SELECTED CRITERIA FOR DETERMINING THE MOST VALUED ASPECT OF LEISURE: ACTIVITY? ENVIRONMENT? RELATIONSHIPS?

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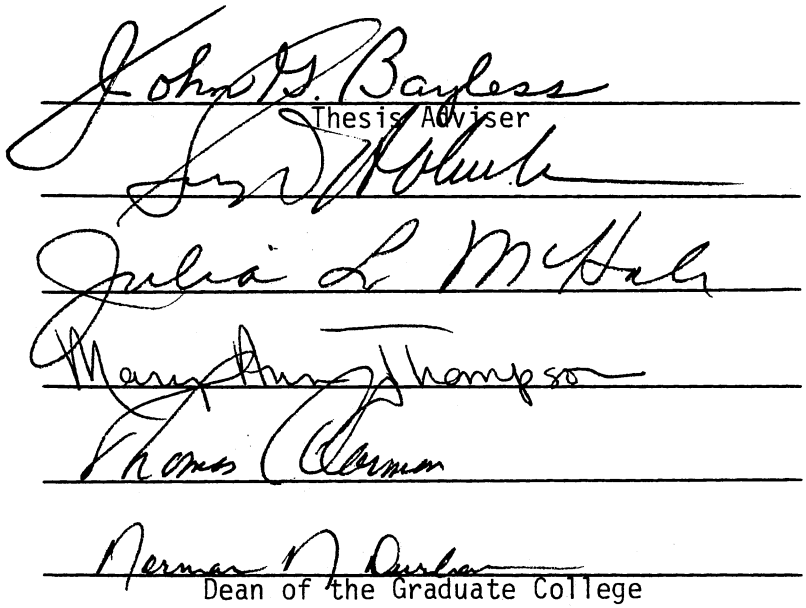

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This study grew from a concern for sedentary lifestyles imposed by technology, the reduction or deletion of physical education requirements in public schools, colleges and universities across America, and the dearth of instrumentation concerning leisure values.

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CHAPTER I

INTRODUCTION

Research is replete with studies dealing with what, where and the numbers of people who recreate. The relationship between participation rates and selected factors such as activity, time, cost, facilities and socio-economic demographic characteristics is often the focus of this kind of research.

Recent research by Romsa and Hoffman (1980) involving some three thousand subjects sought reasons why adults do NOT recreate. "Lack of interest" emerged as the main reason for nonparticipation among low as well as higher socio-economic groups, suggesting further research beyond the known barriers of time, facilities, activity and finances.

It has been the observation of this researcher, through both personal experience and observation of others, that preference for relationships found in leisure may be a prime motivator for participation as well as the benefits of actual involvement in the environment or particular activity. Most leisure research is directed toward participation in activities; however, it is not well established that desire for activity is, in fact, the prime motivator of leisure involvement.

Statement of the Problem

The purpose of this study was to investigate the most valued aspect of leisure according to selected criteria in order better to

delineate directives for physical education programming, leisure services and education, and professional preparation. A secondary purpose was to determine the feasibility for use of a visual assessment with practical application to our field. If people choose leisure for intrinsic values involved in the activity, such as joy of movement, love of challenge, self-testing, exploration, fitness or enhancement of self-esteem, then developing standardized instruments to determine propensities toward successful leisure participation would seem appropriate. However, if people choose leisure for camaraderie or for promoting, developing and sustaining meaningful relationships, then the current normative activity approach to physical education, leisure services and education, and research is inappropriate. If, in fact, people prefer leisure for certain intrinsic values other than activity involvement, then other approaches to study need to be investigated. These preferences are not yet clearly understood, thus presenting the basic problems implicit in this study. What aspect of the leisure experience is most valued by participants? Do male and female participants differ in their motivation to leisure? Do the most valued aspects of leisure differ according to the type of activity and number of participants involved?

Basic Assumptions

1. Participants in this study were representative of the students at Oklahoma State University.

2. Subjects understood the directions and answered honestly the items of the instrument designed to assess their most valued aspect of selected leisure experiences.

3. Illustrations selected for the following sub-groups of leisure activities were representative of each category:

- Individual/Dual Sports
- Team Sports
- Social Recreation
- Outdoor/High Risk/Challenge Activities
- "Free" Activities

4. People seek leisure experiences because of the intrinsic values found in the activity, the environment, or the relationships with others.

Hypotheses

$$H_o: \quad \Pi ij = \Pi i \times \Pi j$$

$$H_1: \quad \Pi ij \neq \Pi i \times \Pi j$$

where H_o is the null hypothesis,

H_1 is the research hypothesis,

Πij is the cell frequency of the i^{th} row, and the j^{th} column,

Πi is the marginal frequency of the i^{th} row,

Πj is the marginal frequency of the j^{th} column (Caneday, 1981, p. 8)

For the data reported, the basic X^2 model is:

Independent variables (j)

Dependent variables (i)				
	Πij			Πi
	Πj			1.0

Primary and related statements which were considered as this study was conducted are as follows:

1. There are no significant differences between activity, environment or relationships as motivation factors for leisure participation.

2.There are no significant differences in most valued aspects of leisure between males and females.

3. There are no significant differences in most valued aspects of leisure between subjects who are married and those who are single.

4. There are no significant differences in most valued aspects of leisure between subjects age 18-21 and those age 22-25.

5. There are no significant differences in most valued aspects of leisure between students enrolled as majors in the College of Business Administration and those enrolled in classes in the School of Health, Physical Education and Leisure Services at Oklahoma State Univeristy.

6. There are no significant differences between activity, environment and relationships in the most valued aspects of leisure related to the five categories of leisure.

7. There are no significant differences between activity, environment and relationships in the most valued aspects of leisure related to the number of participants involved.

Delimitations

1. The study was confined to undergraduate students who were enrolled in classes in the College of Business Administration and the School of Health, Physical Education and Leisure Services at Oklahoma State University during the spring and fall semesters of 1982 and the spring semester of 1983.

2. The study was confined to the use of one visual assessment instrument that had not been subjected to tests of validity prior to this study.

Limitations

Although standard research methods have been incorporated into this study, the following limitation remains:

The visual items of the instrument may not be directly representative of all subject's actual or imagined leisure experiences.

Definition of Terms

1. Leisure - activities, active or passive, participated in during one's time other than work/study or obligatory functions.

2. The Most Valued Aspect of Leisure - the primary motivational criterion of leisure participation.

3. Activity - the physical involvement phase of the leisure experience.

4. Environment - the climatic, edaphic or facilitative parameters surrounding the leisure experience.

5. Relationship - interaction or affiliation with significant others.

6. "Free" Activities - those activities participated in without the restriction of specific rules or boundaries. This term is operationally defined in this study to include all activities not encompassed in definitions seven through ten.

7. Individual/Dual Sports - activities that can be performed alone as an individual participant or competitor, and may be dyadic in nature.

8. Outdoor/High Risk/Challenge Activities - activities that correlate between the environment in such a way that the environment is critical for the activity.

9. Social Recreation - activities confined to group interaction without the competitive limitations of identified sports.

10. Team Sports - activities that are competitive in nature and require three or more participants, game rules or boundaries.

CHAPTER II

REVIEW OF SELECTED LITERATURE

The majority of leisure research approaches have emphasized the use of standardized instrumentation to measure various dimensions of activity involvement (Edwards, 1975; Epperson, 1975; Horen, 1974; McKechnie, 1974; Miranda, 1973; Neulinger, 1974; Overs, 1974). The interest survey approach is based on the assumption that interests stem directly from basic, inborn, human needs rather than learning. These needs, flowing through interests, serve to motivate human actions.

Writing as an avocational counselor for the handicapped, Overs (1974), pointed to the psychological problems related to the leisure decision-making process as being characterized by anxiety, fear, guilt and lack of knowledge. He contends that this situation promotes a need for tools to ferret out individual human motivations and for specialists who can couple those motivations to leisure activities.

The interest survey method is embodied in the Leisure Activities Blank (LAB), a psychological assessment instrument designed to provide a cumulative and compatible data base for research and application in recreation and leisure (McKechnie, 1974b). The LAB consists of a representative list of 120 leisure activites judged to have high participation rates in the United States. For each activity, the respondent indicates the extent of past participation and intended future involvement. A basic assumption underlies the development and use of the LAB, that is,

the notion that the leisure activity interests and behavior of individuals are not random fluctuations, but rather form meaningful psychological patterns which are discoverable through empirical analysis. By understanding leisure activity interest, the individual can be categorized and placed in specific psychological contours of leisure such as ego recognition activities or intellectual activities (Epperson, Witt, and Hitzhusen, 1977).

Implicit in all of the above cited instrumentation is the assumption that desire for activity is the prime motivator of play and leisure behavior. Marano (1975) alludes to the problems with motivation in using leisure preference tools. He found that participation in leisure activities only moderately correlated with satisfaction in those activities ($r=.48$). His findings strongly suggest that the extent of participation in leisure activities may not be a reliable index of leisure satisfaction.

Recently, the process of clarifying values in various educational settings has become vogue. Several authors contend that every action, decision and course of action is based on consciously or unconsciously held beliefs, attitudes and values (Csikszentmihalyi, 1977; Howe and Howe, 1975; Raths, Harmin and Simon, 1964). In order to understand the nature of enjoyment for purposes of improving schools, treating depression and restructuring jobs, Mihaly Csibszentmihalyi (1977), studied 173 subjects who were deeply engaged in activities where conventional rewards were not important. He examined chess masters, composers, rock climbers, dancers, basketball players and many others, and found that enjoyable activities, no matter how different from each other, provided a common experience--a satisfying, often exhilarating, feeling of creative accomplishment and heightened functioning. Csibszentmihalyi called this

experience *flow*, and maintained it was a powerful motivating force in human behavior most often found in activities that offer intrinsic rewards and social interaction.

Other educational authors recognized the value of experiences that provided personal meaning and realization of self in relationship to physical and social environments. Jewett and Mullan's (1977) Purpose Process Curriculum Framework for physical education was postulated on the notion that individuals would be able to reach an acceptable level of personal meaning through the pursuit of body, environment and social goals. Included in the 22 purpose elements for identifying the content of physical education experiences were: physiological efficiency, psychic equilibrium, spatial orientation, object manipulation, communication, group interaction and cultural involvement.

Another complex facet of the affective dimension of self involved the relationship between self and the nature of personal experiences (Allen, 1979). Dr. Allen contended one most important direction for physical education curriculum, teaching and research was the identification of the kinds of experiences which had the greatest positive affective impact on the individual. It appeared that the added presence of another person changed the qualitative-affective dimension of the experience and its subsequent influence on self-concept. Lynch (1968), found that significant human experiences were more frequent when the experience involved another person, in contrast to oneself or the external world. Fuerst's (1965) study on "turning point" experiences supported the same relationship. Turning point experiences were those which were of significant impact to change attitudes, values, motives and subsequent behavior. Additionally, meaningful human experiences were those confirmed by

another, and when confirmed, lead to pleasure, increased positive changes in self, and fuller development of one's potential. Merrill (1968), identified being confirmed as a relevant response where one felt understood or on the same wave-length with another or one's environment. The experience of confirmation appeared to affirm one's faith in resources and facilitate more creative and expansive leisure behaviors.

A document that has influenced college and university curriculum was the "Core Curriculum" which emerged from the Harvard studies and significantly emphasized the need to return to the general education curriculum at the undergraduate level of higher education to develop interpersonal skills in human relationships (Report on the Core Curriculum, 1980).

Danford and Shirley (1970), as well as Fry and Peters (1972), suggest that individuals seek situations in which they perceive themselves as adequate and that this search for adequacy includes areas such as activity, recognition, acceptance and adventure.

Meier (1978) and Miles (1978), researching motivation to high risk, adventure activities, found camaraderie to be an important aspect of the experience.

Evidence is existent in the literature to support further the notion that "association with others" is an important aspect of the leisure experience (Bishop, 1970; Bull, 1971; Burch, 1965; Burdge and Field, 1972; McKechnie, 1974; Neulinger and Breit, 1969; Szalai, 1972; Witt, 1971), while Weiskopf (1982) relates the prediction of social psychologists that the key aspect of play behavior--the dynamics of relationships--will become an increasingly important subject for investigation. In yet another study, activities involving "affiliation with others" emerged as the most preferred category of activities (Neulinger

and Raps, 1972). Kelly (1975) found "enjoyment of activity" to be the primary reason given for leisure participation, while "enjoying companions" and "strengthening relationships" emerged as the second and third reasons. Several other studies identified some type of affiliation with others as an enjoyment factor in leisure (Etzdorn, 1964; Knopp, 1972; Mueller and Furin, 1962). The need for affiliation or relationship also emerges as need that is met at leisure (Crandall, 1976; London, Crandall and Fitzgibbons, 1977).

Iso-Ahola (1982) proposes that perception of leisure and leisure behavior is influenced by perceived freedom and perceived competence, and these feelings lead to intrinsic motivation if the participant can feel competent and participate freely. Intrinsic leisure behavior occurs within a framework of optimal arousal. The desire for optimal arousal causes one to seek novel situations. Iso-Ahola further contends that leisure behavior most often occurs in social settings, and these social interactions, in and of themselves, are often the intrinsic reward of leisure involvement. It followed that the management of intrinsic leisure motivation should be the chief objective of leisure programmers.

Finally, using the clinical procedure of eidetic imagery, Gunn and Scarborough (1980) found that "relationships with significant others" emerged as the most valued aspect of subjects' PEAK or most memorable leisure experience, though not representative of their total leisure experiences.

In order to test the importance of motivational aspects of leisure, such as activity, environment and relationships, it is necessary somehow to elicit individual perceptions of the leisure experience. According

to some researchers, most of human communication is analogical and the rest is digital (Dilts, Grinder, Bandler and Delozier, 1980; Gunn, 1980), while nearly eighty percent of experiential representation is visual (Bandler and Grinder, 1975). In order to capitalize on visual stimulus to elicit the internal frame of reference of the player, this researcher developed a visual assessment of fifty-eight items representative of both sexes, most ages and most leisure experience categories as a pilot study of the most valued aspects of selected leisure (Appendix A). The assessment was administered to one hundred college-aged students enrolled in classes in the School of Health, Physical Education and Leisure Services at Oklahoma State University (Figure 1). The results of that 1981 study indicated that "relationships" was the overall most valued aspect of leisure according to percentages. Beyond that study, no research has been done using visual assessment instrumentation to determine motivation toward leisure participation which presents the implicit need for this study.

Literature Related to Methodology

The purpose of this study was to determine if there were significant differences in attitudes toward the most valued aspects of leisure experiences between two independent samples drawn from the student population at Oklahoma State University. The independent samples included students enrolled in classes in the School of Health, Physical Education and Leisure Services and those enrolled as majors in the College of Business Administration. Since there is no statistical method available to measure attitudes, proportions have become this researcher's code for attitudes. A number of authors support the notion that Chi-square is the most appropriate statistical measure to be used when comparing

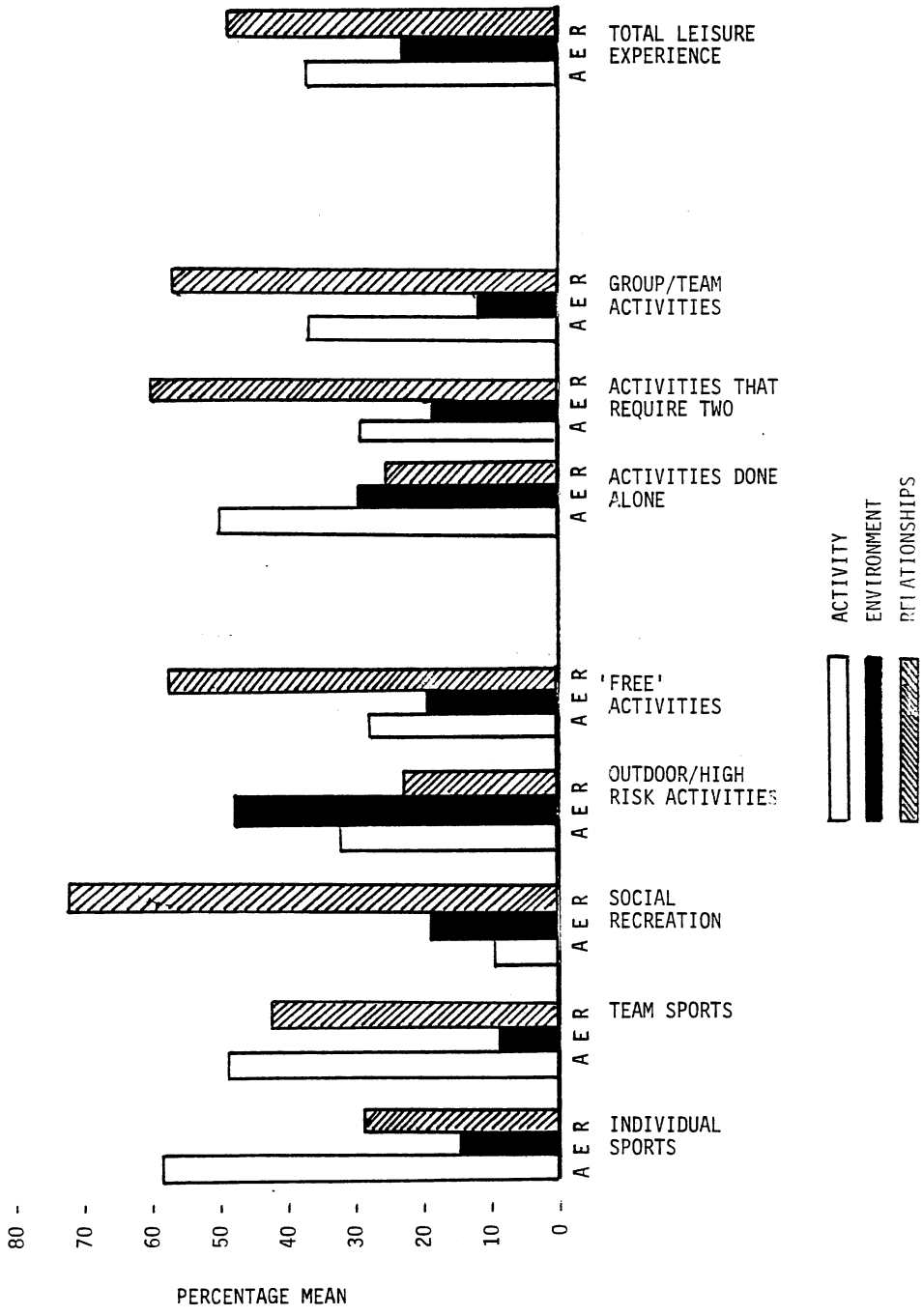

Figure 1. Most Valued Aspects of Leisure - 1981 Study

frequencies of two or more responding samples involving nominal data that can be reduced to proportions and percentages (Isaac and Michael, 1979; Pelegrino, 1979; Steel and Torrie, 1980).

