 13.5% and 11.2% respectively. Cronbach's alpha is reported at .79 for the FITNESS scale. No items need deleting from this scale.

Factor analysis on the FUN scale identified 2 factors with eigenvalues of 3.52 and 1.29. Factor 1 accounted for 35.2% of the variance and factor 2 accounted for 12.8%. Eliminating 1 item (I76), whose factor loading was <.50 in both factors, would improve the construct validity of the scale. Cronbach's alpha is .78 for the FUN scale.

Factor analysis of the SATISFACTION scale identified 7 factors with eigenvalues of 6.14, 1.89, 1.54, 1.40, 1.15, 1.04, and 1.01 respectively. Factor 1 accounted for 29.2% of the variance while the other factors accounted for 9%, 7.3%, 6.7%, 5.5%, 5.0%, and 4.8% of the variance. Eliminating 4 of the 21 items in this scale (I14, I28, I63, & I70), whose factor loadings were <.50 in all factors, it is believed that the SATISFACTION scale would become more valid. Alpha for the Satisfaction scale is reported at .86. This scale should also prove to be quite reliable and valid.

Discussion

With alpha ranging from .76 to .93, the BLI subscales appear to be reliable for research purposes. The validity of the scales as they are may be somewhat problematic. The factor analysis indicates all but one of the subscales may be measuring more than one construct. It would be necessary to eliminate the problem items identified earlier so that each scale would have a better chance to measuring related constructs.

Limitations

The sample used in this study was a non-probability purposive sample, sometimes referred to as a convenience sample. The purpose of the sample selected was for the sole purpose of the initial validation of the BLI. The findings of the study are not meant in any way to be generalized to any other population. The statistics are only descriptive of the sample used. Whether the instrument may prove to be reliable and valid for any other group of persons is yet to be determined.

One particular limitation of this study was the lack of a clinical sample to compare with the non-clinical sample used. A larger sample would make a factor analysis on the whole scale possible, but the large number needed for the procedure was not available for this study. The instrument does appear to have an ability to distinguish between groups of people. Continued data collected and further refinement

of the scales through future reliability runs and factor analysis would make the scales even more reliable and valid.

Some encouraging aspects of the validation results to this point are the high correlations between the self-ratings of respondents with their scores on the BLI scales, the Cronbach's alpha results, the correlations between the BLI subscales and the validation scales and the prospects of improving the results of factor analysis through the elimination of the problematic items from each scale.

Appendix E

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Appendix F

Supplemental Tables

Table 11

Summary Of Balanced Life Inventory Scales and Item Characteristics

Family Scale Characteristics

Mean	43.5
Standard Deviation	11.2
Standard Error	.94
Reliability Coefficients	
Cronbach's Alpha	.93
Spearman-Brown	.90
Guttman	.88

Item Statistics For Family Scale

Items	M	SD	SE	Median	Mode	Hi	Lo	Range	Rank
19	4.2	1.3	.11	4	4	6	1	5	9
25	3.8	1.5	.12	4	4	6	1	5	5
31	4.1	1.6	.13	4	5	6	1	5	7
37	4.3	1.4	.12	5	5	6	1	5	8
43	4.8	1.3	.11	5	6	6	1	5	1
49	4.5	1.5	.13	5	6	6	1	5	9
55	4.4	1.4	.12	5	6	6	1	5	7
61	4.8	1.5	.13	5	6	6	1	5	10
77	4.0	1.5	.13	4	6	6	1	5	9
84	4.7	1.3	.11	5	6	6	1	5	8

Table 12

Summary Of Balanced Life Inventory Scales and Item Characteristics

Friends Scale Characteristics

Mean	44.4
Standard Deviation	7.6
Standard Error	.63
Reliability Coefficients	
Cronbach's Alpha	.83
Spearman-Brown	.84
Guttman	.83

Item Statistics For Friends Scale

Items	M	SD	SE	Median	Mode	Hi	Lo	Range	Rank
14	3.4	1.5	.13	3	3	6	1	5	7
20	3.9	1.3	.11	4	4	6	1	5	9
26	4.5	1.3	.10	5	5	6	1	5	3
32	4.1	1.2	.10	4	4	6	1	5	1
38	4.3	1.2	.10	4	4	6	1	5	2
44	4.4	1.4	.12	5	5	6	1	5	4
56	4.4	1.3	.11	4	5	6	1	5	5
62	4.9	1.0	.08	5	5	6	1	5	8
78	5.6	.77	.06	6	6	6	2	4	10
79	4.9	1.03	.09	5	6	6	2	4	6

Table 13

Summary Of Balanced Life Inventory Scales and Item Characteristics

Faith Scale Characteristics

Mean	43.6
Standard Deviation	6.9
Standard Error	.57
Reliability Coefficients	
Cronbach's Alpha	.76
Spearman-Brown	.84
Guttman	.84

Item Statistics For Faith Scale

Items	M	SD	SE	Median	Mode	Hi	Lo	Range	Rank
15	4.1	1.4	.12	4	5	6	1	5	1
33	4.0	1.3	.11	4	5	6	1	5	6
39	4.5	1.0	.09	5	5	6	1	5	4
45	4.0	1.3	.11	4	5	6	1	5	7
51	4.9	1.0	.09	5	6	6	2	4	9
57	5.1	1.1	.10	5	6	6	1	5	8
63	2.9	1.5	.12	3	2	6	1	5	5
68	4.8	1.1	.10	5	6	6	1	5	10
71	4.9	1.0	.09	5	5	6	1	5	2
74	4.4	1.3	.11	4	4	6	1	5	3

Table 14

Summary Of Balanced Life Inventory Scales and Item Characteristics

Fortune Scale Characteristics

Mean   40
Standard Deviation   8.3
Standard Error   .70
Reliability Coefficients
      Cronbach's Alpha   .82
      Spearman-Brown   .82
      Guttman   .82

Item Statistics For Fortune Scale

Items	M	SD	SE	Median	Mode	Hi	Lo	Range	Rank
4	4.3	1.5	.13	5	5	6	1	5	10
10	3.4	1.5	.13	3	3	6	1	5	7
22	3.9	1.3	.11	4	5	6	1	5	6
28	4.6	1.3	.11	5	5	6	1	5	5
34	3.3	1.4	.12	3	3	6	1	5	4
40	3.2	1.4	.12	3	3	6	1	5	3
46	4.4	1.3	.11	4	6	6	1	5	1
52	4.2	1.4	.12	4	4	6	1	5	2
58	4.5	1.4	.12	5	6	6	1	5	8
72	4.4	1.1	.10	5	5	6	1	5	9

Table 15

Summary Of Balanced Life Inventory Scales and Item Characteristics

Fitness Scale Characteristics

Mean	40
Standard Deviation	8.4
Standard Error	.70
Reliability Coefficients	
Cronbach's Alpha	.79
Spearman-Brown	.75
Guttman	.75

Item Statistics For Fitness Scale

Items	M	SD	SE	Median	Mode	Hi	Lo	Range	Rank
5	3.7	1.4	.12	4	3	6	1	5	4
17	3.5	1.3	.11	4	4	6	1	5	6
29	3.9	1.5	.12	4	5	6	1	5	10
35	4.2	1.4	.12	4	5	6	1	5	9
41	4.2	1.3	.11	5	5	6	1	5	8
47	4.2	1.2	.10	4	4	6	1	5	7
65	3.7	1.6	.13	4	4	6	1	5	3
81	3.7	1.7	.14	4	5	6	1	5	5
82	4.0	1.6	.13	4	5	6	1	5	2
83	4.5	1.2	.10	5	5	6	1	5	1

Table 16

Summary Of Balanced Life Inventory Scales and Item Characteristics

Fun Scale Characteristics

Mean	38
Standard Deviation	7.7
Standard Error	.64
Reliability Coefficients	
Cronbach's Alpha	.78
Spearman-Brown	.77
Guttman	.77

Item Statistics For Fun Scale

Items	M	SD	SE	Median	Mode	Hi	Lo	Range	Rank
12	4.2	1.4	.12	4	5	6	1	5	6
18	3.4	1.4	.11	3	3	6	1	5	3
24	3.5	1.4	.12	3	3	6	1	5	4
30	4.8	1.2	.10	5	5	6	2	4	2
36	3.8	1.3	.11	4	3	6	1	5	7
42	5.1	1.1	.10	5	6	6	1	5	8
60	3.6	1.4	.12	4	3	6	1	5	1
66	3.4	1.3	.11	3	3	6	1	5	9
70	3.0	1.4	.11	3	3	6	1	5	5
76	3.4	1.3	.11	3	3	6	1	5	10

Table 17

Summary Of Balanced Life Inventory Scales and Item Characteristics

Satisfaction Scale Characteristics

Mean   85.7
Standard Deviation   14.7
Standard Error   1.23
Reliability Coefficients
      Cronbach's Alpha   .86
      Spearman-Brown   .88
      Guttman   .86

Item Statistics For Satisfaction Scale

Items	M	SD	SE	Median	Mode	Hi	Lo	Range	Rank
4	4.3	1.5	.13	5	5	6	1	5	19
5	3.7	1.4	.12	4	3	6	1	5	16
14	3.4	1.5	.13	3	3	6	1	5	18
28	4.6	1.3	.11	5	5	6	1	5	5
32	4.1	1.2	.10	4	4	6	1	5	7
35	4.2	1.4	.12	4	5	6	1	5	15
37	4.4	1.4	.12	5	5	6	1	5	1
39	4.5	1.0	.09	5	5	6	1	5	12
45	4.0	1.3	.11	4	5	6	1	5	13
46	3.4	1.3	.11	4	6	6	1	5	4
49	4.5	1.5	.13	5	6	6	1	5	17
55	4.4	1.4	.12	5	6	6	1	5	3
56	4.4	1.3	.11	4	5	6	1	5	2
63	2.9	1.5	.12	3	2	6	1	5	8
66	3.4	1.3	.11	3	3	6	1	5	6
68	4.8	1.1	.10	5	6	6	1	5	18
70	3.0	1.4	.11	3	3	6	1	5	9
76	3.4	1.3	.11	3	3	6	1	5	20
79	4.9	1.0	.09	5	6	6	2	4	15
82	4.0	1.6	.13	4	5	6	1	5	21
84	4.7	1.3	.11	5	6	6	1	5	11