Sample size is also important in drawing inferences from sample statistics to population parameters. It is assumed that the population is normally distributed; therefore, any "sufficiently large" sample will be normally distributed (Glass and Stanley, 1970). According to Glass and Stanley, if both samples exceed 31 individuals, they are "sufficiently large" for analysis of single samples using the Chi-square statistic. Additionally, Chi-square tests require that each subject be counted only once, or technically that all frequencies be independent, which is applicable to this research (Linton and Gallo, 1975).

Although it was not the purpose of this study to establish internal validity of the research instrument (designed by this researcher), it seemed appropriate to determine the origin of response (subjective or objective) based on the opinions of three outside professionals (later referred to as raters) concerning subjects' debriefing of a sample of the 58 items represented in the instrument. Linton and Gallo (1975) and Pelegrino (1979) agree that the Analysis of Variance test is appropriate to compare the opinions of two or more raters where variables may be discovered between and within raters' opinions.

CHAPTER III

METHODS AND PROCEDURES

The purpose of this study was to determine if there were significant differences in attitudes toward the most valued aspects of leisure experiences between two independent samples drawn from the student population at Oklahoma State University. Since the research instrument had not been validated, a secondary purpose was to determine if a sample of the assessment items did what they intended to do, that is, elicit subjective responses. In order to determine the most valued aspects of leisure experiences from the selected criteria of activity, environment and relationships, and to determine if a sample of the assessment items were valid, the following procedures were used:

Selection of Subjects

Subjects for this study included 248 male and female undergraduate students enrolled in classes in the School of Health, Physical Education and Leisure Services (HPELS) or as majors in the College of Business Administration at Oklahoma State University. The samples were considered independent in that majors in the College of Business Administration do not receive credit for activity courses taken in the School of HPELS (Oklahoma State University Catalog, 1982-83), whereas other colleges acknowledge credit for HPELS courses.

Although the majority of subjects enrolled in classes in the School of HPELS expressed their major field of study to be within the Department of Leisure Sciences or Physical Education, there were a number of subjects found in the HPELS sample who claimed major fields within other colleges; however, none of the students in the HPELS sample claimed a major in the College of Business Administration. Only students who claimed a major in some area of business administration were included in the College of Business Administration sample. A random cluster sampling technique was used to determine the subjects. Six classes of twenty-five or more students were randomly selected from the School of HPELS by the researcher providing the HPELS sample. The coordinator of undergraduate studies in the College of Business Administration selected a class of 109 students, 90 of which fell within the parameters of this study to provide the Business Administration sample. Subjects ranged in age from 18 to 25 years and included 146 females and 102 males. One hundred fifty-eight subjects were drawn from the School of HPELS and included 96 females and 62 males. Ninety students were drawn from the College of Business Administration and included 50 females and 40 males (Table I). Hubbard (1973) and Pelegrino (1979) support the fact that the cluster random sampling technique is an acceptable research method in education.

Categorization of Subjects

For the purposes of this study, subjects were categorized into the following pairs for Chi-square analysis of the data:

- Males/Females
- Age 18-21/Age 22-25

- School of HPELS/College of Business Administration
- Single/Married

It was thought that motivational values toward leisure participation may differ according to sex, maturation defined by age, professional orientation and marital status.

TABLE I

PROFILE OF SUBJECTS

Sex:	Females = 146 Males = 102
Marital Status:	Single = 230 Married = 18
Age:	18-21 years = 202 22-25 years = 46
Colleges:	Agriculture = 5 Arts and Sciences = 133 Business Administration = 90 Education = 10 Engineering, Technology, and Architecture = 1 Home Economics = 7 Veterinary Medicine = 2
Samples:	
School of HPELS = 158	Business Administration = 90
• Females - 96	• Females - 50
• Males - 62	• Males - 40
• Freshmen - 33	• Freshmen - 1
• Sophomores - 49	• Sophomores - 42
• Juniors - 51	• Juniors - 31
• Seniors - 25	• Seniors - 16

Research Instrument

Due to the absence of visual assessment of the affective domain in leisure and physical education literature, this research utilized the instrument developed by this researcher and cited in the pilot study, 1981 (Appendix A). The instrument consisted of 58 visual representations of various leisure experiences and intended to elicit responses from the subjective internal experience of each subject. The items in the research instrument were chosen to represent both sexes, most ages and the leisure activity categories specifically identified by this researcher to be:

- Individual/Dual Sports
- Team Sports
- Social Recreation
- Outdoor/High Risk/Challenge Activities
- "Free" Activities

The selected criteria used to determine the most valued aspect of leisure were the activity (A), the environment (E) and relationships (R).

Included with the instrument was an answer sheet and a debriefing sheet (Appendix A). The answer sheet requested a demographic profile on each subject, as well as his/her dual responses to each assessment item. With regard to each item subjects were asked to indicate the most valued aspect of each leisure experience represented as being activity, environment or relationships (A E R), and then to indicate their preference for actual involvement as being participant, spectator or neither. The debriefing sheet addressed five of the assessment items salient for subjects to explain reasons for their choice of activity, environment or relationships as being the most valued aspect of the leisure experience represented. Since there had been no tests of validity applied to the

research instrument prior to this study, the explicit purpose of the debriefing was to determine if the instrument encouraged subjects to respond from subjective internal experience, real or imagined, or from objective interpretation.

Procedure

The research instrument was administered by the researcher during regularly scheduled classes in the spring and fall semesters of 1982, and the spring semester of 1983. A 30 minute time limit was imposed to encourage spontaneity of response. Subjects were asked to utilize the separate answer sheet to circle their choice of the selected criteria, activity (A), environment (E) or relationships (R) as being the most valued aspect of the leisure experience represented in each item. Directions implicit in the assessment stated that choices for each item be made on the basis of real (past or present) or imagined personal leisure experiences. Subjects were then asked to indicate their preference for involvement in each activity represented as being participant, spectator, or neither. This information was deemed relevant in that the parameters for the use of leisure time do not necessitate actual involvement in the activity as a participant, but may offer intrinsic values to the spectator through the environment and relationships germane to the activity (Weiskopf, 1982).

In order to determine whether subjects selected most valued aspects of leisure according to their subjective experience or objective interpretation of each item, a debriefing sheet citing a sample of the assessment items was attached for subjects to indicate how they had responded to each item and their rationale for choice of the selected criteria.

Subjects were instructed to complete the answer sheet prior to looking at the debriefing sheet. In order to determine which of the 58 items were to be debriefed, the researcher grouped the items into the five leisure categories and randomly selected one item from each category.

Although the purpose of this study was not to test the internal validity of the research instrument, it seemed appropriate to determine the origin of response based on the opinions of outside professionals. Following the collection of data by the researcher on 248 subjects within the age and undergraduate parameters of this study, debriefing sheets, a copy of this research proposal and an assessment instrument was sent to three qualified professionals (called raters) for analysis (Appendix B). The raters were professionals in the field of physical education, leisure and counseling. Additionally, each rater had evidenced significant hours of training in the communication model called Neuro-linguistic Programming that claims competency in the ability to match predicates with internal subjective experience (Dilts, Grinder, R. Bandler and L. Bandler, 1980), a skill deemed significant to enhance consistency and the quality of debriefing. Each rater was asked to rate each response on the debriefing sheets based on the subjects' subjective experience or objective interpretation as follows:

1 = Subjective experience

2 = Objective interpretation

3 = Ambiguous

It was thought that if the randomly selected sample of assessment items could elicit subjective responses, then the instrument may be able to withstand tests of validity.

Once data were gathered from subjects and raters the researcher, with the assistance of statistics experts, designed a computer program applicable to this study. Computer Fortran sheets were coded and verified by outside scorers and computer cards were then punched and verified by the Oklahoma State University Computer Center. The data generated were analyzed using the two statistical procedures of CROSSTABS and Analysis of Variance contained in the Statistical Package for Social Sciences (SPSS, 1975) and run through the Oklahoma State University Computer Center.

Methods and Procedures of Statistical Analysis

The data gathered on subjects were reported as raw frequencies of occurrence or as proportions of frequencies within the sample utilizing Pearson's X^2 Goodness of Fit Test to determine the level of significance on each item in the research instrument as follows:

1. activity, environment or relationships as motivational factors for leisure participation;
2. the most valued aspect of leisure between males and females;
3. the most valued aspect of leisure between subjects who are married and those who are single;
4. the most valued aspect of leisure between subjects age 18-21 and those age 22-25;
5. the most valued aspect of leisure between students enrolled in the College of Business Administration and those enrolled in classes in the School of HPELS;
6. the most valued aspect of leisure related to the five categories of leisure activities;

- Individual/Dual Sports
- Team Sports
- Social Recreation
- Out-door/High Risk/Challenge Activities
- "Free" Activities, and

7. the most valued aspect of leisure related to the number of participants involved.

Chi-square was also used to determine the percentage of responses from subjective internal experience based on the five research items debriefed. The Analysis of Variance statistical method was used to determine if there were variances within and between rater opinions concerning the subjective or objective response of subjects to each item debriefed. The α .05 level was used to test for statistical significance. Since the hypotheses stated there would be no significant differences, the rejection level for hypothetical statements was one.

CHAPTER IV

ANALYSIS OF DATA

The purpose of this study was to determine if there were significant differences in attitudes toward the most valued aspects of leisure experiences between two independent samples drawn from the student population at Oklahoma State University. The selected criteria for determining the most valued aspects of leisure were activity, environment and relationships. Results of the study are represented according to the hypothetical statements as they relate to each item of the research instrument.

In addition to determining the most valued aspects of leisure among the subjects, this study intended to determine if the use of a visual assessment instrument could elicit subjective internal responses of subjects as opposed to objective interpretations. Three outside raters were asked to debrief a sample of the 58 items in the instrument to determine the origin of response for purposes of establishing a measure of validity. Results of that debriefing demonstrate a measure of consistency between and within raters, as well as the ability of the instrument to elicit internal subjective responses of subjects.

The data generated in this study were the result of the methods and techniques discussed in Chapter III. Two collection procedures were used in this study. First, subjects were asked to respond to an assessment instrument designed to elicit information concerning their primary

motivation to engage in leisure experiences. Second, three professionals were asked to determine the origin of subjects' response to a sample of assessment items debriefed.

For ease of reporting and understanding, these data were grouped as they related to each item of the assessment instrument and as they related to the origin of response by raters. The assessment developed and utilized in this study generated data on the opinions and attitudes of two samples of undergraduate students at Oklahoma State University concerning 58 leisure experiences. After coding of the data, responses were analyzed using the CROSSTABS and Analysis of Variance routines on the computer at the Oklahoma State University Computer Center. Using the Pearson Goodness of Fit method, frequencies of response were measured statistically by the X^2 distribution. The level of significance selected for this study was $\alpha = .05$. The entire data set was included in tabular form by hypotheses in Appendix D. The statistically significant comparisons were discussed in the following section.

Itemization of the Significant Findings of the Research Instrument

In Item 1 (Figure 2) of the assessment significant relationships occurred between motivational criteria and between males and females. The data indicate that 59.8% of the total subjects chose the intrinsic value of the activity, and of those, 83% indicated they would participate. Four and one-half percent of the subjects chose the value of environment and of those, 54.5% chose to spectate, while 35.8% chose relationships (Table II). The majority of subjects preferred participation in the activity regardless of the environment or relationships involved.

Figure 2. Assessment Item No. 1

TABLE II

ITEM 1, HYPOTHESIS 1

COUNT ROW PCT COL PCT TOT PCT	Participant	Spectator	Neither	ROW TOTAL	
Activity	122 83.0	19 12.9	6 4.1	147 59.8	
Environment	4 36.4	6 54.5	1 9.1	11 4.5	
Relationship	49 55.7	32 36.4	7 8.0	88 35.8	
COLUMN TOTAL	175 71.1	57 23.2	14 5.7	246 100.0	p=.0000

X^2=27.35706 with 4 df
(2 of the 9 valid cells have f_e less than 5.0)

Concerning the difference between the motivational preference of males and females, females chose this activity because of significant relationships three to one over the males who preferred the intrinsic values of the activity (Table III).

TABLE III

ITEM 1, HYPOTHESIS 2

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationship	ROW TOTAL	
Females	74 50.7	10 6.8	62 42.5	146 59.1	
Males	74 73.3	1 1.0	26 25.7	101 40.9	
COLUMN TOTAL	148 59.9	11 4.5	88 35.6	247 100.0	p=.0008

X^2=14.36948 with 2 df
(1 of the 6 valid cells have f_e less than 5.0)

No significant differences occurred in Item 3 (Figure 3) except between males and females where females chose this activity because of relationships three to one over males who were motivated by the activity itself (Table IV).

Figure 3. Assessment No. 3

TABLE IV

ITEM 3, HYPOTHESIS 2

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationship	ROW TOTAL	
Females	36 24.7	12 8.2	98 67.1	146 59.1	
Males	53 52.5	11 10.9	37 36.6	101 40.9	
COLUMN TOT	89 36.0	23 9.3	135 54.7	247 100.0	p=.0000

X^2=23.43301 with 2 df

Figure 4. Assessment Item No. 5

TABLE V

ITEM 5, HYPOTHESIS 1

COUNT ROW PCT COL PCT TOT PCT	Participant	Spectator	Neither	ROW TOTAL	
Activity	62 87.3	8 11.3	1 1.4	71 28.9	
Environment	31 56.4	20 36.4	4 7.3	55 22.4	
Relationship	75 62.5	39 32.5	6 5.0	120 48.8	
COLUMN TOTAL	168 68.3	67 27.2	11 4.5	246 100.0	p=.0015

χ^2=17.58151 with 2 df
(2 of the 9 valid cells have f_e less than 5.0)

According to respondents of Item 5 (Figure 4), 120 subjects chose relationships with 75 indicating a preference for involvement and 39 preferring to be spectators. Of the remaining subjects, 71 chose the activity with 62 indicating a preference for participation (Table V). Two-thirds of the subjects chose participation in this activity because of the relationships involved or because of an interest in the activity.

Figure 5. Assessment Item No. 6

TABLE VI

ITEM 6, HYPOTHESIS 1

COUNT ROW PCT COL PCT TOT PCT	Participant	Spectator	Neither	ROW TOTAL	
Activity	20 100.0	0 0.0	0 0.0	20 8.1	
Environment	22 71.0	5 16.1	4 12.9	31 12.6	
Relationship	175 89.7	17 8.7	3 1.5	195 79.3	
COLUMN TOT	217 88.2	22 8.9	7 2.8	246 100.0	p=.0014

X^2=17.76175 with 4 df
(4 of the 9 valid cells have f_e less than 5.0)

Seventy-nine percent of the total subjects chose relationships to be the primary motivation for the type of social recreation illustrated by Item 6 (Figure 5), and of those selecting relationships, 89.7 indicated a preference for participation (Table VI).

Concerning the crafts activity displayed in Item 7 (Figure 6), 51% of the respondents indicated motivation to the activity itself with 75.2% of those choosing the activity also indicating a desire to participate (Table VII). Thirty-nine percent of the respondents chose relationships as the motivational factor, while only 56.8% indicated a desire to participate, 27.4% said they would observe because of relationships and 12.2% of the subjects indicated no desire for participation in this activity.