Table 18

BLI Reliability And Empirical Scale Characteristics From Pilot Study

Scale Name	Descriptive Statistics					Reliability		
	n of Items	M	SD	Theoretical Range	Actual Range	Cronbach's Alpha	Spearman's Split-Half	Guttman's Split-Half
Family	11	16.25	4.9	0-24	5-23	.77	.77	.76
Friends	10	13.93	4.01	0-22	2-22	.68	.67	.68
Faith	14	22.52	3.83	0-28	4-28	.63	.63	.64
Fortune	14	19.17	5.61	0-28	4-28	.72	.69	.69
Fitness	11	14.99	4.02	0-22	6-22	.56	.48	.48
Fun	13	16.83	5.69	0-28	4-28	.71	.71	.72

Table 19

Mean Comparisons on Background Characteristics from Pilot Study

Characteristic	n of cases	Family	Friends	Faith	Fortune	Fitness	Fun
Sex: Male	41	M=16.95	M=15.61	M=22.54	M=19.29	M=15.46	M=17.71
Female	59	M=15.71	M=15.50	M=22.47	M=19.03	M=14.61	M=17.46
		F=1.53	F=.01	F=.01	F=.05	F=1.08	F=.05
		P=NS	P=NS	P=NS	P=NS	P=NS	P=NS
Age: Under 30	13	M=14.38	M=13.92	M=20.85	M=15.92	M=14.69	M=15.31
30-39	31	M=17.84	M=15.19	M=22.68	M=18.48	M=13.81	M=16.97
40-49	21	M=15.00	M=16.33	M=22.86	M=19.14	M=14.14	M=17.81
50+	26	M=16.11	M=15.85	M=22.31	M=21.31	M=15.92	M=19.27
		F=2.22	F=.89	F=.81	F=2.91	F=1.37	F=1.71
		P=NS	P=NS	P=NS	P=.04	P=NS	P=NS
Marital status							
Married	73	M=17.1	M=16.14	M=22.90	M=19.70	M=14.88	M=18.12
Divorced	4	M=14.00	M=15.00	M=19.25	M=15.75	M=14.20	M=13.75
Single	5	M=12.2	M=13.40	M=20.60	M=20.60	M=14.20	M=16.40
Engaged	3	M=21.3	M=17.00	M=25.33	M=21.00	M=17.00	M=19.33
		F=3.47	F=.72	F=2.19	F=.74	F=.64	F=.90
		P=.02	P=NS	P=NS	P=NS	P=NS	P=NS
Number of Children							
0	6	M=15.17	M=14.50	M=21.17	M=16.50	M=13.67	M=14.50
1	14	M=18.21	M=16.93	M=23.50	M=19.28	M=15.71	M=20.21
2	27	M=16.52	M=16.37	M=22.44	M=19.59	M=14.00	M=17.04
3	14	M=16.07	M=15.43	M=23.07	M=19.78	M=14.89	M=17.21
4 or more	18	M=16.67	M=15.33	M=21.83	M=19.72	M=14.89	M=18.83
		F=.61	F=.52	F=.59	F=.41	F=.50	F=1.37
		P=NS	P=NS	P=NS	P=NS	P=NS	P=NS

Appendix G

Instruments Used In Study
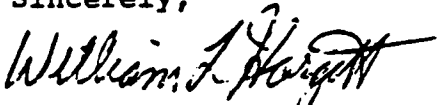
Two instruments were created for use in this study. One was the Balanced Life Inventory on pages 151-153. In the statistical data Items 1 to 84 represent the Balanced Life Inventory. The second instrument, a research questionnaire, is located on pages 155-164. The composition of this instrument included items 101 to 266 in the statisical data used for research purposes.

Dear Research Participant:

The accompanying questionnaires are a part of a research project which is in partial fulfillment for completing my doctoral studies at Oklahoma State University. All who participate are doing so on a strickly volunteer basis. All information is confidential and will be used only for this study. All participants will remain anonymous by using assigned I.D. numbers.

I thank you for your cooperation and participation in this project. You are making it possible for this project to be completed.

Sincerely,

William L. Hargett
Department of Family Relations
 & Child Development
Oklahoma State University

BACKGROUND INFORMATION

Participant Identification Number:_____

Age:_____   Sex: ____ Male ____ Female

Years of Education: _____
     (High School=12; College=16)

On A Scale Of 1 to 10 Rate Your   low   high
Overall Satisfaction With Your: FAMILY 1-------5------10

                                FRIENDS 1-------5------10

                                FAITH   1------5------10

                     FUN & RECREATION 1------5------10

WORK, FINANCES & EDUCATION (FORTUNE)   1------5------10

                   PHYSICAL FITNESS   1------5------10

          GENERAL LIFE SATISFACTION   1------5------10

Job Title/Description:_____

Number of Children:_____ Age of Oldest Child _____

                                Age of Youngest Child _____

Marital Status: Single _____ Never Married_____Widowed_____

                Married_____1st Marriage_____Separated____

                Remarried_____

How adequate is your family income   _____ Very Comfortable
   from all sources in meeting your   _____ Comfortable
   financial needs?   _____ Uncomfortable
                                       _____ Very
                                              Uncomfortable

The Balanced Life Inventory

Please circle the answer that best represents your opinion on each of the items on the Balanced Life Inventory and Satisfaction Scales. Use the answer sheet provided.

1. Our family needs more time together.
2. I need friends who understand the important issues in my life.
3. I generally trust people and believe what they tell me.
4. I am unhappy with my occupational role.
5. I worry about my health.
6. I have at least one hobby.
7. Our family spends too much time together.
8. I would like my friends to understand me.
9. At times I have doubts about the existence of a supreme being.
10. I worry too much about money.
11. I exercise on a regular basis.
12. I take time regularly for fun.
13. Our family needs to be more affectionate.
14. I need more real friends.
15. Trusting others is usually difficult for me.
16. I have to spend too much time making a living.
17. I eat properly.
18. I have a need to laugh more often.
19. My family does not respond to my needs often enough.
20. People do not take me seriously.
21. I feel insecure when circumstances are not in my control.
22. Following a family budget seems impossible to me.
23. I have trouble relaxing.
24. I tend to take life too seriously.
25. I often have trouble communicating with members of my family.
26. I feel like my friends talk about me behind my back.
27. Promises are made to be broken.
28. I feel like life has left me on the short end of its rewards.
29. I cannot always get to sleep at night.
30. There are not very many things I enjoy doing just for fun.
31. Expression of feelings is often strained in our family.
32. Others do not respect me as much as I wish they would.

33. People I trusted have let me down too many times.
34. I worry about my financial security.
35. I have more aches and pains than most people my age.
36. I generally do not have time to play.
37. I feel like my family does not respect my opinions.
38. My friends do not compliment me enough.
39. I am normally optimistic.
40. I never seem to be getting on top financially.
41. I have trouble thinking clearly.
42. I think playing is for kids, not for adults.
43. My family does not give me adequate moral support.
44. I am afraid of losing some of my friends.
45. I get worried about things that do not warrant a lot of concern.
46. I often ask "Is this all there is in life for me?"
47. People consider me to be neat and attractive.
48. I have a place I would really enjoy going on vacation this year.
49. I am generally unhappy with my family relationships.
50. I have trouble expressing love and appreciation to my friends.
51. Thinking about religion occupies too much of my time.
52. I feel like others seem to have all the luck!
53. I have adequate energy for the work I need to do on a regular basis.
54. My family has fun together on a regular basis.
55. I feel insecure when I think of my family relationships.
56. My friends do not care as much about me as I do about them.
57. I question the teaching of my religion and that causes problems for me.
58. I wish I would have chosen a different occupation.
59. I worry too much about my physical fitness.
60. I need to find humorous moments more often.
61. I wonder if my family will stay together.
62. My friends take up too much of my time.
63. I need more self-confidence.
64. I am satisfied with my relationships at work.
65. I am average height and weight.
66. I seldom experience feeling down and discouraged.
67. My family requires too much of my time and energy.
68. I am a trusting person.
69. I have all the formal education I need.

70. I get so pressured by life, that I would just like to get a way from everyone and everything for a while.
71. My faith is too weak to have any positive affect on my life.
72. I am as intelligent as most others in my social world.
73. I take a vacation every year.
74. Life lets me down all too often!
75. I am respected.
76. I need to let down more often.
77. I worry about relationships in my immediate family.
78. I have at least one person who loves me even when I am at my worst.
79. I have solid support from my circle of friends.
80. I have people I associate with on a regular basis socially.
81. I can think of a good reason I should go to my doctor very soon.
82. My physical condition keeps me from doing some things I would like to do.
83. I am in good health.
84. My family members are mutually supportive.

ANSWER SHEET FOR
THE BALANCED LIFE INVENTORY

1 ALMOST ALWAYS TRUE	2 USUALLY TRUE	3 MORE TRUE THAN FALSE	4 MORE FALSE THAN TRUE	5 USUALLY FALSE	6 ALMOST ALWAYS FALSE

CIRCLE ONE	CIRCLE ONE	CIRCLE ONE	CIRCLE ONE	CIRCLE ONE
01. 1 2 3 4 5 6	21. 1 2 3 4 5 6	41. 1 2 3 4 5 6	61. 1 2 3 4 5 6	81. 1 2 3 4 5 6
02. 1 2 3 4 5 6	22. 1 2 3 4 5 6	42. 1 2 3 4 5 6	62. 1 2 3 4 5 6	82. 1 2 3 4 5 6
03. 1 2 3 4 5 6	23. 1 2 3 4 5 6	43. 1 2 3 4 5 6	63. 1 2 3 4 5 6	83. 1 2 3 4 5 6
04. 1 2 3 4 5 6	24. 1 2 3 4 5 6	44. 1 2 3 4 5 6	64. 1 2 3 4 5 6	84. 1 2 3 4 5 6
05. 1 2 3 4 5 6	25. 1 2 3 4 5 6	45. 1 2 3 4 5 6	65. 1 2 3 4 5 6	
06. ' 2 3 4 5 6	26. 1 2 3 4 5 6	46. 1 2 3 4 5 6	66. 1 2 3 4 5 6	
07. 1 2 3 4 5 6	27. 1 2 3 4 5 6	47. 1 2 3 4 5 6	67. 1 2 3 4 5 6	
08. 1 2 3 4 5 6	28. 1 2 3 4 5 6	48. 1 2 3 4 5 6	68. 1 2 3 4 5 6	
09. 1 2 3 4 5 6	29. 1 2 3 4 5 6	49. 1 2 3 4 5 6	69. 1 2 3 4 5 6	
10. 1 2 3 4 5 6	30. 1 2 3 4 5 6	50. 1 2 3 4 5 6	70. 1 2 3 4 5 6	
11. 1 2 3 4 5 6	31. 1 2 3 4 5 6	51. 1 2 3 4 5 6	71. 1 2 3 4 5 6	
12. 1 2 3 4 5 6	32. 1 2 3 4 5 6	52. 1 2 3 4 5 6	72. 1 2 3 4 5 6	
13. 1 2 3 4 5 6	33. 1 2 3 4 5 6	53. 1 2 3 4 5 6	73. 1 2 3 4 5 6	
14. 1 2 3 4 5 6	34. 1 2 3 4 5 6	54. 1 2 3 4 5 6	74. 1 2 3 4 5 6	
15. 1 2 3 4 5 6	35. 1 2 3 4 5 6	55. 1 2 3 4 5 6	75. 1 2 3 4 5 6	
16. 1 2 3 4 5 6	36. 1 2 3 4 5 6	56. 1 2 3 4 5 6	76. 1 2 3 4 5 6	
17. 1 2 3 4 5 6	37. 1 2 3 4 5 6	57. 1 2 3 4 5 6	77. 1 2 3 4 5 6	
18. 1 2 3 4 5 6	38. 1 2 3 4 5 6	58. 1 2 3 4 5 6	78. 1 2 3 4 5 6	
19. ' 2 3 4 5 6	39. 1 2 3 4 5 6	59. 1 2 3 4 5 6	79. 1 2 3 4 5 6	
20. 1 2 3 4 5 6	40. 1 2 3 4 5 6	60. 1 2 3 4 5 6	80. 1 2 3 4 5 6	

Please circle the number that best represents your opinion on each of the items in the BLI.

IDENTIFICATION NUMBER _____

Research Questionnaire

Section I.

During the past year, indicate how often each area has been source of stress to you:

Circle Your Response	1 Almost Never	2 Occasionally	3 Sometimes	4 Often	5 Very Often

1 2 3 4 5	1. Lack of sleep
1 2 3 4 5	2. Lack of exercise
1 2 3 4 5	3. Lack of time to eat
1 2 3 4 5	4. Eating too much
1 2 3 4 5	5. Overuse of alcohol or smoking
1 2 3 4 5	6. Feeling overweight
1 2 3 4 5	7. Feeling emotionally upset
1 2 3 4 5	8. Feeling physically ill

Section II.

1 Almost	2 Once In a While	3 Sometimes	4 Frequently	5 Almost Always

The following statements describe common family situations. Using the 5 responses listed above, please place the NUMBER (1-5) that you believe best describes your family as it is NOW.

Circle One

1 2 3 4 5	9.	Family members feel very close to each other.
1 2 3 4 5	10.	Family togetherness is very important.
1 2 3 4 5	11.	Family members ask each other for help.
1 2 3 4 5	12.	Family members consult with each other on decisions.
1 2 3 4 5	13.	We like to do things with just our immediate family.

Circle Your
Response

1 2 3 4 5   14.   Family members like to spend free time with each other.
1 2 3 4 5   15.   We approve of each others friends.
1 2 3 4 5   16.   When our family gathers for activities, all are together.
1 2 3 4 5   17.   We can easily think of things to do as a family.

Section III.

Answer "true" or "false" to the following statements. True could mean "always" or "mostly true" and "false" could mean "always" or "mostly false". Mark the "I don't know response if you are undecided. Where there is a blank space in a statement, insert your name.

1	2	3
Always or Mostly True	Undecided	Always or Mostly False

1 2 3   18.   Does ... often feel discouraged because of a sense of inferiority?

1 2 3   19.   Does ... have periods of idleness when it is difficult to find any reason for either physical or mental effort?

1 2 3   20.   Family members attend church, synagogue, or Sunday School fairly often.

1 2 3   21.   Does ... often feel depressed by memories of childhood or other past experiences?

1 2 3   22.   Does ... have periods of depression which last for several days or more without apparent reason?

1 2 3   23.   We don't say prayers in our family.

1 2 3   24.   Does ... often feel left out or unwanted?

1 2 3   25.   We often talk about the religious meaning of Christmas, Passover or other holidays.

1 2 3   26.   Does . . .feel disillusioned about life?
1 2 3   27.   Is . . . hopeful and optimistic about the future?
1 2 3   28.   Does . . . have phobias or a deeply disturbing fear of any object, place, or situation?

Circle One

1 2 3   29.   We don't believe in heaven or hell.
1 2 3   30.   Family members have strict ideas about what is right and wrong.
1 2 3   31.   Are there times when . . . feels discouraged or despondent over lack of progress or accomplishment?
1 2 3   32.   We believe there are some things you just have to take on faith.
1 2 3   33.   Does . . . feel that life is very much worth living?
1 2 3   34.   Is . . . bothered at times by feeling unappreciated or by the idea that "nobody cares"?
1 2 3   35.   Does . . . often dwell on past misfortunes?
1 2 3   36.   Is . . . often so low in spirit as to be close to tears?
1 2 3   37.   Is . . . frequently depressed because of personal problems?
1 2 3   38.   In our family each person has different ideas about what is right and wrong.
1 2 3   39.   When deeply disturbed about something, has . . . ever contemplated suicide?
1 2 3   40.   The Bible is a very important book in our home.
1 2 3   41.   Is . . . often troubled by a lack of self-confidence?
1 2 3   42.   Family members believe that if you sin you will be punished.
1 2 3   43.   Is . . . easily disheartened by criticism?
1 2 3   44.   Does . . . often have "the blues" or feel down hearted for no apparent reason?
1 2 3   45.   Does . . . at times suffer extreme physical exhaustion resulting from emotional conflicts?
1 2 3   46.   Does . . . smile or laugh a good deal?

Section IV.

Please read each statement below and decide to what degree each describes your family.

Circle Your Response	1 False	2 Mostly False	3 Mostly True	4 Totally True

1 2 3 4 47. Trouble results from mistakes we make.

1 2 3 4 48. It is not wise to plan ahead and hope because things do not turn out anyway.

1 2 3 4 49. Our work and efforts are not appreciated no matter how hard we try and work.

1 2 3 4 50. In the long run, the bad things that happen to us are balanced by the good things that happen.

1 2 3 4 51. We have a sense of being strong even when we face big problems.

1 2 3 4 52. Many times I feel I can trust that even in difficult times that things will work out.

1 2 3 4 53. While we don't always agree, we con count on each other to stand by us in times of need.

1 2 3 4 54. We do not feel we can survive if another problem hits us.

1 2 3 4 55. We believe that tings will work out for the better if we work together as a family.

1 2 3 4 56. Life seems dull and meaningless.

1 2 3 4 57. We strive together and help each other no matter what.

1 2 3 4 58. When our family plans activities we try new and exciting things.

1 2 3 4 59. We listen to each others' problems, hurts and fears.

1 2 3 4 60. We tend to do the same things over and over . . . its boring.

1 2 3 4 61. We seem to encourage each other to try new things and experiences.

1 2 3 4 62. It is better to stay at home than go out and do things with others.

1 2 3 4 63. Being active and learning new things is encouraged.

Circle One

1 2 3 4   64. We work together to solve problems.

1 2 3 4   65. Most of the unhappy things that happen are due to bad luck.

1 2 3 4   66. We realize our lives are controlled by accidents and luck.

Section V.

Response Choices:

Circle One	1 Agree Strongly	2 Agree	3 Undecided	4 Disagree	5 Disagree Strongly

1 2 3 4 5   67. I sometimes feel pressured to participate in activities my partner enjoys.

1 2 3 4 5   68. Some relatives or friends do things that create tension in our marriage.

1 2 3 4 5   69. I am not pleased with the personality and personal habits of my partner.

1 2 3 4 5   70. It's hard to have complete faith in some of the teachings of my religion.

1 2 3 4 5   71. I wish my partner would have more time and energy for recreation with me.

1 2 3 4 5   72. I am very happy with how we handle role responsibilities in our marriage.

1 2 3 4 5   73. We spend the right amount of time with our relatives and friends.

1 2 3 4 5   74. Religion has the same meaning for both of us.

1 2 3 4 5   75. I would rather do almost anything than spend an evening by myself.

1 2 3 4 5   76. I am not happy with our communication - partner does not understand me.

1 2 3 4 5   77. I think my partner is too involved with or influenced by his/her family.