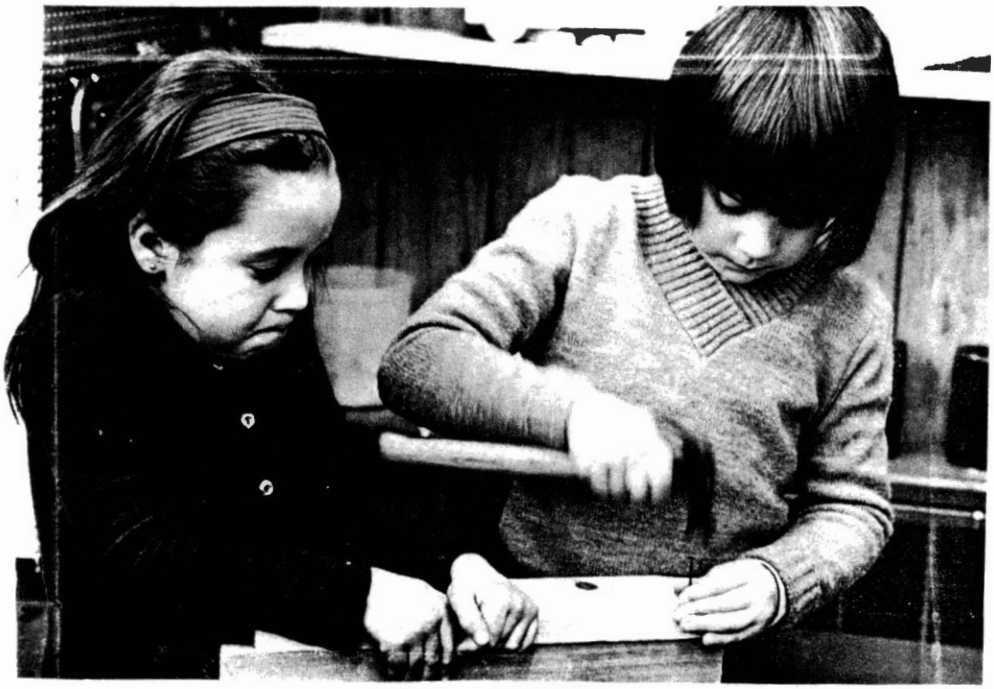

Figure 6. Assessment Item No. 7

TABLE VII

ITEM 7, HYPOTHESIS 1

COUNT ROW PCT COL PCT TOT PCT	Participant	Spectator	Neither	ROW TOTAL	
Activity	20	0	0	20	
	100.0	0.0	0.0	8.1	
Environment	22	5	4	31	
	71.0	16.1	12.9	12.6	
Relationship	175	17	3	195	
	89.7	8.7	1.5	79.3	
COLUMN TOT	217	22	7	246	
	88.2	8.9	2.8	100.0	p=.0021

X^2=16.84225 with 4 df
(1 of the 9 valid cells have f_e less than 5.0)

Based upon subjects' response to Item 7, the second hypothesis of no significant difference between males and females must be rejected. Males indicated primary motivation to the activity, while females indicated a need for relationships in order to become involved (Table VIII).

TABLE VIII

ITEM 7, HYPOTHESIS 2

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationship	ROW TOTAL	
Females	65 44.5	14 9.6	67 45.9	146 59.1	
Males	61 60.4	12 11.9	28 27.7	101 40.9	
COLUMN TOT	126 51.0	26 10.5	95 38.5	247 100.0	p=.0152

X^2=8.37082

Based upon Item 8 illustrating football (Figure 7), the hypothesis stating no significant differences between selected motivational criteria must be rejected in that 69.1% of the subjects indicated a preference for involvement in the activity either as a participant (57.1%) or as a spectator (40.6), while only 15% of the respondents indicated relationships or environment as the primary motivational aspect of this experience (Table IX). Males and females differed in this item in that females

valued relationships twice as much as males, though both males and females indicated a primary preference for involvement in this experience because of the nature of the activity (Table X).

Figure 7. Assessment Item No. 8

Based on subjects' responses to Item 9, (Figure 8), Hypotheses 1, 2, 3 and 5 stating no significant differences must be rejected. The intrinsic values of the activity emerged as the most significant motivational aspect of cheerleading two to one over environment and relationships (Table XI). One-half of the respondents preferred to be spectators as opposed to participants in this activity. Activity emerged as the most valued aspect of this experience for females (60.3%), while males were equally split between activity, environment and relationships (Table XII).

TABLE IX

ITEM 8, HYPOTHESIS 1

COUNT ROW PCT COL PCT TOT PCT	Participant	Spectator	Neither	ROW TOTAL	
Activity	97 57.1	69 40.6	4 2.4	170 69.1	
Environment	10 27.0	25 67.6	2 5.4	37 15.0	
Relationship	19 48.7	17 43.6	3 7.7	37 15.9	
COLUMN TOT	126 51.2	111 45.1	9 3.7	246 100.00	p=.0105

X^2=13.16839 with 4 df
(2 of 9 valid cells have f_e less than 5.0)

TABLE X

ITEM 8, HYPOTHESIS 2

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationship	ROW TOTAL	
Females	95 63.0	25 17.1	29 19.9	146 59.1	
Males	79 78.2	12 11.9	10 9.9	101 40.9	
COLUMN TOT	171 69.2	37 15.0	39 15.8	247 100.0	p=.0327

X^2=6.84097 with 2 df

Figure 8. Assessment Item No. 9

TABLE XI

ITEM 9, HYPOTHESIS 1

COUNT ROW PCT COL PCT TOT PCT	Participant	Spectator	Neither	ROW TOTAL	
Activity	61 50.0	39 32.0	22 18.0	122 49.6	
Environment	9 15.0	41 68.3	10 16.7	60 24.4	
Relationship	17 26.6	27 42.2	20 31.3	64 26.0	
COLUMN TOT	87 35.4	107 43.5	52 21.1	246 100.0	p=.0000

X^2=32.30965 with 4 df

In addition to significant differences between motivational aspects and males and females, subjects who were married differed with subjects who were single (Table XIII). Over 50% of the single subjects chose this experience for the values in the activity, while married students preferred the environment surrounding the activity and the relationships involved. Still another difference occurred between majors in the College of Business Administration and students enrolled in classes in the School of HPELS. Though both samples indicated that activity was the most valued aspect, 30.4% of the HPELS students valued relationships over 19.1% of the Business Administration students (Table XIV).

TABLE XII

ITEM 9, HYPOTHESIS 2

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationship	ROW TOTAL	
Females	88 60.3	23 15.8	35 24.0	146 59.1	
Males	34 33.7	37 36.6	30 29.7	101 40.9	
COLUMN TOT	122 49.4	60 24.3	65 26.3	247 100.0	p=.0000

X^2=20.01898 with 2 df

TABLE XIII

ITEM 9, HYPOTHESIS 3

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationship	ROW TOTAL	
Single	118 51.5	52 22.7	59 25.8	229 92.7	
Married	4 22.2	8 44.4	6 33.3	18 7.3	
COLUMN TOT	122 49.4	60 24.3	65 26.3	247 100.0	p=.0386

X^2=6.51117
(2 of the 6 valued cells have f_e less than 5.0)

TABLE XIV

ITEM 9, HYPOTHESIS 5

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationship	ROW TOTAL	
Business Administration	53 59.6	19 21.3	17 19.1	89 36.0	
HPELS	69 43.7	41 25.9	48 30.4	158 64.0	
COLUMN TOT	122 49.4	60 24.3	65 26.3	247 100.0	p=.0461

X^2=6.15464

According to the respondents, the first hypothesis of no significant differences between motivational criteria must be rejected for Item 11 (Figure 9), where over 50% of the subjects valued the activity of "back-yard" football with 88.1% indicating a preference to participate. Though activities was the most selected criterion, relationships followed at 40.2% (Table XV).

Figure 9. Assessment Item No. 11

In Item 12 (Figure 10) a significant difference occurred between subjects age 18-21 and those age 22-25 (Table XVI). Subjects age 18-21 valued relationships 15% more than those age 22-25, while those 22-25 valued the environment twice as much. A significant difference also occurred between the two samples drawn from the College of Business Administration and the School of HPELS (Table XVII). Students in the College of Business Administration valued the activity twice as much as the HPELS students who valued relationships 13% more.

TABLE XV

ITEM 11, HYPOTHESIS 1

COUNT ROW PCT COL PCT TOT PCT	Participant	Spectator	Neither	ROW TOTAL	
Activity	119 88.1	13 9.6	3 2.2	135 54.9	
Environment	6 50.0	5 41.7	1 8.3	12 4.9	
Relationship	83 83.8	9 9.1	7 7.1	99 40.2	
COLUMN TOT	208 84.6	27 11.0	11 4.5	246 100.0	p=.0028

X^2=16.17198 with 4 df
(3 of the 9 valid cells have f_e less than 5.0)

Figure 10. Assessment Item No. 12

TABLE XVI

ITEM 12, HYPOTHESIS 4

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationship	ROW TOTAL	
Age 18-21	44 21.8	35 17.3	123 60.9	202 81.8	
Age 22-25	5 11.1	15 33.3	25 55.6	45 18.2	
COLUMN TOT	49 19.8	50 20.2	148 59.9	247 100.0	p=.0310

X^2=6.94520 with 2 df

TABLE XVII

ITEM 12, HYPOTHESIS 5

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationship	ROW TOTAL	
Business Administration	26 29.2	17 19.1	46 51.7	89 36.0	
HPELS	23 14.6	33 20.9	102 64.6	158 64.0	
COLUMN TOT	49 19.8	50 20.2	148 59.9	247 100.0	p=.0200

X^2=7.82847 with 2 df

Fifty-five percent of the subjects chose the activity of cross-country skiing (Figure 11) with 85.2% indicating a preference to participate, while the environment surrounding this activity appealed to 36.3% of the subjects (Table XVIII).

Figure 11. Assessment Item No. 13

According to the responses of Item 14 (Figure 12), Hypothesis 1 stating no significant differences between motivational criteria must be rejected. Sixty-nine percent of the subjects indicated they would choose art because of the activity with over 50% preferring participation (Table XIX). Regardless of motivational criteria, only 51.8% of the subjects indicated a preference to participate, while 31% chose to observe and the remaining 17.1% expressed no interest in art as a leisure experience. An analysis of subjects by age indicated that subjects age 18-21 preferred the activity 20% more than those age 22-25 who were

motivated twice as much by the environment and relationships surrounding the activity (Table XX).

TABLE XVIII

ITEM 13, HYPOTHESIS 1

COUNT ROW PCT COL PCT TOT PCT	Participant	Spectator	Neither	ROW TOTAL	
Activity	115 85.2	7 5.2	13 9.6	135 55.1	
Environment	59 66.3	16 18.0	14 15.7	89 36.3	
Relationship	15 71.4	3 14.3	3 14.3	21 8.6	
COLUMN TOT	189 77.1	26 10.6	30 12.2	245 100.0	p=.0120

χ^2=12.85086 with 4 df
(2 of the 9 valid cells have f_e less than 5.0)

A significant difference in motivational criteria was indicated toward the high risk activity of cliff diving illustrated in Item 16 (Figure 13). Fifty-eight percent of the subjects indicated they would be motivated to this experience by the activity itself, though 33.1% would only spectate and 19.7% indicated no interest for involvement (Table XXI). Of the 34.3% of the subjects indicating motivation by the environment, 53.6% of them chose only to spectate. Regardless of the

motivational criteria, almost 44.1% of the subjects indicated a preference to participate in this high-risk activity, and 40% indicated a preference to spectate.

Figure 12. Assessment Item No. 14

TABLE XIX

ITEM 14, HYPOTHESIS 1

COUNT ROW PCT COL PCT TOT PCT	Participant	Spectator	Neither	ROW TOTAL	
Activity	96 56.5	43 25.3	31 18.2	170 69.4	
Environment	20 45.8	16 39.0	5 12.2	41 16.7	
Relationship	11 32.4	17 50.0	6 17.6	34 13.9	
COLUMN TOT	127 51.8	76 31.0	42 17.1	245 100.0	p=.0319

X^2=10.55887 with 4 df

TABLE XX

ITEM 14, HYPOTHESIS 4

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationships	ROW TOTAL	
Age 18-21	146 72.6	29 14.4	26 12.9	201 81.7	
Age 22-25	24 53.3	12 26.7	9 20.0	45 18.3	
COLUMN TOT	170 69.1	41 16.7	35 14.2	246 100.0	p=.0373

X^2=6.57686 with 2 df

Figure 13. Assessment Item No. 16

The significant difference in Item 19 (Figure 14) occurred between subjects who were married and those who were single. Two out of three subjects who were single chose this activity for the relationships involved, whereas the married students were more motivated by the activity and the environment surrounding it (Table XXII).

Figure 14. Assessment Item No. 19

In the leisure experience of picnicking illustrated in Item 20 (Figure 15), relationships emerged as the most significant aspect (61.6%) with 82.8% of respondents indicating a desire to participate (Table XXIII). Twenty percent of the subjects chose picnicking for environmental reasons, and 18% indicated enjoyment of the activity.

TABLE XXI

ITEM 16, HYPOTHESIS 1

COUNT ROW PCT COL PCT TOT PCT	Participant	Spectator	Neither	ROW TOTAL	
Activity	67 47.2	47 33.1	28 19.7	142 58.0	
Environment	31 36.9	45 53.6	8 9.5	84 34.3	
Relationships	10 52.6	6 31.6	3 15.8	19 7.8	
COLUMN TOT	108 44.1	98 40.0	39 15.9	245 100.0	p=.0272

X^2=10.94802 with 4 df
(1 of the 9 valid cells has f_e less than 5.0)

TABLE XXII

ITEM 19, HYPOTHESIS 3

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationships	ROW TOTAL	
Single	66 28.9	10 4.4	152 66.7	228 92.7	
Married	7 38.9	3 16.7	8 44.4	18 7.3	
COLUMN TOT	73 29.7	13 5.3	160 65.0	246 100.0	p=.0372

X^2=6.58343 with 2 df
(1 of the 6 valid cells have f_e less than 5.0)

Significant differences in motivational aspects for Item 22 (Figure 16) occurred between males and females and between students age 18-21 and those age 22-25. Two out of three women chose camping because of the environment (67.1%) while the men were much more equitable (Table XXIV). Though they selected environments more frequently (48.5%), they were almost equally motivated by the activity (21.8%) and the relationships involved (29.7%). Of subjects age 18-21, 64.9% indicated motivation by environment, while subjects age 22-25 chose relationships two to one over the 18 to 21 year olds (Table XXV).

Figure 15. Assessment Item No. 20

TABLE XXIII

ITEM 20, HYPOTHESIS 1

COUNT ROW PCT COL PCT TOT PCT	Participant	Spectator	Neither	ROW TOTAL	
Activity	26 59.1	6 13.6	12 27.3	44 18.0	
Environment	38 76.0	7 14.0	5 10.0	50 20.4	
Relationship	125 82.8	12 7.9	14 9.3	151 61.6	
COLUMN TOT	189 77.1	25 10.2	31 12.7	245 100.0	p=.0089

X^2=13.53256 with 4 df
(1 of the 9 valid cells have f_e less than 5.0)

TABLE XXIV

ITEM 22, HYPOTHESIS 2

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationship	ROW TOTAL	
Female	18 12.3	98 67.1	30 20.5	146 59.1	
Male	22 21.8	49 48.5	30 29.7	101 40.9	
COLUMN TOT	40 16.2	147 59.5	60 24.3	247 100.0	p=.0121

X^2=8.82797 with 2 df

TABLE XXV

ITEM 22, HYPOTHESIS 4

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationship	ROW TOTAL	
Age 18-21	32 15.8	131 64.9	39 19.3	202 81.8	
Age 22-25	8 17.8	16 35.6	21 46.7	45 18.2	
COLUMN TOT	40 16.2	147 59.5	60 24.3	247 100.0	p =.0002

Figure 16. Assessment Item No. 22

Fifty-eight percent of respondents valued relationships in Item 23 (Figure 17); however, the statistical difference occurred between subjects who were single and those who were married (Table XXVI). Single subjects valued the activity represented 13% more than married subjects, who valued the environment four times as much.

Figure 17. Assessment Item No. 23

Though no significant differences occurred between the selected criteria of activity, environment and relationships in Item 25 (Figure 18), it was interesting that 31 subjects indicated a desire to participate in boxing, 116 chose to spectate while 99 chose neither. A significant difference did occur between subjects age 18-21 and those 22-25 (Table XXVII). The 18-21 year olds selected the activity 15% more than the 22-25 year olds who chose the environment four to one over the younger subjects. According to inferences from the data, the samples drawn from

the OSU population value boxing as a spectator sport and become less interested in participating with chronological maturation.