Circle One

1 2 3 4 5	78. Sharing religious values helps our relationship grow.
1 2 3 4 5	79. I am concerned that my partner does not have enough interests/hobbies.
1 2 3 4 5	80. I am very happy about how we make decisions and resolve conflicts.
1 2 3 4 5	81. I do not enjoy spending time with some of our relatives or in-laws.
1 2 3 4 5	82. My religious beliefs are an important part of my commitment to my partner.
1 2 3 4 5	83. My partner and I seem to enjoy the same type social/recreational activities.
1 2 3 4 5	84. I am unhappy with our financial position and how we make financial decisions.
1 2 3 4 5	85. My partner likes all of my friends.
1 2 3 4 5	86. My partner and I disagree on how to practice our religious beliefs.
1 2 3 4 5	87. I have concerns about where and how we spend holidays with our families.
1 2 3 4 5	88. I am very happy with how we manage our leisure
1 2 3 4 5	89. Sometimes my partner spends too much time with friends.
1 2 3 4 5	90. It is important for me to pray with my partner.
1 2 3 4 5	91. We never have concerns about TV programs or the time spent watching television.
1 2 3 4 5	92. I am very pleased with how we express affection and relate sexually.
1 2 3 4 5	93. I feel that our parents expect too much assistance or attention from us.
1 2 3 4 5	94. I believe that our marriage includes active religious involvement.
1 2 3 4 5	95. I like the amount of time and leisure activities my partner and I share.
1 2 3 4 5	96. I am not satisfied with how we each handle our responsibilities as parents.
1 2 3 4 5	97. I feel that our parents create problems in our marriage.
1 2 3 4 5	98. In loving my partner, I better understand the concept that God is love.

Circle One

1 2 3 4 5   99.   I do not seem to have fun unless I am with my partner.

1 2 3 4 5   100.   I am satisfied about our relationship with my parents, in-laws and/or friends.

1 2 3 4 5   101.   I really enjoy being with all of my partner's friends.

1 2 3 4 5   102.   My partner and I disagree about some of the teachings of my religion.

1 2 3 4 5   103.   My partner and I have a good balance of leisure time together and separately.

1 2 3 4 5   104.   I feel very good about how we each practice our religious beliefs and values.

1 2 3 4 5   105.   I've concerns when my partner spends at time with friends or co-workers of the opposite sex.

1 2 3 4 5   106.   My partner and I feel closer because of our religious beliefs.

1 2 3 4 5   107.   There are times when I am bothered by my partner's jealousy.

1 2 3 4 5   108.   I'm completely satisfied with the amount of affection my partner gives me.

1 2 3 4 5   109.   Sometimes I wish my partner was more careful in spending money.

---

1 2 3 4 5   110.   It bothers me that I cannot spend money without my partner's approval.

1 2 3 4 5   111.   We have difficulty deciding on how to handle our finances.

1 2 3 4 5   112.   I am satisfied with our decisions about how much we should save.

1 2 3 4 5   113.   We are both aware of our major debts, and they are not a problem for us.

1 2 3 4 5   114.   We seldom keep records of our spending or budget our money.

1 2 3 4 5   115.   Use of credit cards and charge accounts has been a problem for us.

1 2 3 4 5   116.   Deciding what is most important to spend our money on is sometimes a problem.

1 2 3 4 5   117.   We always agree on how to spend our money.

Section VI.

Response Choices:

Circle Your Response	1 True or Mostly True	2 Undecided	3 False or Mostly False

1 2 3   118. We spend most weekends and evenings at home.
1 2 3   119. Friends often come over for dinner or to visit.
1 2 3   120. Nobody in our family is active in sports, Little League, bowling, etc.
1 2 3   121. We often go to movies, sports events, camping, etc.
1 2 3   122. Everyone in our family has a hobby or two.
1 2 3   123. Family members are not very involved in recreational activities outside work or school.
1 2 3   124. Family members sometimes attend courses or take lessons for some hobby or interest (outside of school).

Section VII

Please mark your responses according to the amount of satisfaction you experience with the following:

1 Very Satisfied	2 Somewhat Satisfied	3 Satisfied	4 Somewhat Dissatisfied	5 Very Dissatisfied

Circle One
1 2 3 4 5   125. Appetite
1 2 3 4 5   126. Physical Stamina
1 2 3 4 5   127. Muscular Strength
1 2 3 4 5   128. Waist
1 2 3 4 5   129. Energy Level
1 2 3 4 5   130. Height
1 2 3 4 5   131. Tolerance For Pain

1 2 3 4 5   132. Digestion
1 2 3 4 5   133. Resistance To Illness
1 2 3 4 5   134. Sleep
1 2 3 4 5   135. Health
1 2 3 4 5   136. Weight

Section VIII

	1	2	3	4	5	6
Circle Your Response	Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree

1 2 3 4 5 6   137. The extent of a man's ambition to better himself is a pretty good indication of his character.

1 2 3 4 5 6   138. In order to merit the respect of others, a person should show the desire to better himself.

1 2 3 4 5 6   139. One of the things you should consider in choosing your friends is whether they can help you make your way in the world.

1 2 3 4 5 6   140. Ambition is the most important factor in determining success in life.

1 2 3 4 5 6   141. One should always try to live in a highly respectable residential area, even though it entails sacrifice.

1 2 3 4 5 6   142. Before joining any civic or political association, it is usually important to find out whether it has the backing of people who have achieved a respected social position.

1 2 3 4 5 6   143. Possession of proper social etiquette is usually the mark of a desirable person.

1 2 3 4 5 6   144. The raising of one's social position is one of the more important goals in life.

1 2 3 4 5 6   145. It is worth considerable effort to assure one's self of a good name with the right kind of people.

1 2 3 4 5 6   146. An ambitious person can almost always achieve his goals.

Section IX.

Circle the answer that best describes your feelings and relationships with friends.

Circle your Response	1 True	2 Don't Know	3 False

1 2 3   147. My friends give me the moral support I need.

1 2 3   148. Most other people are closer to their friends than I am.

1 2 3   149. My friends enjoy hearing about what I think.

1 2 3   150. Certain friends come to me when they have problems.

1 2 3   151. I rely on my friends for emotional support.

1 2 3   152. If I felt that one or more of my friends were upset with me, I'd just keep it to myself.

1 2 3   153. I feel that I'm on the fringe in my circle of friends.

1 2 3   154. There is a friend I could go to if I were just feeling down, without feeling funny about it later.

1 2 3   155. My friends and I are very open about what we think about things.

1 2 3   156. My friends are sensitive to my personal needs.

1 2 3   157. My friends come to me for emotional support.

1 2 3   158. My friends are good at helping solve problems.

1 2 3   159. I have a deep sharing relationship with a number of friends.

1 2 3   160. My friends get good ideas about how to do things or make things from me.

1 2 3   161. When I confide in friends, it makes me feel uncomfortable.

1 2 3   162. My friends seek me out for companionship.

1 2 3   163. I think that my friends feel that I'm good at helping them solve problems.

1 2 3   164. I don't have a relationship with a friend that is as intimate as other people's relationships with friends.

1 2 3   165. I've recently gotten a good idea about how to do something from a friend.

1 2 3   166. I wish my friends were much different.

Balanced Life Inventory
Revised Items

1. Our family needs more time together. FAMILY
2. I need friends who understand the important issues in my life. FRIENDS
3. I generally trust people and believe what they tell me. FAITH
4. I am unhappy with my occupational role. FORTUNE *
5. I worry about my health. FITNESS *
6. I have at least one hobby. FUN
7. Our family spends too much time together. FAMILY
8. I would like my friends to understand me. FRIENDS
9. At times I have doubts about the existence of God. FAITH
10. I worry too much about money. FORTUNE
11. I exercise on a regular basis. FITNESS
12. I take time regularly for fun. FUN
13. Our family needs to be more affectionate. FAMILY
14. I need more real friends. FRIENDS *
15. Trusting others is usually difficult for me. FAITH
16. I have to spend too much time making a living. FORTUNE
17. I eat properly. FITNESS
18. I have a need to laugh more often. FUN
19. My family does not respond to my needs often enough. FAMILY
20. People do not take me seriously. FRIENDS
21. I feel insecure when circumstances are not in my control. FAITH
22. Following a family budget seems impossible to me. FORTUNE
23. I have trouble relaxing. FITNESS
24. I tend to take life too seriously. FUN
25. I often have trouble communicating with members of my family. FAMILY
26. I feel like my friends talk about me behind my back. FRIENDS
27. Promises are made to be broken. FAITH
28. I feel like life has left me on the short end of its rewards. FORTUNE *
29. I cannot always get to sleep at night. FITNESS
30. There are not very many things I enjoy doing just for fun. FUN
31. Expression of feelings is often strained in our family. FAMILY
32. Others do not respect me as much as I wish they would. FRIENDS *
33. People I trusted have let me down too many times. FAITH
34. I worry about my financial security. FORTUNE
35. I have more aches and pains than most people my age. FITNESS *
36. I generally do not have time to play. FUN

37. I feel like my family does not respect my opinions. FAMILY *
38. My friends do not compliment me enough. FRIENDS
39. I am normally optimistic. FAITH *
40. I never seem to b getting on top financially. FORTUNE
41. I have trouble thinking clearly. FITNESS
42. I think playing is for kids, not for adults. FUN
43. My family does not give me adequate moral support. FAMILY
44. I am afraid of losing some of my friends. FRIENDS
45. I get worried about things that do not warrant a lot of concern. FAITH *
46. I often ask "Is this all there is in life for me?" FORTUNE *
47. People consider me to be neat and attractive. FITNESS
48. I have a place I would really enjoy going on vacation this year. FUN
49. I am generally unhappy with my family relationships. FAMILY *
50. I have trouble expressing love and appreciation to my friends. FRIENDS
51. Thinking about religion occupies too much of my time. FAITH
52. I feel like others seem to have all the luck! FORTUNE
53. I have adequate energy for the work I need to do on a regular basis. FITNESS *
54. My family has fun together on a regular basis. FUN *
55. I feel insecure when I think of my family relationships. FAMILY *
56. My friends do not care as much about me as I do about them. FRIENDS *
57. I question the teaching of my church and that causes problems for me. FAITH
58. I wish I would have chosen a different occupation. FORTUNE
59. I worry too much about my physical fitness. FITNESS
60. I need to find humorous moments more often. FUN
61. I wonder if my family will stay together. FAMILY
62. My friends take up too much of my time. FRIENDS
63. I need more self confidence. FAITH *
64. I am satisfied with my relationships at work. FORTUNE *
65. I am of average height and weight. FITNESS
66. I seldom experience feeling down and discouraged. FUN *
67. My family requires too much of my time and energy. FAMILY
68. I am a trusting person. FAITH *
69. I have all the formal education I need. FORTUNE
70. I get so pressured by life, that I would just like to get away from everyone and everything for awhile. FUN *
71. My faith is too weak to have any positive affect on my life. FAITH

72. I am as intelligent as most others in my social world. FORTUNE
73. I take a vacation every year. FUN
74. God lets me down all too often! FAITH
75. I am respected. FORTUNE
76. I need to let down more often. FUN *
77. I worry about relationships in my immediate family. FAMILY
78. I have at least one person who loves me even when I am at my worst. FRIENDS
79. I have solid support from my circle of friends. FRIENDS *
80. I have people I associate with on a regular basis socially. FRIENDS
81. I can think of a good reason I should go to my doctor very soon. FITNESS
82. My physical condition keeps me from doing some things I would like to do. FITNESS *
83. I am in good health. FITNESS
84. My family members are mutually supportive. FAMILY *

* Indicates items used on the SATISFACTION scale.