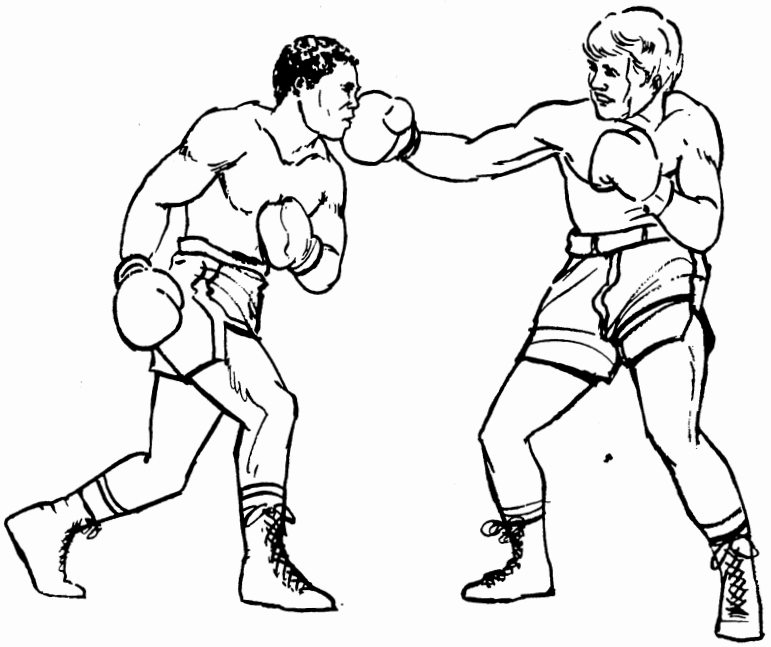

Figure 18. Assessment Item No. 25

Though the activity implied in Item 31 (Figure 19) is heavily dependent upon the element of mud, only 37 subjects chose not to participate while all but 25 subjects most valued relationships in this activity (Table XXVIII).

The most valued aspect in Item 32 (Figure 20) was that of activity (68.3%) and of the total subjects, 49.2% chose to participate while 34.1% preferred spectating and 16.7% indicated a preference for no involvement (Table XXIX).

TABLE XXVI

ITEM 23, HYPOTHESIS 3

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationship	ROW TOTAL	
Single	82 35.8	14 6.1	133 58.1	229 92.7	
Married	4 22.2	4 22.2	10 55.6	18 7.3	
COLUMN TOT	86 34.8	18 7.3	143 57.9	247 100.0	p=.0326

X^2=6.84531 with 2 df
(1 of the 6 valid cells have f_e less than 5.0)

TABLE XXVII

ITEM 25, HYPOTHESIS 4

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationship	ROW TOTAL	
Age 18-21	165 81.7	12 5.9	25 24.4	202 81.8	
Age 22-25	30 66.7	9 20.0	6 13.3	45 18.2	
COLUMN TOT	195 78.9	21 8.5	31 12.6	247 100.0	p=.0081

X^2=9.63416 with 2 df
(1 of the 6 valid cells have f_e less than 5.0)

Figure 19. Assessment Item No. 31

Significant differences occurred for the activity silhouetted in Item 33 (Figure 21) between males and females and between majors in the College of Business Administration and students in the School of HPELS. Though both males and females most valued the activity, females valued relationships 15% more than the males (Table XXX), while 68.2% of the students in the College of Business Administration valued the activity and students in the School of HPELS valued relationships equally as much as the activity (Table XXXI).

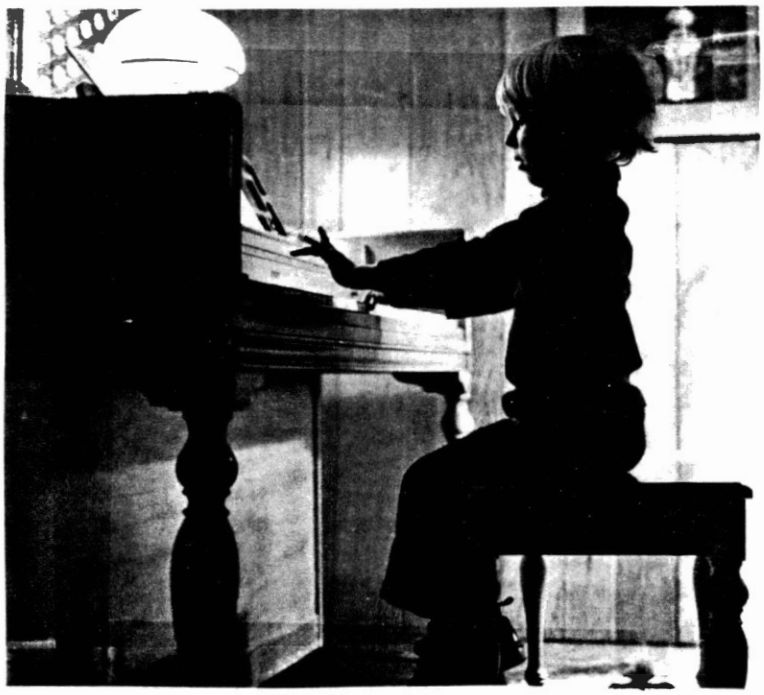

Figure 20. Assessment Item No. 32

TABLE XXVIII

ITEM 31, HYPOTHESIS 1

COUNT ROW PCT COL PCT TOT PCT	Participant	Spectator	Neither	ROW TOTAL	
Activity	11 73.3	2 13.3	15 13.3	 6.1	
Environment	4 40.0	2 20.0	4 40.0	10 4.1	
Relationship	194 87.8	16 7.2	11 5.0	221 89.8	
COLUMN TOT	209 85.0	20 8.1	17 6.9	246 100.0	p=.0001

X^2=23.20770 with 4 df
(4 of the 9 valid cells have f_e less than 5.0)

Figure 21. Assessment Item No. 33

TABLE XXIX

ITEM 32, HYPOTHESIS 1

COUNT ROW PCT COL PCT TOT PCT	Participant	Spectator	Neither	ROW TOTAL	
Activity	87 51.8	54 32.1	27 16.1	168 68.3	
Environment	17 32.1	23 43.4	13 24.5	53 21.5	
Relationship	17 68.0	7 28.0	1 4.0	25 10.2	
COLUMN TOT	121 49.2	84 34.1	41 16.7	246 100.0	p=.0225

X^2=11.39446 with 4 df
(1 of the 9 valid cells have f_e less than 5.0)

TABLE XXX

ITEM 33, HYPOTHESIS 2

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationship	ROW TOTAL	
Females	77 52.7	6 4.1	63 43.2	146 59.1	
Males	62 61.4	10 9.9	29 28.7	101 40.9	
COLUMN TOT	139 56.3	16 6.5	92 37.2	247 100.0	p=.0270

X^2=7.22537 with 2 df

TABLE XXXI

ITEM 33, HYPOTHESIS 5

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationship	ROW TOTAL	
Business Administration	60 68.2	4 4.5	24 27.3	88 35.6	
HPELS	79 49.7	12 7.5	68 42.8	159 64.4	
COLUMN TOT	139 56.3	16 6.5	92 37.2	247 100.0	p=.0194

X^2=7.88304 with 2 df

Male and female subjects expressed significant differences of motivational aspects concerning the animated illustration of ice skating represented in Item 34 (Figure 22). Females were more ambivalent in that they were equally split among the selected criteria, whereas males were more motivated by the environmental implications of the activity (Table XXXII). A significant difference also occurred between the two samples (Table XXXIII). Whereas 34.6% of the students in the School of HPELS valued relationships, 33% of the Business Administration students valued the activity.

Figure 22. Assessment Item No. 34

TABLE XXXII

ITEM 34, HYPOTHESIS 2

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationship	ROW TOTAL	
Females	44 30.1	58 39.7	44 30.1	146 59.1	
Males	16 15.8	52 51.5	33 32.7	101 40.9	
COLUMN TOT	60 24.3	110 44.5	77 31.2	247 100.0	p=.0302

X^2=6.99931 with 2 df

TABLE XXXIII

ITEM 34, HYPOTHESIS 5

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationship	ROW TOTAL	
Business Administration	29 33.0	37 42.0	22 25.0	88 35.6	
HPELS	31 19.5	73 45.9	55 34.6	159 64.4	
COLUMN TOT	60 24.3	110 44.5	77 31.2	247 100.0	p=.0477

X^2=6.08524 with 2 df

The most valued aspect of the leisure experience illustrated in Item 35 was relationships (Figure 23). Seventy-nine percent of the subjects expressed motivation by relationships, and of those choosing relationships, 94.4% also chose to participate (Table XXXIV). From the university samples drawn, there were 13 subjects who indicated no preference for involvement in this type of activity common to the university setting.

Figure 23. Assessment Item No. 35

Though relationships emerged as the most valued aspect of Item 37 (Figure 24) for both males and females, females valued the environment 13.1% more than males, who valued the activity 12.3% more than females (Table XXXV).

TABLE XXXIV

ITEM 35, HYPOTHESIS 1

COUNT ROW PCT COL PCT TOT PCT	Participant	Spectator	Neither	ROW TOTAL	
Activity	15 62.5	3 12.5	6 25.0	24 9.8	
Environment	20 74.1	4 14.8	3 11.1	27 11.0	
Relationship	184 94.4	7 3.6	4 2.1	195 79.3	
COLUMN TOT	219 89.0	14 5.7	13 5.3	246 100.0	p=.0000

X^2=33.86018 with 4 df
(4 of the 9 valid cells here f_e less than 5.0)

Figure 24. Assessment Item No. 37

TABLE XXXV

ITEM 37, HYPOTHESIS 2

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationship	ROW TOTAL	
Females	11 7.5	64 43.8	71 48.6	146 59.1	
Males	20 19.8	31 30.7	50 49.5	101 40.9	
COLUMN TOT	31 12.6	95 38.5	121 49.0	247 100.0	p=.0073

X^2=9.84922 with 2 df

Figure 25. Assessment Item No. 40

The most valued aspect of the verbal dialogue illustrated in Item 40 (Figure 25) was relationships three to one with 70.7% of subjects choosing to participate (Table XXXVI). A significant difference occurred between males and females with females expressing motivation by relationships 8% more than males, and males expressing motivation by environment 11.6% more than females (Table XXXVII).

TABLE XXXVI

ITEM 40, HYPOTHESIS 1

COUNT ROW PCT COL PCT TOT PCT	Participant	Spectator	Neither	ROW TOTAL	
Activity	19 63.3	1 3.3	10 33.3	30 12.2	
Environment	12 44.4	7 25.9	8 29.6	27 11.0	
Relationship	143 75.7	23 12.2	23 12.2	189 76.8	
COLUMN TOT	174 70.7	31 12.6	41 16.7	246 100.0	p=.0007

X^2=19.41203 with 4 df
(3 of the 9 valid cells have f_e less than 5.0)

The most valued aspect of leisure according to respondents on Item 41 (Figure 26) was relationships at 66.3%. Nearly 80% of the subjects also indicated a preference to participate in this activity (Table XXXVIII). Item 41 (Figure 26) and Item 1 (Figure 2) both were

illustrations of youth ball teams. In Item 1 respondents most valued the activity 60%, whereas in Item 41 relationships were most valued at 66.3%. Camaraderie was depicted in both pictures; however, Item 41 was coed and depicted a jovial emotional tone which may have accounted for some of the difference in motivational aspects.

TABLE XXXVII

ITEM 40, HYPOTHESIS 2

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationship	ROW TOTAL	
Females	20 13.7	9 6.2	117 80.1	146 59.1	
Males	10 9.9	18 17.8	73 72.3	101 40.9	
COLUMN TOT	30 12.1	27 10.9	190 76.9	247 100.0	p=.0135

X^2=8.61021 with 2 df

Figure 26. Assessment Item No. 41

TABLE XXXVIII

ITEM 41, HYPOTHESIS 1

COUNT ROW PCT COL PCT TOT PCT	Participant	Spectator	Neither	ROW TOTAL	
Activity	53 70.7	16 21.3	6 8.0	75 30.5	
Environment	5 62.5	3 37.5	0 0.0	8 3.3	
Relationship	138 84.7	19 11.7	6 3.7	163 66.3	
COLUMN TOT	196 79.7	38 15.4	12 4.9	246 100.0	p=.0467

X^2=0.65375 with 4 df
(3 of the 9 valid cells have f_e less than 5.0)

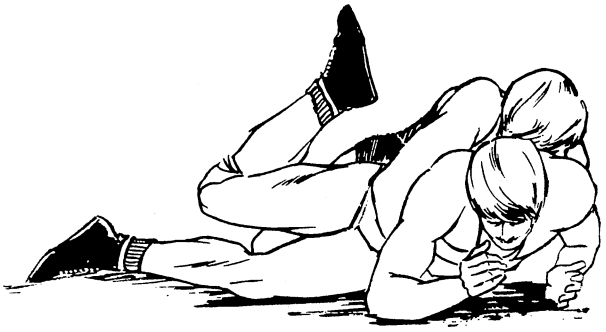

Figure 27. Assessment Item No. 42

TABLE XXXIX

ITEM 42, HYPOTHESIS 2

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationship	ROW TOTAL	
Females	118 80.8	9 6.2	19 13.0	146 59.1	
Males	91 90.1	7 6.9	3 3.0	101 40.9	
COLUMN TOT	209 84.6	16 6.5	22 8.9	247 100.0	p=.0244

X^2=7.42238 with 2 df

Though both males and females agreed they would be motivated to the sport of wrestling (Figure 27) by the intrinsic values of the activity (84.6%), females valued relationships 10% more than males, and males valued the activity 10% more than females (Table XXXIX).

The most valued aspect of the leisure experience illustrated in Item 44 (Figure 28) was the activity itself with 87.8% of subjects responding (Table XL). Of those motivated by this activity, 81% also preferred participation. Environment (2.4%) and relationships (9.8%) were relatively unimportant as motivational factors.

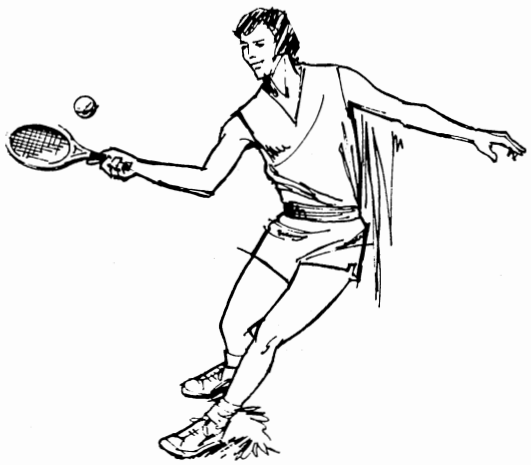

Figure 28. Assessment Item No. 44

TABLE XL

ITEM 44, HYPOTHESIS-1

COUNT ROW PCT COL PCT TOT PCT	Participant	Spectator	Neither	ROW TOTAL	
Activity	175 81.0	25 11.6	16 7.4	216 87.8	
Environment	1 16.7	4 66.7	1 15.7	6 2.4	
Relationship	22 91.7	1 4.2	1 4.2	24 9.8	
COLUMN TOT	198 80.5	30 12.2	18 7.3	246 100.0	p=.0004

X^2=20.39642 with 4 df
(5 of the 9 valid cells have f_e less than 5.0)

In Item 46 (Figure 29), relationships (78%) emerged as the most frequently selected motivational aspect, with 58% of the subjects indicating a preference for participation and 24% preferring to be spectators (Table XLI). Both males and females agreed upon relationships as the primary motivation for the activity; however, males indicated more of a preference for the environment than females, who chose the activity instead (Table XLII). There was also a significant difference of opinion between subjects age 18-21 and those 22-25 (Table XLIII). Eighty percent of the 18-21 year olds selected relationships, as opposed to 70% of the 22-25 year olds. Both age groups agreed equally concerning the activity, but the 22-25 year olds selected the environment 11% more than the 18-21 year olds.

TABLE XLI

ITEM 46, HYPOTHESIS 1

COUNT ROW PCT COL PCT TOT PCT	Participant	Spectator	Neither	ROW TOTAL	
Activity	15 44.1	10 29.4	9 26.5	34 13.8	
Environment	5 25.0	8 40.0	7 35.0	20 8.1	
Relationship	122 63.5	42 21.9	28 14.6	192 78.0	
COLUMN TOT	142 57.7	60 24.4	44 17.9	246 100.0	p=.0056

X^2=14.62088 with 4 df
(2 of the 9 valid cells have f_e less than 5.0)

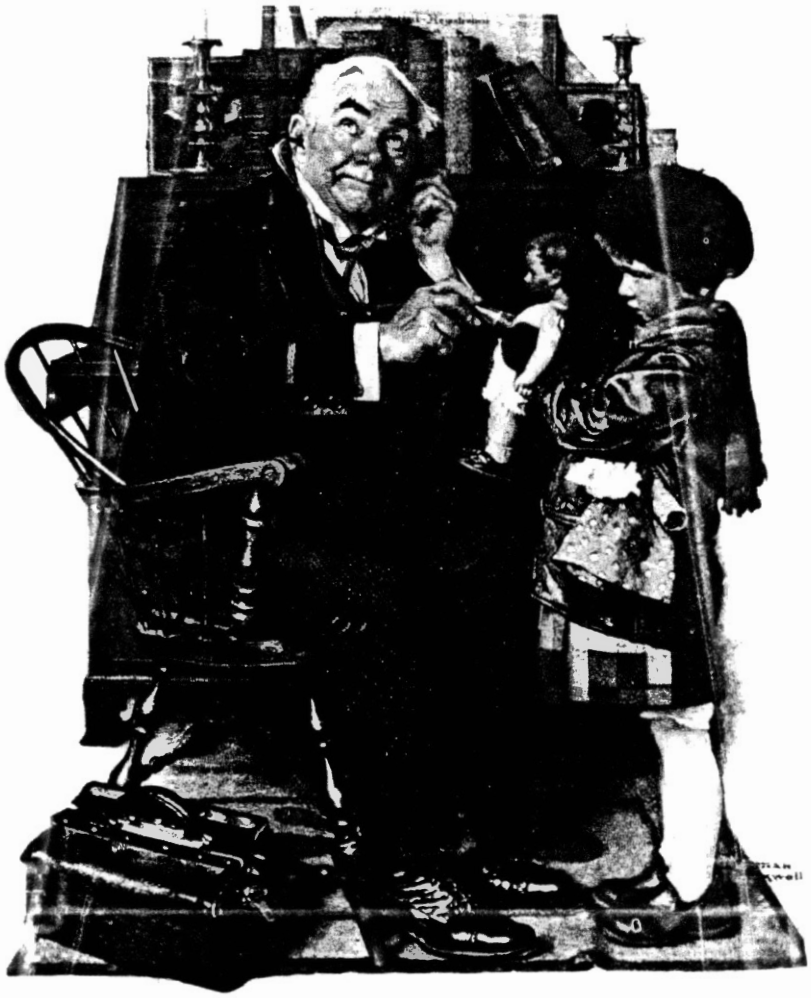

Figure 29. Assessment Item No. 46

The most valued aspect of bicycling as illustrated in Item 48 (Figure 30) to the sample population was the activity itself (76%). Eighteen percent of the sample indicated the environment to be the primary motivational factor, and 6% chose relationships. Of the entire sample there were only 11 subjects who preferred no involvement in this activity and 9 who would rather spectate. The remaining 226 subjects indicated a preference to participate making this activity extremely appealing to the population sampled.

TABLE XLII

ITEM 46, HYPOTHESIS 2

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationship	ROW TOTAL	
Females	24 16.4	7 4.8	115 78.8	146 59.1	
Males	10 9.9	14 13.9	77 76.2	101 40.9	
COLUMN TOT	34 13.8	21 8.5	192 77.7	247 100.0	p=.0215

X^2=7.67525 with 2 df

TABLE XLIII

ITEM 46, HYPOTHESIS 4

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationship	ROW TOTAL	
Age 18-21	28 13.9	13 6.4	161 79.7	202 81.8	
Age 22-25	6 13.3	8 17.8	31 68.9	45 18.2	
COLUMN TOT	34 13.8	21 8.5	192 77.7	247 100.0	p=.0467

X^2=6.12956 with 2 df
(1 of the 6 valid cells have f_e less than 5.0)

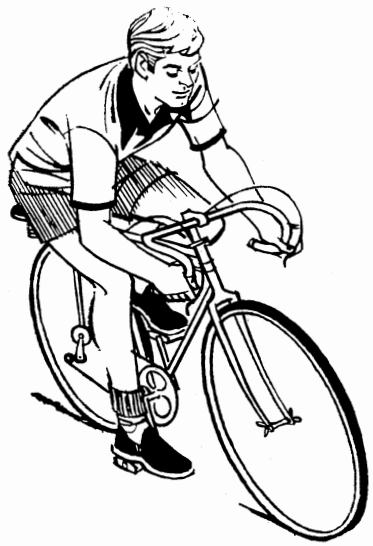

Figure 30. Assessment Item No. 48

TABLE XLIV

ITEM 48, HYPOTHESIS 1

COUNT ROW PCT COL PCT TOT PCT	Participant	Spectator	Neither	ROW TOTAL	
Activity	170 90.9	6 3.2	11 5.9	187 76.0	
Environment	44 100.0	0 0.0	0 0.0	44 17.9	
Relationship	12 80.0	3 20.0	0 0.0	15 6.1	
COLUMN TOT	226 91.9	9 3.7	11 4.5	246 100.0	p=.0022

X^2=16.69801 with 4 df
(4 of the 9 valid cells have f_e less than 5.0)

Relationships emerged as the most valued aspect of the leisure activity in Item 51 (Figure 31) for 52.4% of respondents. Twenty-nine percent chose the environment and 19% indicated primary interest in the activity (Table XLV). Regardless of motivation, 51% of the subjects preferred participation in this activity, while 30.5% chose to spectate and 19% preferred no involvement. Only 50% of the population sampled were interested in this activity during leisure and then primarily for the relationships involved.

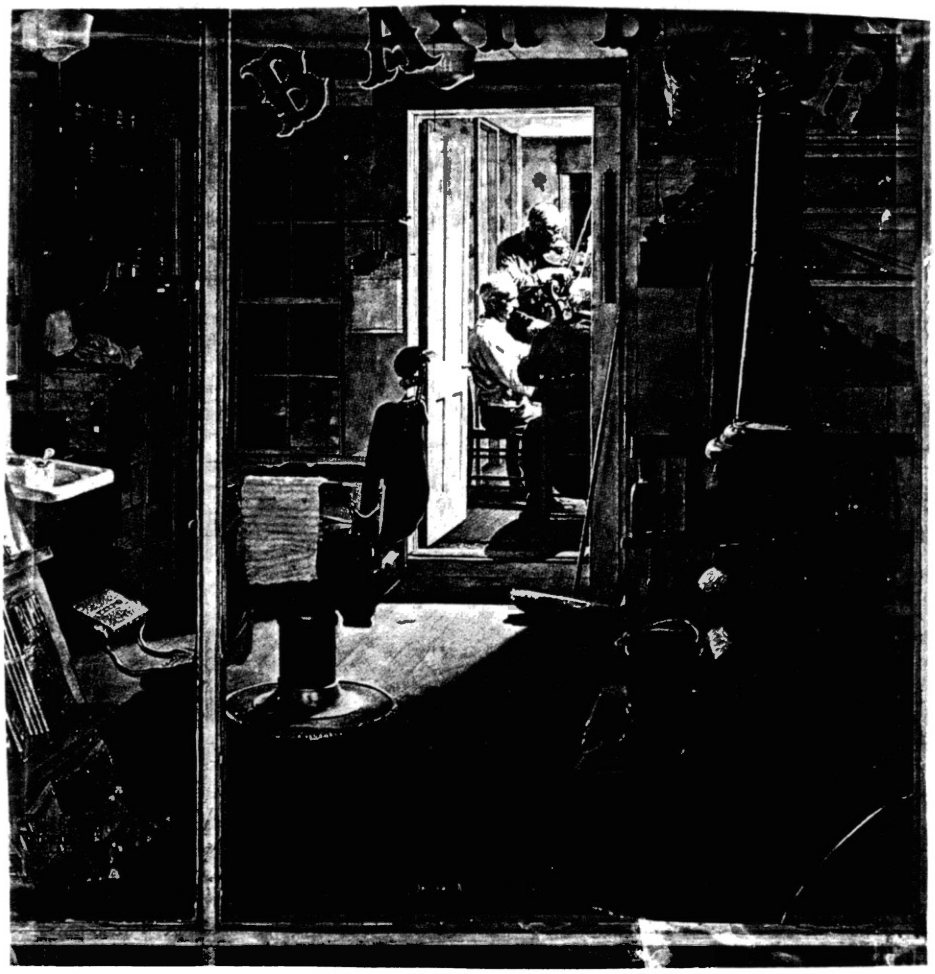

Figure 31. Assessment Item No. 51

TABLE XLV

ITEM 51, HYPOTHESIS 1

COUNT ROW PCT COL PCT TOT PCT	Participant	Spectator	Neither	ROW TOTAL	
Activity	27 58.7	10 21.7	9 19.6	46 18.7	
Environment	21 29.6	29 40.8	21 29.6	71 28.9	
Relationship	77 59.7	36 27.9	16 12.4	129 52.4	
COLUMN TOT	125 50.8	75 30.5	46 18.7	246 100.0	p=.0005

X^2=20.04515 with 4 df

Seventy-two percent of respondents identified relationships as the primary motivation for roller skating as illustrated in Item 52 (Figure 32), while 25.6% preferred the activity and only 2.4% expressed a preference for the environment. Eighty-nine percent of the respondents, regardless of motivation, expressed a preference for actual involvement in this activity while nearly 6% preferred to watch and 5% preferred no involvement (Table XLVI). This activity was particularly attractive to the population sampled because of the relationships involved. A significant difference also occurred between subjects who were single and those who were married (Table XLVII). Single students were interested in the activity 16% more than the married students who chose the environment instead.

Figure 32. Assessment Item No. 52

There was a significant difference in motivational criteria for Item 53 (Figure 33) with relationships most valued by 68% of the respondents (Table XLVIII). The environment was preferred by 23.2% and the activity by 9%. Sixty-three percent of the total sample indicated a preference for involvement, while 24% chose to spectate and 13% indicated no interest at all. Females chose relationships more often than males, and males chose the environment and activity twice as often as females (Table LXIX). Another significant difference occurred between subjects age 18-21 and those age 22-25 (Table L). The 18-21 year olds preferred

the activity 8.2% and relationships 12.5% more than the 22-25 year olds who preferred the environment twice as much.

Though 85% of both males and females most valued the activity of tennis illustrated in Item 54 (Figure 34), a significant difference occurred in their attitudes toward relationships and environment. Females valued relationships more while males preferred the environment (Table LI). Another significant difference occurred between students in the College of Business Administration and those in the School of HPELS (Table LII). Ninety-three percent of the Business Administration students most valued the activity compared to 80.5% of the HPELS students. The HPELS students valued relationships three times more than the Business Administration students.

TABLE XLVI

ITEM 52, HYPOTHESIS 1

COUNT ROW PCT COL PCT TOT PCT	Participant	Spectator	Neither	ROW TOTAL	
Activity	48 76.2	9 14.3	6 9.5	63 25.6	
Environment	5 83.3	1 16.7	0 0.0	6 2.4	
Relationship	167 94.4	4 2.3	6 3.4	177 72.0	
COLUMN TOT	220 89.4	14 5.7	12 4.9	246 100.0	p=.0009

X^2=18.73143 with 4 df
(4 of the 9 valid cells have f_e less than 5.0)

TABLE XLVII

ITEM 52, HYPOTHESIS 3

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationship	ROW TOTAL	
Single	62 27.1	4 1.7	163 71.2	229 92.7	
Married	2 11.1	2 11.1	14 77.8	18 7.3	
COLUMN TOT	64 25.9	6 2.4	177 71.7	247 100.0	p=.0206

X^2=7.76703 with 2 df
(2 of the 6 valid cells have f_e less than 5.0)

TABLE XLVIII

ITEM 53, HYPOTHESIS 1

COUNT ROW PCT COL PCT TOT PCT	Participant	Spectator	Neither	ROW TOTAL	
Activity	16 72.7	3 13.6	3 13.6	22 8.9	
Environment	19 33.3	21 36.8	17 29.8	57 23.2	
Relationship	119 71.3	36 21.6	12 7.2	157 67.9	
COLUMN TOT	154 62.6	60 24.4	32 13.0	246 100.0	p=.0000

X^2=32.12570 with 4 df
(1 of the 9 valid cells have f_e less than 5.0)

Figure 33. Assessment Item No. 53

TABLE LXIX

ITEM 53, HYPOTHESIS 2

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationship	ROW TOTAL	
Females	16 11.0	24 16.4	106 72.6	146 59.1	
Males	6 5.9	33 32.7	62 61.4	101 40.9	
COLUMN TOT	22 8.9	57 23.1	168 68.0	247 100.0	p=.0082

X^2=9.61095 with 2 df

TABLE L

ITEM 53, HYPOTHESIS 4

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationship	ROW TOTAL	
Age 18-21	21 10.4	39 19.3	142 70.3	202 81.8	
Age 22-25	1 2.2	18 40.0	26 57.8	45 18.2	
COLUMN TOT	22 8.9	57 23.1	168 68.0	247 100.0	p=.0054

X^2=10.43726 with 2 df
(1 of the 6 valid cells have f_e less than 5.0)

Figure 34. Assessment Item No. 54

TABLE LI

ITEM 54, HYPOTHESIS 2

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationship	ROW TOTAL	
Females	123 84.2	4 2.7	19 13.0	146 59.1	
Males	87 86.1	9 8.9	5 5.0	101 40.9	
COLUMN TOT	210 85.0	13 5.3	24 9.7	247 100.00	p=.0155

X^2=8.33959 with 2 df

TABLE LII

ITEM 54, HYPOTHESIS 5

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationship	ROW TOTAL	
Business Administration	82 93.2	2 2.3	4 4.5	88 35.6	
HPELS	128 80.5	11 6.9	20 12.6	159 64.4	
COLUMN TOT	210 85.0	13 5.3	24 9.7	247 100.0	p=.0279

X^2=7.15599 with 2 df
(1 of the 6 valid cells have f_e less than 5.0)

Again, a significant difference occurred between students in the College of Business Administration and those in the School of HPELS. Concerning Item 56 (Figure 35), the Business Administration students valued the activity twice as much the HPELS students who preferred the environment (7%) and relationships (5.3%) more.

Figure 35. Assessment Item No. 56

TABLE LIII

ITEM 56, HYPOTHESIS 5

COUNT ROW PCT COL PCT TOT PCT	Activity	Environment	Relationship	ROW TOTAL	
Business Administration	20 22.7	14 15.9	54 61.4	88 35.6	
HPELS	17 10.7	36 22.6	106 66.7	159 64.4	
COLUMN TOT	37 15.0	50 20.2	160 64.8	247 100.0	p=.0303

X^2=6.99206 with 2 df

Figure 36. Assessment Item No. 58

TABLE LIV

ITEM 58, HYPOTHESIS 1

COUNT ROW PCT COL PCT TOT PCT	Participant	Spectator	Neither	ROW TOTAL	
Activity	39 75.0	9 17.3	4 7.7	52 21.1	
Environment	51 49.0	29 27.9	24 23.1	104 42.3	
Relationship	66 73.3	13 14.4	11 12.2	90 36.6	
COLUMN TOT	156 63.4	51 20.7	39 15.9	246 100.0	p=.0021

X^2=16.81914 with 4 df

Forty-two percent of the respondents indicated the environment to be the most valued aspect of the Halloween-type activity depicted in Item 58 (Figure 36), however 28% of those choosing the environment also chose to spectate while 23% indicated no desire for involvement (Table LIV). Twenty-one percent of the subjects indicated the activity motivated them and nearly 37% chose relationships. Sixty-three percent of the total sample indicated a preference for actual involvement regardless of motivational criteria.

Analysis of Data Related to Leisure Categories

The sixth hypothesis stated there would be no significant differences between subjects' selection of motivational criteria as they

relate to the five defined categories of leisure. Results recorded were drawn from the 3 x 3 CROSSTABS between activity, environment, relationships, and subjects' preference for involvement as a participant, spectator or neither. Following is an identification of items in each category (Table LV) with a discussion of significant differences.

TABLE LV

LEISURE CATEGORIES REPRESENTING ITEMS OF NON-SIGNIFICANCE AND SIGNIFICANCE AT α .05

LEISURE CATEGORIES	ITEMS IN EACH CATEGORY
Individual Sports	11, 18, 21, 24, 25, 28, 36, 39, 42, 44, 48,50,52
Team Sports	1, 4, 8, 9, 23, 27, 39, 41, 47
Social Recreation	6, 17, 20, 35, 40, 51, 53, 58
Outdoor/High Risk/ Challenge Activities	10, 13, 16, 22, 30, 38, 43, 57
"Free" Activities	2, 3, 5, 7, 12, 14, 15, 19, 26, 31, 32, 33, 34, 37, 45, 46, 49, 55, 56

LEISURE CATEGORIES	Number of Non-significant Items	Number of Significant Items	Items Significant α.05
Individual Sports	10	4	11, 44, 48, 52
Team Sports	5	4	1, 8, 9, 41
Social Recreation	1	7	6, 20, 35, 40, 51, 53, 58
Outdoor/High Risk/Challenge Activities	6	2	13, 16
"Free" Activities	13	6	5, 7, 14, 31, 32, 46

TABLE LVI

PERCENTAGE BREAKDOWN OF THE 3 x 3 CROSSTABS FOR SIGNIFICANT (α.05) ITEMS RELATED TO THE 5 LEISURE CATEGORIES

LEISURE CATEGORIES		A	E	R	P	S	N
INDIVIDUAL SPORTS							
Item No.	11	54.9	4.9	40.2	84.6	11.0	4.5
	44	87.8	2.4	9.8	80.5	12.2	7.3
	48	76.0	17.9	6.1	91.9	3.7	4.5
	52	25.6	2.4	72.0	89.4	5.7	4.9
TEAM SPORTS							
Item No.	1	59.8	4.5	35.8	71.1	23.2	5.7
	8	69.1	15.0	15.9	51.2	45.1	3.7
	9	49.6	24.4	26.0	35.4	43.5	21.1
	41	30.5	3.3	66.3	79.7	15.4	4.9
SOCIAL RECREATION							
Item No.	6	8.1	12.6	79.3	88.2	8.9	2.8
	20	18.0	20.4	61.6	77.1	10.2	12.7
	35	9.8	11.0	79.3	89.0	5.7	5.3
	40	12.2	11.0	76.8	70.7	12.6	16.7
	51	18.7	28.9	52.4	50.8	30.5	18.7
	53	8.9	23.2	67.9	62.6	54.4	13.0
	58	21.1	42.3	36.6	63.4	20.7	15.9
OUTDOOR/HIGH RISK/ CHALLENGE ACTIVITIES							
Item No.	13	55.1	36.3	8.6	77.1	10.6	12.2
	16	58.0	34.3	7.8	44.1	40.0	15.9
"FREE" ACTIVITIES							
Item No.	5	28.9	22.4	48.8	68.3	27.2	4.5
	7	50.8	10.6	38.6	64.2	23.6	12.2
	14	69.4	16.7	13.9	51.8	31.0	17.1
	31	6.1	4.1	89.8	85.0	8.1	6.9
	32	68.3	21.5	10.2	49.2	34.1	16.7
	46	13.8	8.1	78.0	57.7	24.4	17.9

A=Activity
E=Environment
R=Relationship
P=Participant
S=Spectator
N=Neither

Hypothesis 6 stating no significant differences in motivational criteria between various categories or types of leisure experiences must be rejected in that significant differences concerning most valued aspects of leisure occurred within each of the five defined leisure categories (Table LVI).