Appendix H

Pilot Study

A pilot study was completed on the Balanced Life Inventory. Respondent answers were placed on an answer sheet which contained background information as well as places for all responses to be entered.

Each subscale had from 11 to 14 "true" or "false" items assessing a particular scale. In addition, each subscale had one short answer question.

A sample, n=101, was composed of persons attending family life and stress management seminars. They were of a non-clinical population representing various ages, marital status, educational levels, and with varying numbers of children.

The demographics of the group sampled were as follows: males=41, females=60, age range=18 to 69, married=73, divorced=4, single=5, and engaged=3. The numbers of children respondents had ranged from 0 to 8. All answer sheets were hand scored, coded for computer processing and verified by a series of cross-checking strategies.

A frequency distribution was reported for each subscale. Reliability coefficients were reported for each subscale and Cronbach's coefficient alpha was run on each

subscale to determine a listing of the most to least reliable items on each subscale.

Means, standard deviations, actual range of scores, Cronbach's, Spearman's split-half, and Guttman's split-half reliability coefficients were reported for each of the six subscales. Table 18 shows the results.

The mean of subscales ranged from FRIENDS (13.93) to FAITH (22.53). Standard deviations ranged from FAITH (3.83) to FUN (5.69). The possible ranges of scores on the subscales were from 0-22 on the FRIENDS and FITNESS subscales to 0-28 on the FAITH, FORTUNE, and FUN subscales.

The respondents had a wide range of actual scores on all subscales, indicating that each of the subscales could potentially identify differences between subjects. Table 20 shows the results.

Insert Table 18 about here

Cronbach's alpha estimates of reliability on each subscale ranged from FITNESS (.55) to FAMILY (.77). The Guttman split-half reliability coefficients ranged from FITNESS (.48) to FAMILY (.76). The Spearman split-half reliability coefficients ranged from FITNESS (.46) to FAMILY (.77). Other subscale reliability coefficients (Cronbach's) were: FRIENDS (.68), FAITH (.63), FORTUNE (.72), and FUN (.71). The reliability estimates were consistently higher

using Cronbach's estimates for FAMILY, FRIENDS, FORTUNE, and
FITNESS. Guttman's split-half reliability estimates were
found to be higher than Cronbach's on the FAITH and FUN
subscales. The subscales were broken down by subjects'
gender, age, marital status, and numbers of children they
have. Table 19 reports the results.

Insert Table 19 about here

Means and analysis of variance are reported. Means for
males, females, age groups of under thirty, 30-39, 40-49, 50
and over, married, divorced, single, and engaged subjects,
and subjects with none, one, two, three and four or more
children were reported. Only two groups had a significant
difference in means: The marital status characteristics on
the FAMILY subscale $\underline{F}(3,81)$, = 3.47, $\underline{p}$<.02 and the subjects
in the age grouping on the FORTUNE subscale $\underline{F}(3,87)$, = 2.91,
$\underline{p}$<.04.

BALANCED LIFE INVENTORY

William L. Hargett, author
1986

INSTRUCTIONS: Read these instructions carefully before beginning. Mark your responses on the answer sheet. Do not mark on this booklet. Please respond to every statement. Please attempt to respond to each statement with a "+" or "-". Avoid "?" responses. Plus (+) means "yes" or "usually true". Question mark (?) means undecided. Minus (-) means "no" or "usually not true". Mark your responses with an "x" on the answer sheet. Do not think too long about one question.

1. Our family needs more time together.

2. I need friends who understand the important issues in my life.

3. I generally trust people and believe what they tell me.

4. I am unhappy with my occupational role.

5. I worry about my health.

6. I have at least one hobby that is of interest to me.

7. Our family spends too much time together.

8. People generally don't understand me.

9. I believe in God.

10. I worry too much about money.

11. I exercise on regular basis.

12. I take time daily for relaxation.

13. Our family needs to be more affectionate.

14. I need more <u>real</u> friends.

15. Trusting others is usually difficult for me.

16. I have to spend too much time making a living.

17. I don't eat properly.

18. I have a need to laugh more.

19. My spouse doesn't understand my needs.

20. People don't take me seriously.

21. I feel uneasy when I'm not in control of my present circumstances.

22. Following a family budget seems impossible to me.

23. I have trouble relaxing.

24. I tend to take life too seriously.

25. I often have trouble communicating with members of my family.

26. People talk about me behind my back.

27. I think promises are made to be broken.

28. I feel like life has left me on the short end of it's rewards.

29. I can't always get to sleep at night.

30. There aren't too many things I enjoy doing just for fun.

31. Expression of feelings is often strained in our family.

32. Others don't respect me as much as I wish they would.

33. People I trusted have let me down too many times.

34. I worry about my financial security.

35. I have more aches and pains than most people my age.

36. I generally don't have time to play.

37. I feel like my family doesn't respect my opinions.

38. People don't usually compliment me.

39. I am usually pretty optimistic.

40. I never seem to be getting on top financially.

41. I have trouble thinking clearly.

42. I think playing is for kids, not for adults.

43. My family doesn't usually give me adequate moral support.

44. I am afraid of losing some of my friends.

45. I often get too worried about things that really don't warrant a lot of concern.

46. I often ask "Is this all there is in life for me?"

47. Most people consider me to be neat and attractive.

48. I have a favorite place I would really enjoy going on vacation this year.

49. I am generally unhappy with my family relationships.

50. I have trouble expressing love & appreciation to my friends.

51. I spend too much time and energy thinking about religious things.

52. I feel like others seem to have all the luck!

53. I have adequate energy for the work I need to do on a regular basis.

54. My family has fun together on a regular basis.

55. I feel insecure when I think of my family relationships.

56. My friends don't care as much about me as I do about them.

57. I don't believe as my church teaches and that causes problems for me.

58. I wish my occupation could have been something other than what it is.

59. I tend to spend too much time and energy thinking about my physical fitness.

60. I need to laugh more often.

61. I wonder if my family will stay together.

62. My friends take up too much of my time.

63. I have a problem believing in myself.

64. I am satisfied with my relationships at work.

65. I am of average height and weight.

66. I seldom experience the "blues".

67. My family requires too much of my time and energy.

68. I can't trust my spouse.

69. I have all the formal education I need.

70. I get so pressured by life, that I'd just like to get away from everyone and everythin< forever.

71. My faith is too weak to really have any positive affect on my life.

72. I am as intelligent as most others in my social world.

73. I take a vacation every year.

74. God lets me down all too often!

75. I am respected and admired by my peers.

76. I need to let down more often.

Complete the following statements in the space provided on the answer sheet.

77. My biggest concern about my family is:

78. The main problem I have with my friends is:

79. One question I wish God would answer for me is:

80. If I could accomplish anything more in life it would be to:

81. When it comes to physical fitness my greatest need is to:

82. When it comes to having fun here's one change I really need to make:

BALANCED LIFE INVENTORY
William L. Hargett, author

Total

?:

Raw Score:

        A   B   C   D   E   F

%-ile:

      Norm(s): Male_____Female_____Criss Cross_____

	+	?	-		+	?	-		+	?	-		+	?	-		+	?	-		+	?	-		+	?	-		+	?	-
1				11				21				31				41				51				61				71			
2				12				22				32				42				52				62				72			
3				13				23				33				43				53				63				73			
4				14				24				34				44				54				64				74			
5				15				25				35				45				55				65				75			
6				16				26				36				46				56				66				76			
7				17				27				37				47				57				67							
8				18				28				38				48				58				68							
9				19				29				39				49				59				69							
10				20				30				40				50				60				70							

Complete statements 77-82 in the space provided below:

77._____

78._____

79._____

80._____

81._____

82._____

BALANCED LIFE INVENTORY

A   **FAMILY**
   1. Our family needs more time together.
   7. Our family spends too much time together.
   13. Our family needs to be more affectionate.
   19. My spouse doesn't understand my needs.
   25. I often have trouble communicating with members of my family.
   31. Expression of feelings is often strained in our family.
   37. I feel like my family doesn't respect my opinions.
   43. My family doesn't usually give me adequate moral support.
   49. I am generally unhappy with my family relationships.
   55. I feel insecure when I think of my family relationships.
   61. I wonder if my family will stay together.
   67. My family requires too much of my time and energy.
   77. My biggest concern about my family is_____.

B   **FRIENDS**
   2. I need friends who understand the important issues in my life.
   8. People generally don't understand me.
   14. I need more real friends.
   20. People don't take me seriously.
   26. People talk about me behind my back.
   32. Others don't respect me as much as I wish they would.
   38. People don't usually compliment me.
   44. I am afraid of losing some of my friends.
   50. I have trouble expressing love & appreciation to my friends.
   56. My friends don't care as much about me as I do about them.
   62. My friends take up too much of my time.
   78. The main problem I have with my friends is_____.