Four of the fourteen items categorized individual sports were significantly different at the α .05. With the exception of roller skating, respondents indicated their primary motivation to be the activity. With regard to roller skating, relationships were most valued or provided the greatest motivation. All of the individual sport activities had significant participatory appeal to this population in that over 80% indicated a preference to be involved.

According to significant items in the team sport category, the activity was the most valued aspect with the exception of a coed team where relationships emerged as most valued. The majority of respondents also indicated a desire to participate with the exception of cheerleading where 43.5% chose to spectate. This exception might be expected in that cheerleading is societally deemed sex specific.

The greatest difference occurred within the social recreation category where six of the seven significant items strongly favored relationships. Respondents also indicated a preference for participation in these activities.

Two of the eight items within the outdoor/high risk/challenge category were statistically significant. Fifty-five to fifty-eight percent of the respondents chose the activity over the environment and relationships, though the environment was most valued by 35%. Relationships were important to only 8%. There was a strong preference for

participation in these activities with the exception of cliff-diving where 40% of the sample chose to spectate and 16% expressed no interest at all.

The activity itself and the relationships surrounding the activity were equally important to respondents concerning free activities. Of the six significant items categorized "free," three preferred the activity and three preferred relationships. In all of the free activities, respondents indicated a preference for participation.

There existed in all leisure categories a relationship between preference for participation and significant motivational criteria or valued aspects.

Analysis of Data Related to the Number of Participants Involved in Leisure Activities

The seventh hypothesis stated there would be no significant differences between subjects' selection of motivational criteria as they relate to the number of participants involved. Data reported were drawn from the 3 x 3 CROSSTABS between activity, environment, relationships and preference for involvement. Following is an identification of items representing activities that can be done alone, activities that are dyadic in nature, and those that require a group or team (Table LVII).

The seventh hypothesis stating there would be no significant differences between the motivational aspects of activity, environment and relationships as they relate to the number of participants involved must be rejected in that differences were found within activities that could be done alone, activities preferring one significant other (dyadic) and

those best accomplished with a group or team (Table LVIII). All of the significant items among activities that could be done alone reflected respondents' most valued aspect to be the activity. The environment was the second most valued aspect (22.8%) and relationships followed (14.2%). Significant alone activities also held significant participatory value.

Of the nine significant dyadic activities all but two reflected relationships as the most valued aspect. In all of the dyadic activities respondents showed a strong preference for participation.

TABLE LVII

ITEMS OF SIGNIFICANCE (α .05) AND NON-SIGNIFICANCE RELATED TO THE NUMBER OF PARTICIPANTS INVOLVED

NUMBER OF PARTICIPANTS	ITEMS IN EACH CATEGORY
Alone	7, 10, 13, 14, 16, 18, 21, 24, 28, 30, 32, 34, 38, 39, 43, 48, 49, 50, 55, 57
Dyadic	2, 3, 5, 12, 15, 19, 20, 22, 25, 26, 31, 36, 37, 40, 42, 44, 46, 52, 53, 54, 56, 58
Group/Team	1, 4, 6, 8, 9, 11, 17, 23, 27, 29, 33, 35, 41, 45, 47, 51

NUMBER OF PARTICIPANTS	NUMBER OF NON-SIGNIFICANT ITEMS	NUMBER OF SIGNIFICANT ITEMS	ITEMS SIGNIFICANT At α .05
Alone	14	6	7, 13, 14, 16, 32, 48
Dyadic	13	9	5, 20, 31, 40, 44, 46, 52, 53, 58
Group/Team	8	8	1, 6, 8, 9, 11, 35, 41, 51

TABLE LVIII

PERCENTAGE BREAKDOWN OF THE 3 X 3 CROSSTABS FOR SIGNIFICANT (α .05) ITEMS RELATED TO THE NUMBER OF PARTICIPANTS INVOLVED

NUMBER OF PARTICIPANTS	A	E	R	P	S	N
ALONE						
Item No.						
7	50.8	10.6	38.6	64.2	23.6	12.2
13	55.1	36.3	8.6	77.1	10.6	12.2
14	69.4	16.7	13.9	51.8	31.0	17.1
16	58.0	34.3	7.8	44.1	40.0	15.9
32	68.3	21.5	10.2	49.2	34.1	16.7
48	76.0	17.9	6.1	91.9	3.7	4.5
DYADIC						
Item No.						
5	28.9	22.4	48.8	68.3	27.2	4.5
20	18.0	20.4	61.6	77.1	10.2	12.7
31	6.1	4.1	89.8	85.0	8.1	6.9
40	12.2	11.0	76.8	70.7	12.6	16.7
44	87.8	2.4	9.8	80.5	12.2	7.3
46	13.8	8.1	78.0	57.7	24.4	17.9
52	25.6	2.4	72.0	89.4	5.7	4.9
53	8.9	23.2	67.9	62.6	24.4	13.0
58	21.1	42.3	36.6	63.4	20.7	15.9
GROUP/TEAM						
Item No.						
1	59.8	4.5	35.8	71.1	23.2	5.7
6	8.1	12.6	79.3	88.2	8.9	2.8
8	69.1	15.0	15.9	51.2	45.1	3.7
9	49.6	24.4	26.0	35.4	43.5	21.1
11	54.9	4.9	40.2	84.6	11.0	4.5
35	9.8	11.0	79.3	89.0	5.7	5.3
41	30.5	3.3	66.3	79.7	15.4	4.9
51	18.7	28.9	52.4	50.8	30.5	18.7

A=Activity
E=Environment
R=Relationship
P=Participant
S=Spectator
N=Neither

Leisure experiences best performed with a group or team are equally pursued because of the intrinsic values of the activity and the relationships involved. With the exception of cheerleading, the majority of respondents chose to participate in the group or team activities deemed significant.

As seen with the categorical analysis of leisure activites, a strong relationship existed between the preference to participate and the presence of a dominant motivational criterion.

Analysis of Data Between and Within Raters

The research instrument utilized in this study intended to elicit the internal subjective responses of subjects. Though it was not the primary purpose of this study to establish the internal validity of the instrument, it was of interest to this researcher to determine a measure of the instruments' ability to elicit subjective responses. Three professionals (called raters) were asked to determine the origin of response for each subject on a sample of the 58 assessment items. Two statistical inquiries were made concerning debriefed items. First, an analysis of variance was run to determine between and within differences in raters and second, a Chi square statistical measure was used to determine the origin of subjects' response according to rater's opinion. Table LIX reflects the results of the first statistical inquiry. All ANOVA tests indicated no significance within each rater's evaluation of responses which established consistency within raters. Additionally, there were no significant differences between raters in their evaluation of responses which enhanced the external validity of the instrument as it related to the sample items debriefed.

The second statistical inquiry using a 3 X 3 Chi square CROSSTABS between the three raters and their evaluation of each debriefed item revealed no significant differences between raters and their evaluations (Tables LX through LXIV). For each item debriefed, raters consistently agreed that the origin of response was highly subjective. Based upon rater opinion, it can be said of the sample items debriefed, that they are valid and do what they intend to do.

TABLE LIX

ANALYSIS OF VARIANCE BY ITEMS DEBRIEFED AND RATERS

Rater	Item	Source of Variation	Sum of Squares	DF	Mean Square	F	Significance Of F
1	1	Explained	1.028	2	0.514	2.467	0.087
2	1	Explained	0.889	2	0.444	1.948	0.145
3	1	Explained	0.009	2	0.005	0.038	0.963
1	6	Explained	0.063	2	0.031	0.256	0.774
2	6	Explained	0.059	2	0.029	0.263	0.769
3	6	Explained	0.056	2	0.028	0.261	0.770
1	22	Explained	0.035	2	0.018	0.053	0.948
2	22	Explained	0.145	2	0.072	0.206	0.814
3	22	Explained	0.061	2	0.031	0.137	0.872
1	52	Explained	0.293	2	0.147	0.557	0.574
2	52	Explained	0.231	2	0.115	0.500	0.607
3	52	Explained	0.013	2	0.006	0.026	0.975
1	55	Explained	0.020	2	0.010	0.062	0.940
2	55	Explained	0.066	2	0.033	0.217	0.805
3	55	Explained	0.274	2	0.137	1.311	0.271

TABLE LX

CHI SQUARE ANALYSIS OF RESPONSES
AMONG RATERS - ITEM I

	Rater 1	Rater 2	Rater 3	ROW TOTAL
Subjective	210	211	221	642
Objective	27	25	21	73
Ambiguous	8	9	3	20
COLUMN TOT	245	245	245	735 100.0

X^2=3.7665 with 4 df p=.5538

TABLE LXI

CHI SQUARE ANALYSIS OF RESPONSES
AMONG RATERS - ITEM 6

	Rater 1	Rater 2	Rater 3	ROW TOTAL
Subjective	203	199	216	618
Objective	27	29	20	76
Ambiguous	16	18	10	44
COLUMN TOT	246	246	246	738 100.0

X^2=4.4741 with 4 df p=.3531

TABLE LXII

CHI SQUARE ANALYSIS OF RESPONSES
AMONG RATERS - ITEM 22

	Rater 1	Rater 2	Rater 3	ROW TOTAL
Subjective	224	225	231	680
Objective	14	15	10	39
Ambiguous	7	5	4	16
COLUMN TOT	245	245	245	735 100.0

X^2=2.0844 with 4 df p=.7565

TABLE LXIII

CHI SQUARE ANALYSIS OF RESPONSES
AMONG RATERS - ITEM 52

	Rater 1	Rater 2	Rater 3	ROW TOTAL
Subjective	184	201	202	587
Objective	46	31	33	110
Ambiguous	10	8	5	23
COLUMN TOT	240	240	240	720 100.0

X^2=6.3400 with 4 df p=.1804

TABLE LXIV

CHI SQUARE ANALYSIS OF RESPONSES
AMONG RATERS - ITEM 55

	Rater 1	Rater 2	Rater 3	ROW TOTAL
Subjective	198	203	208	609
Objective	29	26	21	76
Ambiguous	10	8	8	26
COLUMN TOT	237	237	237	711 100.0

X^2=1.6597 with 4 df p=.7980

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Most leisure research and assessment has been directed toward participation in activities; however, it has not been well established that the intrinsic values of the activity are, in fact, the only primary reasons for participation. This research grew out of concern for sedentary lifestyles imposed by technology and accepted in adulthood and maturation. Even though the profession of physical education and related areas has reached levels of scientific sophistication in terms of movement, leisure and sport related skills, teaching methods, delivery systems, apparatus and equipment, the general public's regard for the value of physical education has diminished, as is evidenced by the reduction or deletion of physical education requirements in public schools, colleges and universities across America. Though attitudes and values surrounding movement and the development of lifetime sports and leisure skills have been identified as the affective domain, little has been done to elicit individual motivation criterion for consideration in the delivery of leisure services and the development and matching of curriculum to individual needs.

This study was designed to identify the most valued aspects of leisure participation within individuals. Three selected criteria were used to determine the motivational aspects of leisure. They were the activity, the environment and the relationships with others. These

three selected criteria were thought to encompass the primary reasons for leisure participation. Two separate data collection procedures were used. First, 248 undergraduate students at Oklahoma State University were asked to respond to a visual assessment of 58 items concerning what they deemed to be the most valued aspects of leisure. Additionally, they were asked to explain their rationale for choice of the selected criteria on a sample of the items. The second collection procedure involved the categorization of the debriefed items by raters.

Two samples were drawn from the population at Oklahoma State University. First, 158 undergraduate students enrolled in classes in the School of Health, Physical Education and Leisure Services were drawn to respond to the assessment instrument. Then a cluster random sample of 90 students was drawn from the College of Business Administration. These two samples responded to the research instrument providing the primary data base. After the data were coded, they were analyzed and tested for statistical significance using contingency tables and Pearson's Goodness of Fit X^2 statistic. Since there had been no previous application of tests for validity to the research instrument, an analysis of variance was used to determine within and between differences concerning rater responses to the debriefed items.

The level of significance chosen for this study was $\alpha = .05$. The rejection level for hypothetical statements was one. Using the SPSS CROSSTABS and Analysis of Variance procedures, the coded data were reported accurately.

Conclusions of the Research Relative to the Hypothetical Statements

Investigation of the most valued aspects of leisure under consideration yielded the following conclusions which may be valuable when addressing programs and curriculum in leisure related fields.

Hypothesis 1:

> There are no significant differences in most valued aspects of leisure between activity, environment or relationships as motivation factors for leisure participation.

The hypothesis was rejected since 23 of the 58 assessment items showed significant statistical differences in motivational criteria and preference for involvement. Of the 23 statistically significant items, 11 demonstrated a strong preference for the activity and an equal number for the relationships involved. Only item 58 (Figure 36) showed the environment to be the most valued aspect of leisure. In all statistically significant items, there was a direct relationship between preference for actual participation and dominant motivational criterion. It may then be said, based upon the statistical findings of this study, that dominant values concerning leisure lead to actual participation within the population sampled. It may also be said that relationships with significant others are almost equally as important to this population as the intrinsic values of the leisure activity itself, and far more important than the environmental parameters.

Hypothesis 2:

> There are no significant differences in most valued aspects of leisure between males and females.

The hypothesis was rejected when males and females differed concerning valued aspects of leisure on 14 of the assessment items. The most significant difference observed between males and females was that females valued leisure related relationships more than males, and males more often valued the activity. In marketing and programming leisure for this population it would seem to be most efficacious to appeal to females more on the basis of relationships, and to males on the basis of the intrinsic challenge within the activity.

Hypothesis 3:

> There are no significant differences in most valued aspects of leisure between subjects who are married and those who are single.

The hypothesis was rejected when a statistically significant relationship was found between marital status and most valued aspects of leisure on four assessment items. Of the statistically significant items, single students more often valued the activity whereas those who were married valued the environment. Given this information, it might be appropriate to place considerable emphasis on structuring and marketing leisure environments for those who are married and activities for those who are single.

Hypothesis 4:

> There are no significant differences in most valued aspects of leisure between subjects age 18-21 and those age 22-25.

The hypothesis was rejected when age of subjects significantly effected response to six of the research items. With the exception of Item 22 (Figure 15), the 18-22 year olds most valued the activity or relationships, while the 22-25 year olds valued the environment more.

According to this study, leisure values appear to change with chronological maturation. Information concerning leisure values may provide professionals with more specific directives concerning age-group programming.

Hypothesis 5:

> There are no significant differences in most valued aspects of leisure between students enrolled as majors in the College of Business Administration and those enrolled in classes in the School of Health, Physical Education and Leisure Services at Oklahoma State University.

The hypothesis was rejected since the two samples from the OSU population differed on six of the assessment items. On all six of the statistically significant items majors in the College of Business Administration valued the leisure activity, whereas students enrolled in HPELS classes valued relationships. Based upon the statistical findings of this research it can be said that relationships are significantly important to students who seek out classes in the School of Health, Physical Education and Leisure Services.

Hypothesis 6:

> There are no significant differences between activity, environment and relationships in the most valued aspects of leisure related to the five categories of leisure.

The five identified categories of leisure were:

- Individual Sports/Dual Sports
- Team Sports
- Social Recreation
- Outdoor/High Risk/Challange Activities
- "Free" activities

The hypothesis was rejected when statistically significant differences in respondents' motivation to participation were found in each of these leisure categories. The most valued aspect of individual sports, team sports and outdoor/high risk/challenge sports was the activity itself. Relationships were by far the most valued aspect of social recreation, and the activity and relationships involved were equally valued in free leisure experiences. Based upon the statistical inquiries of this study it can be said of this population that individuals are motivated to participate in various types of leisure experiences for different reasons, and that the values within the activities and the relationships involved are the primary sources of motivation.

Hypothesis 7:

> There are no significant differences between activity, environment and relationships in the most valued aspects of leisure related to the number of participants involved. The numerical categories under consideration were:
>
> - Activities that can be done alone
> - Dyadic activities
> - Group/Team activities

The hypothesis was rejected when a number of statistically significant relationships were found between the number of participants involved and motivational criteria. Statistically significant leisure experiences that could be done alone were all chosen for the intrinsic values of the activity. Almost all of the dyadic activities were chosen because of relationships involved, and group/team activities were selected equally by respondents for the activity itself and the relationships involved. In terms of encouraging leisure participation where specific numbers of

participants are preferred, it may be useful to consider motivational criteria when grouping, marketing and programming. For example, in the population under consideration, forced pairing may be inappropriate for dyadic activities where relationships are of primary importance.

The statistical findings related to the hypothetical statements of this study may significantly impact the marketing, programming, delivery of services, leisure counseling and curriculum development relative to the fields of leisure and physical education. Understanding the motivation and leisure values of a population may enable us as professionals to address areas of primary importance in our instruction, counseling, development of curriculum and delivery of leisure services. If we can appeal to the leisure values of a population, we may be able to enhance leisure participation and the quality of lifestyles in our society.

Conclusions of the Research Instrument

The research instrument was a visual assessment of 58 leisure-related items that intended to elicit the internal subjective response of subjects. Three professional raters were asked to determine the origin of response concerning a sample of the assessment items for each subject. Upon review of rationale by subjects on the sample items debriefed, raters were asked to indicate if each response was subjective, objective interpretation or ambiguous. It was thought that an instrument that could elicit subjective responses would give more accurate directives for programming and delivery of services to professionals in leisure related fields. An Analysis of Variance statistical measure was used to determine if there were within and between differences in rater opinions. A Chi square statistic was used to determine the most frequent origin of

response by subjects according to raters. The statistical inquiries revealed there were no between and within variances in rater opinions, and that the raters consistently agreed the subjects were responding from a subjective internal base on the items debriefed. Based on the findings of raters, it may be assumed a portion of the instrument has a measure of validity and does what it intends to do. Visual instrumentation may be useful and more accurate in providing subjective information concerning the leisure values of a population.

Additional Conclusions from the Statistical Inquiry

In addition to the statistical inquiries relative to the hypothetical statements of this study, the following observations were made:

1. In all but one of the significant items reported, actual preference for participation was directly related to the presence of a dominant motivational criteria. In other words, when subjects were able to distinguish a particular motivation toward leisure, they also preferred actual participation in the leisure experience.

2. When leisure experiences were illustrated as sex specific, the intrinsic values of the activity emerged as the primary motivational criterion; however, when a coed relationship was illustrated, relationships with significant others emerged as the most valued aspect of leisure.

3. The majority of previous research has emphasized the use of instrumentation designed to measure various levels of activity involvement. Such instrumentation implies that the desire for activity is the primary motivational aspect of leisure; however, according to this study, relationships with others were almost equally as important as the intrinsic values of the activity.

4. According to a percentage of response comparison of this study with the pilot study (Appendix C), activities emerged slightly over relationships as the overall most valued aspect of leisure. In the pilot study, relationships were slightly more valued than activities. This difference may be attributed to different samples, as well as the elapse of time from 1981 to 1983. Two variables might be considered. First, the pilot study involved only HPELS students, and this study included students from the College of Business Administration. The significant difference between the two samples in this study was that HPELS students valued relationships while the Business Administration students valued activities. The inclusion of Business Administration students in this study may have swung the overall most valued leisure aspect from relationships to activity. Additionally, it was observed that the shift from relationships as most overall valued aspect of leisure to activities was directly attributable to the response of females. During the lapse of time between the pilot study and the final study, females may have gained more interest, competence and access to leisure-related activities.

5. Though not statistically significant, the overall percent of response comparisons (Appendix C) yielded some interesting observations that may propose further study. Males and females consistently agreed that desire for activity was most important to individual and team sports though relationships followed closely. In outdoor/high risk/ challenge activities, females valued the environment slightly over the activity and males valued the activity slightly over the environment. Relationships emerged considerably more important to social recreation, and slightly more valued in the free activities where one might expect more value to be placed on the activity.

Males and females both agreed the activity was of primary importance and the environment secondary concerning activities that could be done alone. Females also found the activity most valued in dyadic leisure experiences, whereas, males preferred relationships. In group/team activities, females valued relationships slightly over activities, whereas, males valued activities slightly more than relationships.

Recommendations for Future Studies

As a result of this research, the following recommendations are made by this investigator:

1. A revision of the instrument to include illustrations of more current leisure activities may enhance subjective responses.

2. Quality production of the research instrument would clarify assessment items.

3. Age specific as well as career orientation research would generate information relative to various societal populations and would eliminate the homogenous factor present in this study.

4. Future research might allow respondents to rank order their responses so as to prioritize most valued leisure aspects.

5. This research instrument might be used in comparison with instrumentation designed to profile personality to see if motivation toward leisure can be related to personality.

6. Rather than restricting respondents to selected motivational criteria for leisure participation, they might be allowed to identify personal reasons for involvement. The responses may then be used to develop categories of motivational criteria.

7. As a preliminary procedure, raters might categorize assessment items into the types of leisure activities, thus eliminating researcher bias.

8. Future research would attempt to establish further validity of the entire instrument utilized in this study.

In view of the related literature and previous research, this study has contributed evidence that relationships are almost equally as important as the desire for activity in providing motivation toward leisure participation. In addition, this study has introduced the possibility of using visual assessment in order to determine subjective leisure values.

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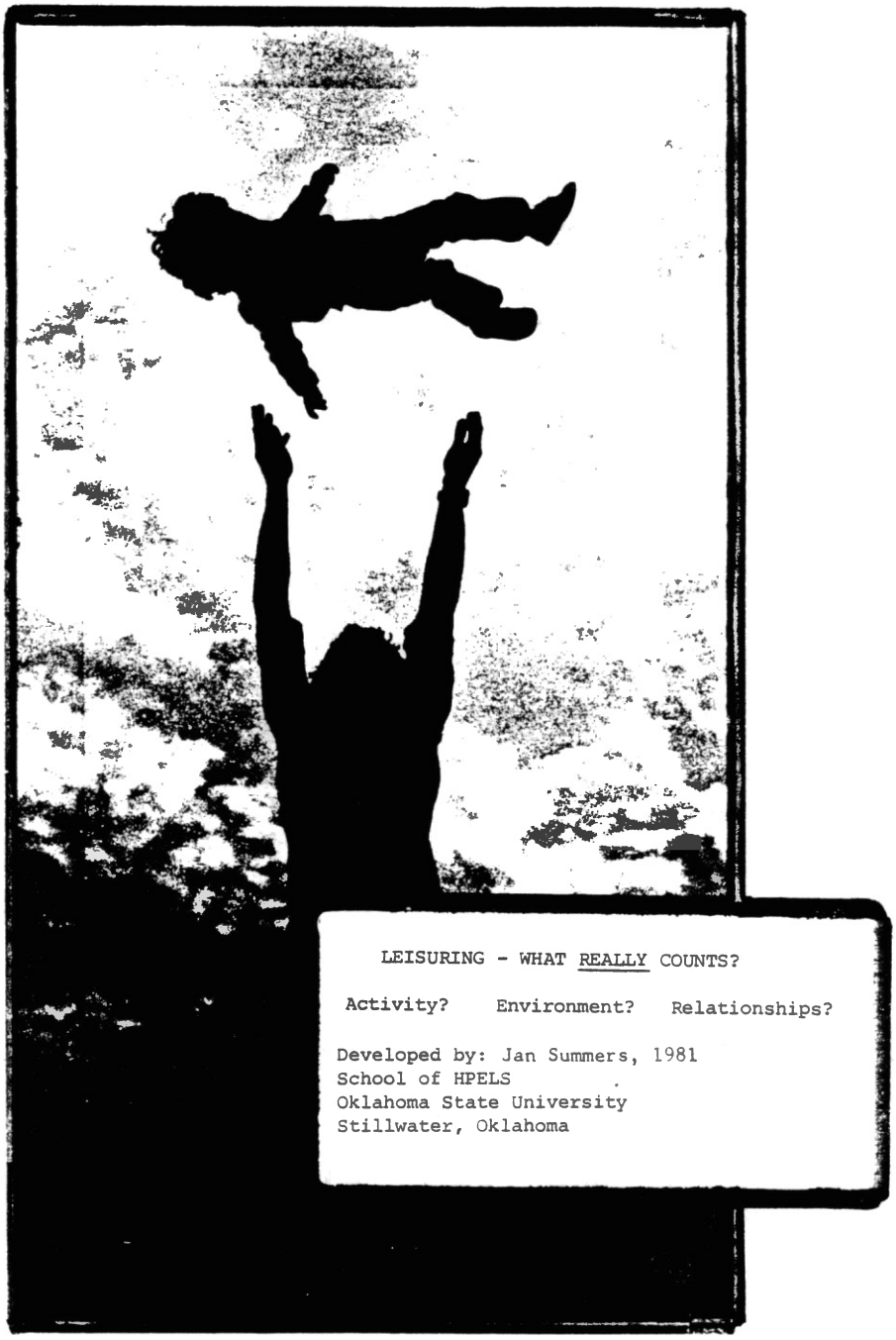
APPENDIXES

APPENDIX A

RESEARCH INSTRUMENT, ANSWER SHEET, DEBRIEFING SHEET

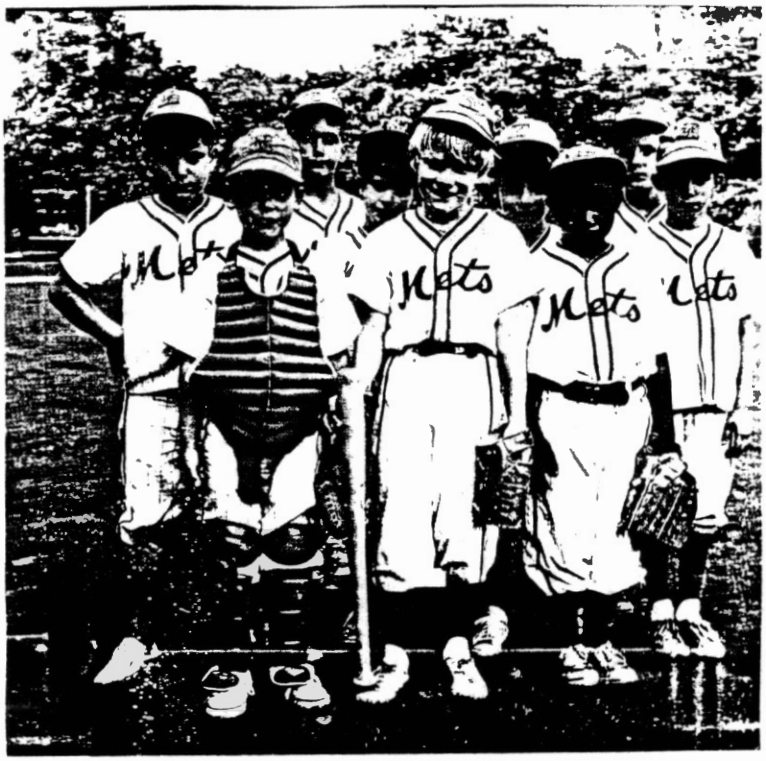

LEISURING - WHAT REALLY COUNTS?
Activity? Environment? Relationships?
Developed by: Jan Summers, 1981
School of HPELS
Oklahoma State University
Stillwater, Oklahoma

WHAT IS THE MOST MEANINGFUL ASPECT OF YOUR LEISURE?

Activity? Environment? Relationship?

Is it WHAT you do . . . WHERE you do it . . . or WHOM you do it with?

As you relate to the experiences expressed in the pictures that follow, recall what your similar experiences were, or imagine what it would be like for you now, and try to determine the MOST VALUED ASPECT of the experience . . . was it the value of performing the activity? . . . or was it the environment? . . . or was it the relationships . . . the people you enjoyed being with? Consider what has motivated you to participate in various leisure activities. When you determine which of the three is the MOST IMPORTANT aspect in each picture, CIRCLE YOUR CHOICE. Also indicate your preference for involvement in each activity as being either participant, spectator or neither.



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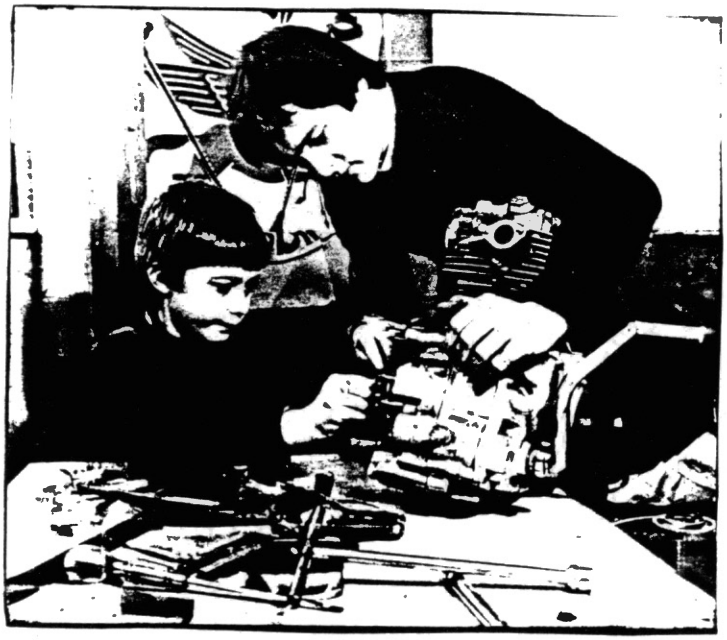

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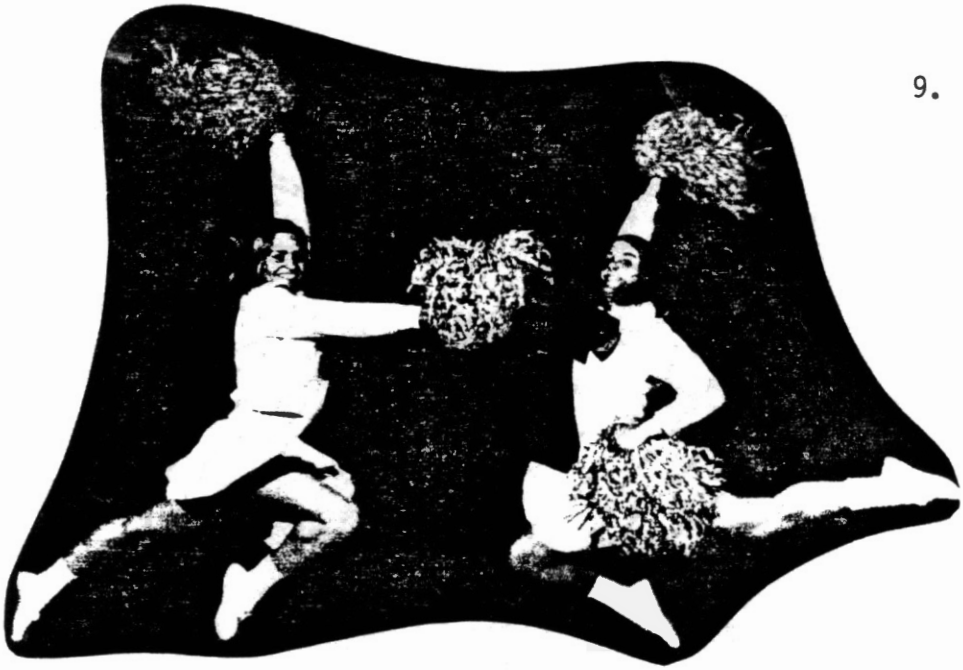

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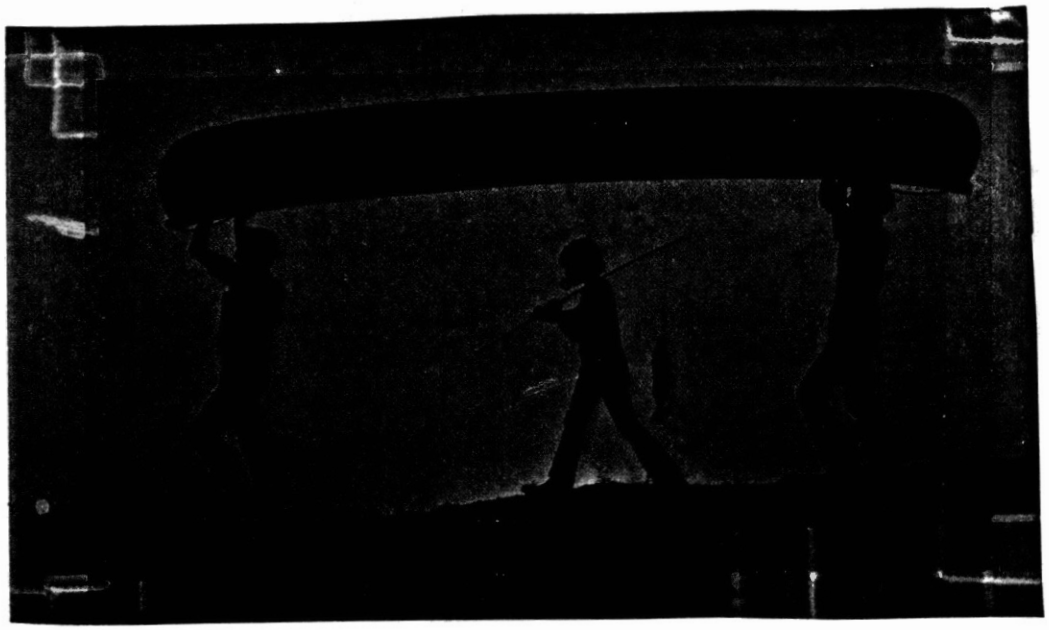