C   **FAITH**
   3. I generally trust people and believe what they tell me.
   9. I believe in God.
   15. Trusting others is usually difficult for me.
   21. I feel uneasy when I'm not in control of my present circumstances.
   27. I think promises are made to be broken.
   33. People I trusted have let me down too many times.
   39. I am usually pretty optimistic.
   45. I often get too worried about things that really don't warrant a lot of concern.
   51. I spend too much time and energy thinking about religious things.
   57. I don't believe as my church teaches and that causes problems for me.
   63. I have a problem believing in myself.
   68. I can't trust my spouse.
   71. My faith is too weak to really have any positive affect on my life.
   74. God lets me down all too often!
   79. One question I wish God would answer for me is:_____.

D   **FORTUNE**
   4. I am unhappy with my occupational role.
   10. I worry too much about money.
   16. I have to spend too much time making a living.
   22. Following a family budget seems impossible to me.
   28. I feel like life has left me on the short end of it's rewards.
   34. I worry about my financial security.
   40. I never seem to be getting on top financially.
   46. I often ask "Is this all there is in life for me?"
   52. I feel like others seem to have all the luck!
   58. I wish my occupation could have been something other than what it is.
   64. I am satisfied with my relationships at work.
   69. I have all the formal education I need.
   72. I am as intelligent as most others in my social world.

75. I am respected and admired by my peers.
80. If I could accomplish anything more in life it would be to_____
_____.

E FITNESS
5. I worry about my health.
11. I exercise on a regular basis.
17. I don't eat properly.
23. I have trouble relaxing.
29. I cant always get to sleep at night.
35. I have more aches and pains than most people my age.
41. I have trouble thinking clearly.
47. Most people consider me to be neat and attractive.
53. I have adequate energy for the work I need to do on a regular basis.
59. I tend to spend too much time and energy thinking about my physical fitness.
65. I am of average height and weight.
81. When it comes to physical fitness my greatest need is to:_____
_____.

F FUN
6. I have at least one hobby that is of interest to me.
12. I take time daily for relaxation.
18. I have a need to laugh more.
24. I tend to take life too seriously.
30. There aren't too many things I enjoy doing just for fun.
36. I generally don't have time to play
42. I think playing is for kids, not for adults.
48. I have a favorite place I would really enjoy going on vacation this year.
54. My family has fun together on a regular basis.
60. I need to laugh more often.
66. I seldom experience the "blues".
70. I get so pressured by life, that I'd just like to get away from everyone and everything forever.
82. When it comes to having fun here's one change I really need to make:_____
73. I take a vacation every year   /_____
76. I need to let down more often

BALANCED LIFE INVENTORY
William L. Hargett, author

Answers apply to_____
Name   Last   First   Middle

Address_____City_____

State_____Zip_____

Date_____Age_____Sex: M F Occupation_____

School_____Now attending?____Grade_____

Major_____Last grade completed_____Degree_____

Major_____

Marital Status: Single___Engaged___Yrs. married___

Yrs. divorced___Yrs. Widowed___No. of children:___M___

Ages_____F___Ages_____

Information given by SELF___Husband__wife__father__

Mother___Brother___Sister___Son__Daughter__or_____

of the person described.

Total

?:   ____ ____ ____ ____ ____ ____

Raw Score: ____ ____ ____ ____ ____
                        B   C   D   E   F

%-ile: ____ ____ ____ ____ ____ ____

Norm(s): Male_____Female_____Criss Cross_____

A family

	+	?	-		+	?	-		+	?	-		+	?	-		+	?	-		+	?	-		+	?	-
				11	_	_	_	21	_	_	_					41	_	_	_	51	_	_	_					71	_	_	_
2	0	1	2	12	_	_	_	22	_	_	_	32	0	1	2	42	_	_	_	52	_	_	_	62	0	1	2	72	_	_	_
3	_	_	_					23	_	_	_	33	_	_	_					53	_	_	_	63	_	_	_	73	_	_	_
4	_	_	_	14	0	1	2	24	_	_	_	34	_	_	_	44	0	1	2	54	_	_	_	64	_	_	_	74	_	_	_
5	_	_	_	15	_	_	_					35	_	_	_	45	_	_	_					65	_	_	_	75	_	_	_
6	_	_	_	16	_	_	_	26	0	1	2	36	_	_	_	46	_	_	_	56	0	1	2	66	_	_	_	76	_	_	_
				17	_	_	_	27	_	_	_					47	_	_	_	57	_	_	_								
8	0	1	2	18	_	_	_	28	_	_	_	38	0	1	2	48	_	_	_	58	_	_	_	68	0	1	2				
9	_	_	_					29	_	_	_	39	_	_	_					59	_	_	_	69	_	_	_				
10	_	_	_	20	0	1	2	30	_	_	_	40	_	_	_	50	0	1	2	60	_	_	_	70	_	_	_				

Complete statements 77-82 in the space provided below:

A 77. _____

78. _____

79. _____

80. _____

81. _____

82. _____

BALANCED LIFE INVENTORY
William L. Hargett, author

Answers apply to_____
　　　　　　　　Name　　Last　　　　First　　　Middle
Address_____City_____
　　　　　　　　　State_____Zip_____
Date_____Age____Sex: M F　Occupation_____
School_____Now attending?____Grade_____
Major_____Last grade completed_____Degree_____
Major_____
Marital Status: Single__Engaged__Yrs. married__
Yrs. divorced__Yrs. Widowed__No. of children:___M___
Ages_____F___Ages_____
Information given by　SELF___Husband__wife__father__
Mother__Brother__Sister__Son__Daughter__or_____
of the person described.

Total

?:

Raw Score:

A　　　　　C　　D　　E　　F

%-ile:

Norm(s):　Male_____Female_____Criss Cross_____

B friends

	+ ? -		+ ? -		+ ? -		+ ? -		+ ? -		+ ? -		+ ? -		+ ? -
1	_ _ _	11	_ _ _	21	_ _ _	31	_ _ _	41	_ _ _	51	_ _ _	61	_ _ _	71	_ _ _
		12	_ _ _	22	_ _ _			42	_ _ _	52	_ _ _			72	_ _ _
3	Q ⊥ 2	13	_ _ _	23	_ _ _	33	Q ⊥ 2	43	_ _ _	53	_ _ _	63	Q + 2	73	_ _ _
4	_ _ _			24	_ _ _	34	_ _ _			54	_ _ _	64	_ _ _	74	_ _ _
5	_ _ _	15	Q + 2	25	_ _ _	35	_ _ _	45	U ⊥ 2	55	_ _ _	65	_ _ _	75	_ _ _
6	_ _ _	16	_ _ _			36	_ _ _	46	_ _ _			66	_ _ _	76	_ _ _
7	_ _ _	17	_ _ _	27	Q ⊥ 2	37	_ _ _	47	_ _ _	57	Q ⊥ 2	67	_ _ _		
		18	_ _ _	28	_ _ _			48	_ _ _	58	_ _ _	68	_ _ _		
9	Q ⊥ 2	19	_ _ _	29	_ _ _	39	Q ⊥ 2	49	_ _ _	59	_ _ _	69	_ _ _		
10	_ _ _			30	_ _ _	40	_ _ _			60	_ _ _	70	_ _ _		

O / 2

O / 2

Complete statements 77-82 in the space provided below:

77._____

B 78._____

79._____

80._____

81._____

82._____

BALANCED LIFE INVENTORY
William L. Hargett, author

Answers apply to_____
Name   Last   First   Middle
Address_____City_____
                    State_____Zip_____
Date_____Age_____Sex: M F Occupation_____
School_____Now attending?____Grade_____
Major_____Last grade completed_____Degree_____
Major_____
Marital Status: Single___Engaged___Yrs. married___
Yrs. divorced___Yrs. Widowed___No. of children:___M___
Ages_____F___Ages_____
Information given by SELF___Husband___wife___father___
Mother___Brother___Sister___Son__Daughter__or_____
of the person described.

"..tal

?:   ___ ___   ___ ___ ___   ___..
Raw Score: ___   ___   ___   ___   ___
          A   B   D   E   F
%-ile: ___ ___   ___ ___ ___ ___
          Norm(s): Male____Female____Criss Cross____

C Faith

	?	-	+	?	-	+	?	-	+	?	-	+	?	-	+	?	-	+	?	-
1	_	_	_	11	_	_	_				31	_	_	_	41	_	_	_			61	_	_	_

1 _ _ _   11 _ _ _   31 _ _ _   41 _ _ _   61 _ _ _
2 _ _ _   12 _ _ _   22 O + 2   32 _ _ _   42 _ _ _   52 O + 2   62 _ _ _   72 O + 2
           13 _ _ _   23 _ _   43 _ _ _   53 _ _ _   73 _ _ _
4 2 -1 O   14 _ _ _   24 _ _ _   34 O + 2   44 _ _ _   54 _ _ _   64 O + 2
5   25 _ _ _   35 _ _   55 _ _ _   65 _ _ _   75 O + 2
6 _ _ _   16 O + 2   26 _ _ _   36 _ _ _   46 O + 2   56 _ _ _   66 _ _ _   76 _ _ _
7 _ _ _   17 _ _   37 _ _ _   47 _ _ _   67 _ _ _
8 _ _ _   18 _ _ _   28 O + 2   38 _ _ _   48 _ _ _   58 O + 2
           19 _ _ _   29 _ _ _   49 _ _ _   59 _ _ _   69 O + 2
10 2 -1 O 20 _ _ _   30 _ _ _   40 2 + O   50 _ _ _   60 _ _ _   70 _ _ _

Complete statements 77-82 in the space provided below:

77._____
78._____
C 79._____
80._____
81._____
82._____

BALANCED LIFE INVENTORY
William L. Hargett, author

Answers apply to_____
Name   Last   First   Middle

Address_____City_____

State_____Zip_____

Date_____Age_____Sex: M F Occupation_____

School_____Now attending?_____Grade_____

Major_____Last grade completed_____Degree_____

Major_____

Marital Status: Single___Engaged___Yrs. married___

Yrs. divorced___Yrs. Widowed___No. of children:___M___

Ages_____F___Ages_____

Information given by   SELF___Husband___wife___father___

Mother___Brother___Sister___Son___Daughter___or_____

of the person described.

Total

?: ___ ___ ___   ___ ___ ___

Raw Score: ___ ___ ___   ___ ___ ___

A   B   C   E   F

t-ile: ___ ___ ___   ___ ___ ___

Norm(s): Male___ Female___ Criss Cross___

D Fortune

	+	?	-		+	?	-		+	?	-		+	?	-		+	?	-		+	?	-		+	?	-		+	?	-
1	_	_	_	11	_	_	_	21	_	_	_	31	_	_	_	41	_	_	_	51	_	_	_	61	_	_	_	71	_	_	_
2	_	_	_	12	_	_	_					32	_	_	_	42	_	_	_					62	_	_	_				
3	_	_	_	13	_	_	_	23	0	1	2	33	_	_	_	43	_	_	_	53	0	1	2	63	_	_	_	73	2	1	0
				14	_	_	_	24	_	_	_					44	_	_	_	54	_	_	_					74	_	_	_
5	0	1	2	15	_	_	_	25	_	_	_	35	0	1	2	45	_	_	_	55	_	_	_	65	2	1	0				
6	_	_	_					26	_	_	_	36	_	_	_					56	_	_	_	66	_	_	_	76	2	1	0
7	_	_	_	17	0	1	2	27	_	_	_	37	_	_	_	47	0	1	2	57	_	_	_	67	_	_	_				
8	_	_	_	18	_	_	_					38	_	_	_	48	_	_	_					68	_	_	_				
9	_	_	_	19	_	_	_	29	0	1	2	39	_	_	_	49	_	_	_	59	0	1	2								
				20	_	_	_	30	_	_	_					50	_	_	_	60	_	_	_	70	2	1	0				

0 1 2   0 1 2

Complete statements 77-82 in the space provided below:

77._____

78._____

79._____

D 80._____

81._____

82._____

BALANCED LIFE INVENTORY
William L. Hargett, author

Answers apply to_____
            Name   Last   First   Middle

Address_____City_____

         State_____Zip_____

Date_____Age____Sex: M F Occupation_____

School_____Now attending?___Grade_____

Major_____Last grade completed_____Degree_____

Major_____

Marital Status: Single__Engaged__Yrs. married__

Yrs. divorced__Yrs. Widowed__No. of children:___M__

Ages_____F__Ages_____

Information given by SELF___Husband__wife__father__

Mother__Brother__Sister__Son__Daughter__or_____

of the person described.

Total

?:   ___ ___ ___ ___   ___ ___

Raw Score: ___ ___ ___ ___   ___ ___
     A   B   C   D   F

%-ile: ___ ___ ___ ___   ___ ___

Male____ Female____ Criss Cross____

E Fitness

	+	?	-		+	?	-		+	?	-		+	?	-		+	?	-		+	?	-		+	?	-		+	?	-
1	_	_	_	21	_	_	_	31	_	_	_					51	_	_	_	61	_	_	_	71	_	_	_
2	_	_	_	12	2	1	0	22	_	_	_	32	_	_	_	42	0	1	2	52	_	_	_	62	_	_	_	72	_	_	_
3	_	_	_	13	_	_	_					33	_	_	_	43	_	_	_					63	_	_	_	73	_	_	_
4	_	_	_	14	_	_	_	24	0	1	2	34	_	_	_	44	_	_	_	54	2	1	0	64	_	_	_	74	_	_	_
				15	_	_	_	25	_	_	_					45	_	_	_	55	_	_	_					75	_	_	_
6	0	1	2	16	_	_	_	26	_	_	_	36	0	1	2	46	_	_	_	56	_	_	_	66	2	1	0	76	_	_	_
7	_	_	_					27	_	_	_	37	_	_	_					57	_	_	_	67	_	_	_
8	_	_	_	18	0	1	2	28	_	_	_	38	_	_	_	48	2	1	0	58	_	_	_	68	_	_	_
9	_	_	_	19	_	_	_					39	_	_	_	49	_	_	_					69	_	_	_
10	_	_	_	20	_	_	_	30	0	1	2	40	_	_	_	50	_	_	_	60	0	1	2	70	_	_	_

Complete statements 77-82 in the space provided below:

77._____

78._____

79._____

80._____

E 81._____

82._____

BALANCED LIFE INVENTORY
William L. Hargett, author

Answers apply to_____
Name   Last   First   Middle
Address_____City_____
State_____Zip_____
Date_____Age_____Sex: M F Occupation_____
School_____Now attending?____Grade_____
Major_____Last grade completed_____Degree_____
Major_____
Marital Status: Single___Engaged___Yrs. married___
Yrs. divorced___Yrs. Widowed___No. of children:___M___
Ages_____F___Ages_____
Information given by   SELF___Husband___Wife___Father___
Mother___Brother___Sister___Son___Daughter___or_____
of the person described.

Total

?: ___ ___ ___ ___ ___   ___

Raw Score: ___ ___ ___ ___ ___
         A   B   C   D   E

%-ile: ___ ___ ___ ___ ___

Norm(s): Male____Female____Criss Cross____

F   FUN

	+ ? -		+ ? -		+ ? -		+ ? -		+ ? -		+ ? -		+ ? -	
1 _ _ _	11 _ _ _	21 _ _ _	31 _ _ _	41 _ _ _	51 _ _ _	61 _ _ _	71 _ _ _
2 _ _ _		22 _ _ _	32 _ _ _		52 _ _ _	62 _ _ _	72 _ _ _
3 _ _ _	13 2 1 0	23 _ _ _	33 _ _ _	43 0 1 2	53 _ _ _	63 _ _ _	
4 _ _ _	14 _ _ _		34 _ _ _	44 _ _		64 _ _ _	74 2 1 0
5 _ _ _	15 _ _ _	25 0 1 2	35 _ _ _	45 _ _ _	55 2 1 0	65 _ _ _	75 _ _ _
	16 _ _ _	26 _ _ _		46 _ _ _	56 _ _ _		
7 2 1 0	17 _ _ _	27 _ _ _	37 0 1 2	47 _ _ _	57 _ _ _	67 2 1 0 0 1 2	
8 _ _ _		28 _ _ _	38 _ _ _		58 _ _ _	68 _ _ _	
9 _ _ _	19 0 1 2	29 _ _ _	39 _ _ _	49 2 1 0	59 _ _ _	69 _ _ _	
10 _ _ _	20 _ _ _		40 _ _ _	50 _ _ _			

0 1 2

0 1 2   0 1 2

Complete statements 77-82 in the space provided below:

77._____

78._____

79._____

80._____

81._____

F 82.___ _____

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BALANCED LIFE INVENTORY PROFILE

A Family · B Friends · C Faith · D Fortune · E Fitness · F Fun

Raw Score -- %

Raw	A Family	B Friends	C Faith	D Fortune	E Fitness	F Fun
28			100	100		100
27			96	96		96
26			93	93		93
25			89	89		89
24	100		85	85		85
23	96		82	82		82
22	92	100	78	78	100	78
21	87	95	75	75	95	75
20	83	91	71	71	91	71
19	79	86	68	68	86	68
18	75	82	64	64	82	64
17	71	77	61	61	77	61
16	66	73	57	57	73	57
15	62	68	53	53	68	53
14	58	64	50	50	64	50
13	54	59	46	46	59	46
12	50	54	43	43	54	43
11	46	50	39	39	50	39
10	42	45	36	36	45	36
9	37	41	32	32	41	32
8	33	36	28	28	36	28
7	29	32	25	25	32	25
6	25	27	21	21	27	21
5	21	23	18	18	23	18
4	16	18	14	14	18	14
3	12	14	11	11	14	11
2	8	9	7	7	9	7
1	4	4	3	3	4	3

BALANCED LIFE INVENTORY

PROFILE

WILLIAM L. HARGETT Author

NAME: _____   DATE: _____

Family — 87%

Fun — 61%

FAITH — 85%

Friends — 32%

Fitness — 32%

Fortune — 43%
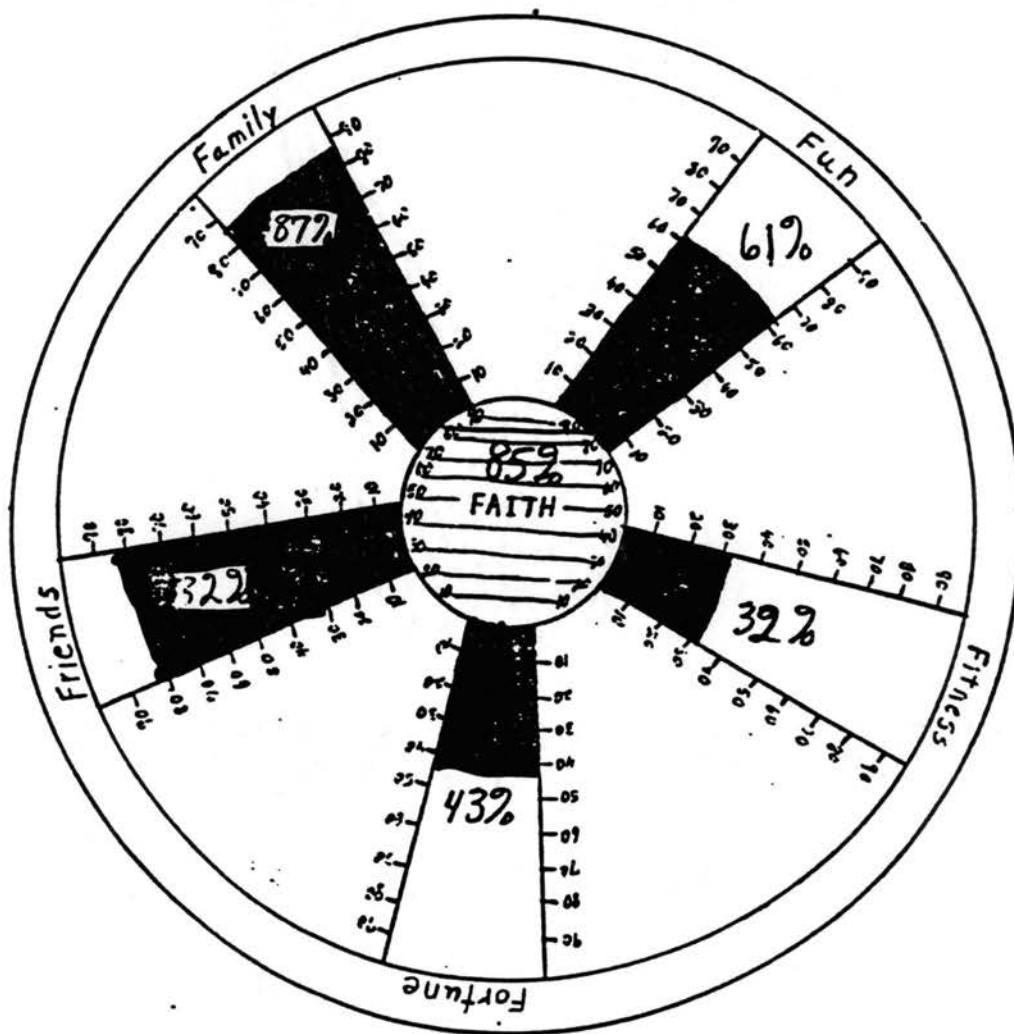
IRB # *HE-41-C21*

APPLICATION FOR REVIEW OF HUMAN SUBJECTS RESEARCH
(PURSUANT TO 45 CFR 46)
OKLAHOMA STATE UNIVERSITY INSTITUTIONAL REVIEW BOARD

Title of project (please type): __Validation of the Balanced Life__

__Inventory and Satisfaction Scales__

Please attach copy of project proposal.

I agree to provide the proper surveillance of this project to ensure that
the rights and welfare of the human subjects are properly protected.
Additions to or changes in procedures affecting the subjects after the
project has been approved will be submitted to the committee for review.

PRINCIPAL INVESTIGATOR(S): Davied G. Fournier, Ph.D.
(If student, list
advisor's name first)

Typed Name(advisor)	Signature
William L. Hargett	
Typed Name(student)	Signature

Typed Name	Signature

__Family Relations & Child Development__   __Home Economics__
Department   College

__232 Home Economics West__   __744-8351__
Faculty Member's Campus Address   Campus Phone Number

TYPE OF REVIEW REQUESTED: [x] EXEMPT   [ ] EXPEDITED   [ ] FULL BOARD
(Refer to OSU IRB Information Packet or the OSU IRB Brochure for an
explanation of the types of review.)

1. Briefly describe the background and purpose of the research.

The instrument being studied in this research project was
developed for partial completion of the Ph.D. requirements.
It measures a number of dimensions of individuals in context
of family life. They are measured in relation to the participants'
perceived satisfaction on the specific dimensions of: Family,
Friends, Fortune, Physical Fitness, Fun & Recreation, Faith, and
Friends. The purpose of the study is the validation of the
instrument in terms of it being a valid and reliable instrument.

2. Who will be the subjects in this study? How will they be solicited or
    contacted? Subjects must be informed about the nature of what is
    involved as a participant, including particularly a description of
    anything they might consider to be unpleasant or a risk. Please
    provide an outline or script of the information which will be provided
    to subjects prior to their volunteering to participate. Include a
    copy of the written solicitation and/or an outline of the oral solici-
    tation.

The subjects participating in this sudy will come from the
general public, will be of adult age, and completely volunteer.
There will also be subjects from clinical settings (adults who
are also volunteers) such as mental halth facilities. Nothing
will be done to put anyone at risk. The quesitonnaires and
the cover letter to be used are attached and included in the
accompanying research proposal.

3. Briefly describe each condition or manipulation to be included within
    the study.

4. What measures or observations will be taken in the study? Include a
    copy of any questionnaires, tests, or other written instruments that
    will be used.

  The questionnaires are attached to this application.

5. Will the subjects encounter the possibility of stress or psychologi-
    cal, social, physical, or legal risks which are greater, in proba-
    bility or magnitude, than those ordinarily encountered in daily life
    or during the performance of routine physical or psychological exami-
    nations or tests?
    Yes [ ]   No [x]   If yes, please describe.

6. Will medical clearance be necessary before subjects can participate due to tissue or blood sampling, or administration of substances such as food or drugs, or physical exercise conditioning?
Yes [ ]   No [X]   If so, please describe.

Note: Refer to the OSU IRB Information Packet for information on the handling of blood and tissue samples.

7. Will the subjects be deceived or misled in any way? Yes [ ]   No [X]
If yes, please describe and include an outline or script of the debriefing.

8. Will there be a request for information which subjects might consider to be personal or sensitive? Yes [ ]   No [X]   If yes, please describe.

9. Will the subjects be presented with materials which might be considered to be offensive, threatening, or degrading?
Yes [ ]   No [X]   If yes, please describe.

10. Will any inducements be offered to the subjects for their partici-
    pation? Yes [ ] No [x] If yes, please describe.
    If extra course credits are offered, are alternative means of
    obtaining additional credits available?

11. Will a written consent form be used? Yes [ ] No [X]   If yes, please
    include the form, and if not, please indicate why not and how
    voluntary participation will be secured.

    Note: The OSU IRB Information Packet illustrates elements which must
    be considered in preparing a written consent form. Conditions under
    which the IRB may waive the requirement for informed consent are to be
    found in 45 CFR 46.117 (c), (1) and (2).

12. Will any aspect of the data be made a part of any record that can be
    identified with the subject? Yes [ ] No [X]   If yes, please
    explain.

No names, phone numbers, social security numbers, or addresses
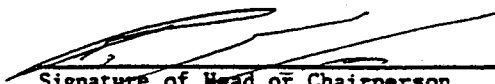will be solicited.

13. What steps will be taken to ensure the confidentiality of the data?

Only identification numbers on answer sheets will be used.
They are only for the purpose of pairing responses to the
questionnaires and not for the purpose of subject identification.

14. Will the fact that a subject did or did not participate in a specific experiment or study be made a part of any record available to a supervisor, teacher, or employer? Yes [ ] No [X]   If yes, please explain.

15. Describe any benefits that might accrue to either the subject or society. (See 45 CFR 46, section 46.111 (a) (2)).

There will be no benefit to the subjects. It may be that the scale will be found to valid and reliable. That may contribute a diagnostic tool of value to society.

_____   ⊃3 о ⌐. 9,
Signature of Head or Chairperson   Date

_____   _____
Department or Administrative Unit   Date

Margaret J. Weber   3-7-91
College/Division Research Director   Date

Checklist for Application Submission

    [ ] Proposal
    [ ] Informed Consent Form/Assent (if appropriate)
    [ ] Instrument(s) (questionnaire, survey, testing, field)
    [ ] Curriculum Vita (not necessary for Exempt review)
    [ ] Departmental/College/Division Signatures

Number of copies to be submitted:

    Exempt Review: 2 copies
    Expedited Review: 3 copies
    Full Board Review: 7 copies

APPROVED 10-13-88

THE FOLLOWING TO BE COMPLETED BY IRB REVIEWER

Date: _____   IRB # _____

IRB ACTION:

      [ ] Approved

      [ ] Approved with Provision

      [ ] Deferred for Revision

      [ ] Disapproved

Comments:

Signature: _____   Date: _____
      IRB Reviewer

OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD
FOR HUMAN SUBJECTS RESEARCH

Proposal Title: <u>Validation of the Balanced Life Inventory and</u>

<u>Satisfaction Scales</u>

Principal Investigator: <u>David G. Fournier/William L. Hargett</u>

Date: <u>March 25, 1991</u>   IRB # <u>HE-91-021</u>

This application has been reviewed by the IRB and

Processed as: Exempt [χ]   Expedite [ ]   Full Board Review [ ]

         Renewal or Continuation [ ]

Approval Status Recommended by Reviewer(s):

         Approved [X]   Deferred for Revision [ ]

         Approved with Provision [ ]   Disapproved [ ]

Approval status subject to review by full Institutional Review Board at
next meeting, 2nd and 4th Thursday of each month.

Comments, Modifications/Conditions for Approval or Reason for Deferral or
Disapproval:

Signature: _____ Date: <u>March 29, 1991</u>
     Chair of Institutional Review Board

VITA

William L. Hargett

Candidate for the Degree of

Doctor of Philosophy

Thesis: THE INITIAL VALIDATION OF THE BALANCED LIFE
INVENTORY

Major Field: Human Environmental Sciences

Biographical:

Personal Data: Born in Petoskey, Michigan, December 1,
1946, the son of Nathan G. and Amy O. Hargett.

Education: Graduated from Bloomfield Hills Senior High
School, Bloomfield Hills, Michigan, in June 1964;
received Bachelor of Arts Degree in Music
Education from Anderson College at Anderson,
Indiana in June, 1968; received Bachelor of Arts
Degree in Psychology from Saginaw Valley State
College at University Center, Michigan in
December, 1982; received Master of Arts Degree in
Counseling from Michigan State University at East
Lansing, Michigan in December, 1985; completed the
requirements for the Doctor of Philosophy Degree
in Human Environmental Sciences at Oklahoma State
University in May, 1993.

Professional Experience: Public school music teacher
from 1968 to 1973 in Pontiac, Michigan and
Palatka, Florida; Minister in the Church of God
with national offices in Anderson, Indiana from
1973 to present; ordained in 1976; Behavioral
Science Department Head at Mid-America Bible
College in Oklahoma City from 1987 to present;
Licensed Professional Counselor since June, 1989;
Licensed Marital & Family Therapist since
September, 1991.