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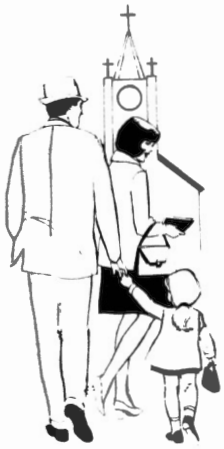

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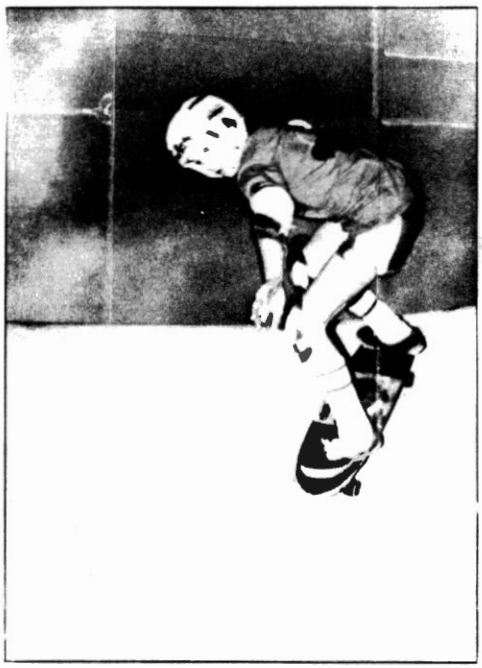

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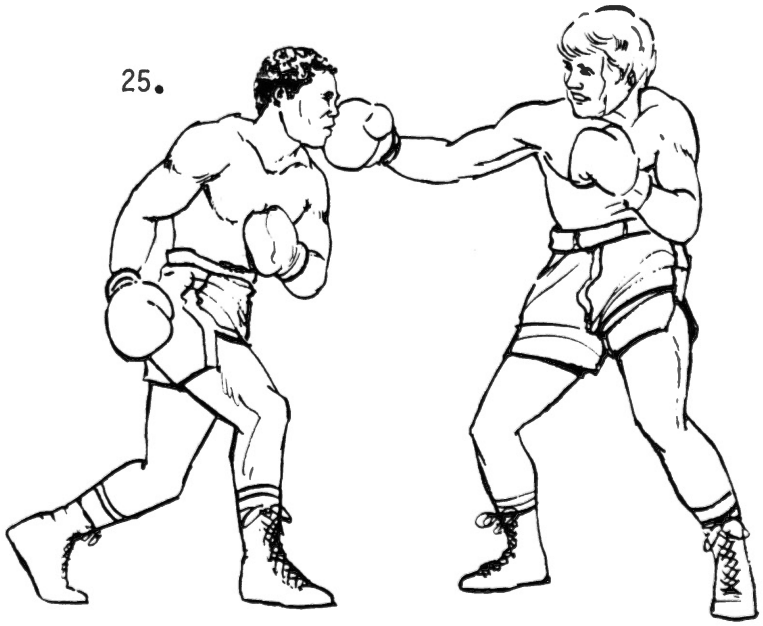

26. ACTIVITY
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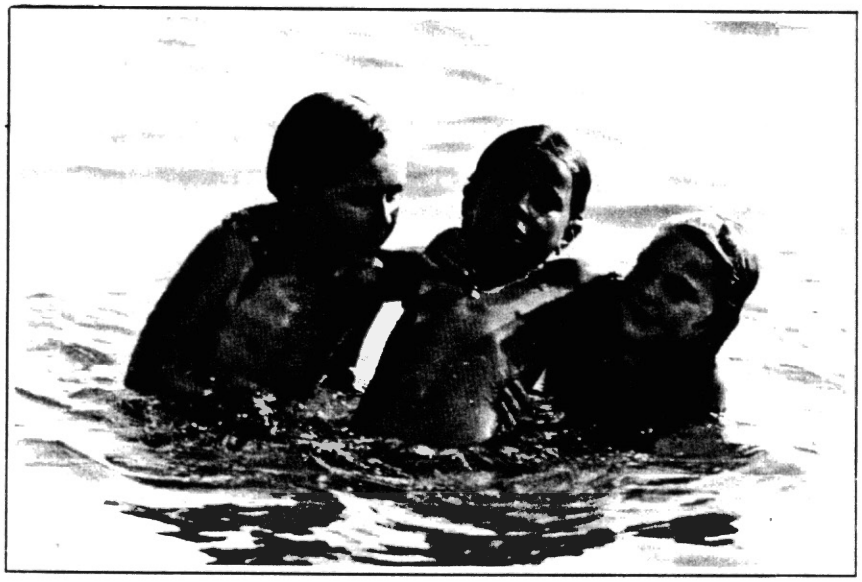


29.

30.

ACTIVITY?
ENVIRONMENT?
RELATIONSHIPS?

31.

ACTIVITY?
ENVIRONMENT?
RELATIONSHIPS?

32.

33.

34.

35. ACTIVITY?
ENVIRONMENT?
RELATIONSHIPS?

36.

37.

ACTIVITY?
ENVIRONMENT?
RELATIONSHIPS?

38.

39.

ACTIVITY?
ENVIRONMENT?
RELATIONSHIPS?

40.

ACTIVITY?
ENVIRONMENT?
RELATIONSHIPS?

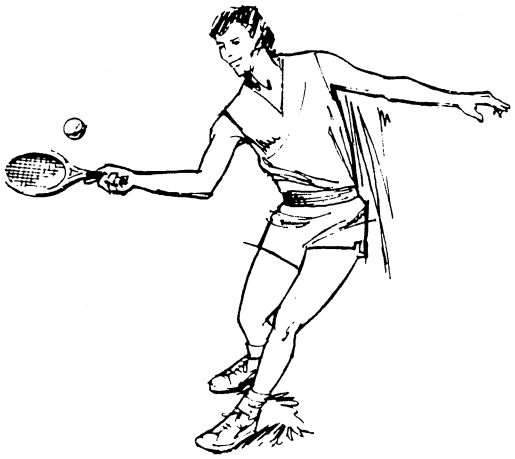
41.

42.

43.

ACTIVITY?
ENVIRONMENT?
RELATIONSHIPS?

44.

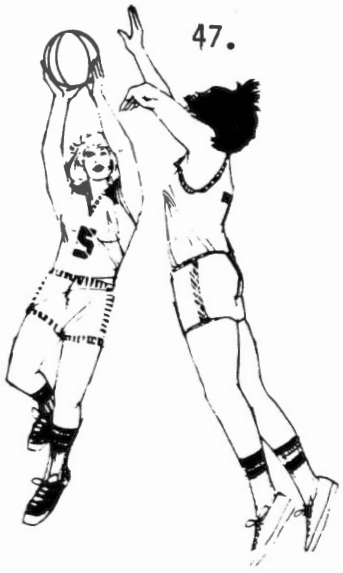


45.

ACTIVITY?
ENVIRONMENT?
RELATIONSHIPS?

46. ACTIVITY?
ENVIRONMENT?
RELATIONSHIPS?

48.



47.

49.

ACTIVITY?
ENVIRONMENT?
RELATIONSHIPS?

50.

51.

52.

ACTIVITY?
ENVIRONMENT?
RELATIONSHIPS?

53.

54.

ACTIVITY?
ENVIRONMENT?
RELATIONSHIPS?

55.

56.

ACTIVITY?
ENVIRONMENT?
RELATIONSHIPS?

57.

58.

ACTIVITY?
ENVIRONMENT?
RELATIONSHIPS?

No. _____

ANSWER SHEET

PLEASE INDICATE: 1ST TEST ( ) RE-TEST ( )

MALE ( ) UNDERGRADUATE STATUS_____ AGE_____

FEMALE ( ) MAJOR FIELD_____

DO YOU HAVE PHYSICAL LIMITATIONS TO ACTIVITY? YES ( )NO ( )

MARITAL STATUS: SINGLE ( ) MARRIED ( )

CIRCLE YOUR CHOICE IN EACH CATEGORY: (A) ACTIVITY (E) ENVIRONMENT (R) RELATIONSHIPS

CHECK (✓) YOUR PREFERENCE FOR INVOLVEMENT IN EACH ACTIVITY AS BEING: PARTICIPANT // SPECTATOR // NEITHER /

1. A E R - participant ☐ spectator ☐ neither ☐
2. A E R - participant ☐ spectator ☐ neither ☐
3. A E R - participant ☐ spectator ☐ neither ☐
4. A E R - participant ☐ spectator ☐ neither ☐
5. A E R - participant ☐ spectator ☐ neither ☐
6. A E R - participant ☐ spectator ☐ neither ☐
7. A E R - participant ☐ spectator ☐ neither ☐
8. A E R - participant ☐ spectator ☐ neither ☐
9. A E R - participant ☐ spectator ☐ neither ☐
10. A E R - participant ☐ spectator ☐ neither ☐
11. A E R - participant ☐ spectator ☐ neither ☐
12. A E R - participant ☐ spectator ☐ neither ☐
13. A E R - participant ☐ spectator ☐ neither ☐
14. A E R - participant ☐ spectator ☐ neither ☐
15. A E R - participant ☐ spectator ☐ neither ☐
16. A E R - participant ☐ spectator ☐ neither ☐
17. A E R - participant ☐ spectator ☐ neither ☐
18. A E R - participant ☐ spectator ☐ neither ☐
19. A E R - participant ☐ spectator ☐ neither ☐
20. A E R - participant ☐ spectator ☐ neither ☐
21. A E R - participant ☐ spectator ☐ neither ☐
22. A E R - participant ☐ spectator ☐ neither ☐
23. A E R - participant ☐ spectator ☐ neither ☐
24. A E R - participant ☐ spectator ☐ neither ☐
25. A E R - participant ☐ spectator ☐ neither ☐
26. A E R - participant ☐ spectator ☐ neither ☐
27. A E R - participant ☐ spectator ☐ neither ☐
28. A E R - participant ☐ spectator ☐ neither ☐
29. A E R - participant ☐ spectator ☐ neither ☐
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31. A E R - participant ☐ spectator ☐ neither ☐
32. A E R - participant ☐ spectator ☐ neither ☐
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34. A E R - participant ☐ spectator ☐ neither ☐
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37. A E R - participant ☐ spectator ☐ neither ☐
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40. A E R - participant ☐ spectator ☐ neither ☐
41. A E R - participant ☐ spectator ☐ neither ☐
42. A E R - participant ☐ spectator ☐ neither ☐
43. A E R - participant ☐ spectator ☐ neither ☐
44. A E R - participant ☐ spectator ☐ neither ☐
45. A E R - participant ☐ spectator ☐ neither ☐
46. A E R - participant ☐ spectator ☐ neither ☐
47. A E R - participant ☐ spectator ☐ neither ☐
48. A E R - participant ☐ spectator ☐ neither ☐
49. A E R - participant ☐ spectator ☐ neither ☐
50. A E R - participant ☐ spectator ☐ neither ☐
51. A E R - participant ☐ spectator ☐ neither ☐
52. A E R - participant ☐ spectator ☐ neither ☐
53. A E R - participant ☐ spectator ☐ neither ☐
54. A E R - participant ☐ spectator ☐ neither ☐
55. A E R - participant ☐ spectator ☐ neither ☐
56. A E R - participant ☐ spectator ☐ neither ☐
57. A E R - participant ☐ spectator ☐ neither ☐
58. A E R - participant ☐ spectator ☐ neither ☐

No. _____

PLEASE INDICATE HOW YOU ANSWERED THE FOLLOWING 5 ITEMS, AND BRIEFLY STATE YOUR REASONS:

#1. A E R PARTICIPANT // SPECTATOR // NEITHER //

_____

_____

_____

#6. A E R PARTICIPANT // SPECTATOR // NEITHER //

_____

_____

_____

#22. A E R PARTICIPANT // SPECTATOR // NEITHER //

_____

_____

_____

#52. A E R PARTICIPANT // SPECTATOR // NEITHER //

_____

_____

_____

#55. A E R PARTICIPANT // SPECTATOR // NEITHER //

_____

_____

_____

APPENDIX B

RATER PROFILES

INDIVIDUAL DEBRIEFER INFORMATION

SELECTED CRITERIA FOR DETERMINING THE MOST VALUED ASPECT OF LEISURE:

Activity? Environment? Relationships?

Research to be submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the degree of
DOCTOR OF EDUCATION

by

Jan Summers, M.Ed.

DEBRIEFER'S NAME Doris L. Berryman, Ph.D. CODE # 1

TITLE AND POSITION Associate Professor

ADDRESS Department of Recreation and Leisure Studies, New York University

70 Press Annex, Washington Square

New York, NY 10003

PHONE: (WORK) (212) 598-3941 (HOME) (212) 533-9896

DEGREES/CERTIFICATIONS:

- Ph.D., M.A., B.A.
- Certified Practitioner in the Excellence Principle Utilizing Neurolinguistic Programming

INDIVIDUAL DEBRIEFER INFORMATION

SELECTED CRITERIA FOR DETERMINING THE MOST VALUED ASPECT OF LEISURE:

Activity? Environment? Relationships?

Research to be submitted to the Faculty of the
Graduate College of the
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in partial fulfillment of
the degree of
DOCTOR OF EDUCATION

by

Jan Summers, M.Ed.

DEBRIEFER'S NAME Kathleen Black, Ed.D. CODE # 2

TITLE AND POSITION Associate Professor

ADDRESS Department of Health, Physical Education & Recreation

Central State University

Edmond, Oklahoma 73034

PHONE: (WORK) (405) 341-2980 x237 (HOME) (405) 943-1563

DEGREES/CERTIFICATIONS:

- B.S. Physical Education, Oklahoma College for Women, 1958
- M.Ed. Physical Education, University of Oklahoma, 1961
- Ed.D. Higher Education Administration, University of Oklahoma, 1971
- Oklahoma Teacher's Certificate, Standard Physical Education, Standard School counselor
- American Red Cross Water Safety Instructor Trainer
- 18 hours of training in the communication model, Neurolinguistic Programming

INDIVIDUAL DEBRIEFER INFORMATION

SELECTED CRITERIA FOR DETERMINING THE MOST VALUED ASPECT OF LEISURE:

Activity? Environment? Relationships?

Research to be submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the degree of
DOCTOR OF EDUCATION

by

Jan Summers, M.Ed.

DEBRIEFER'S NAME Chris Pepper Shipman, M.F.C.C. CODE # 3

TITLE AND POSITION Marriage, Family & Child Counselor

ADDRESS 226 5th Street

Encinitas, California 92024

PHONE: (WORK) (714) 753-3461 (HOME) same

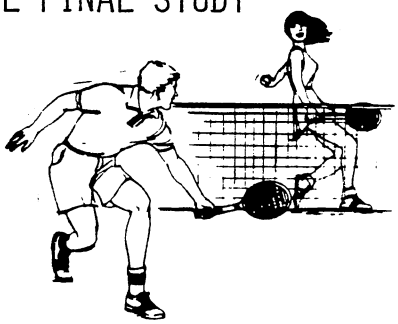
DEGREES/CERTIFICATIONS:

- California State liscence in Marriage, Family & Child Counseling. #MY16628
- California Counseling Credential for Community Colleges
- Certified Trainer in the Excellence Principle Utilizing Neurolinguistic Programming
- Master's degree: Marriage, Family & Child Counseling

APPENDIX C

A COMPARISON OF PERCENTAGES BETWEEN 1981 AND FINAL STUDY

A COMPARATIVE ANALYSIS OF THE TOTAL ASSESSMENT REPRESENTED IN PERCENTAGES (%) OF RESPONSES FROM SUBJECTS BETWEEN THE PILOT STUDY AND THE FINAL STUDY



FEMALES

	A	E	R
PILOT STUDY	34%	20%	47%
FINAL STUDY	44%	19%	37%

MALES

	A	E	R
PILOT STUDY	40%	20%	41%
FINAL STUDY	46%	20%	34%

TOTAL SUBJECTS

	A	E	R
PILOT STUDY	36%	20%	44%
FINAL STUDY	45%	19%	36%

INDIVIDUAL SPORTS - N14

(ASSESSMENT ITEMS NO. 11, 18, 21, 24, 25, 28, 36, 39, 42, 44, 48, 50, 52, 54)

FEMALES

	A	E	R
PILOT STUDY	55%	15%	31%
FINAL STUDY	68%	10%	22%

MALES

	A	E	R
PILOT STUDY	64%	13%	24%
FINAL STUDY	69%	12%	19%

TOTAL SUBJECTS

	A	E	R
PILOT STUDY	58%	14%	28%
FINAL STUDY	69%	11%	20%

TEAM SPORTS -N9

(ASSESSMENT ITEMS NO. 1, 4, 8, 9, 23, 27, 29, 41, 47)

FEMALES

	A	E	R
PILOT STUDY	44%	7%	49%
FINAL STUDY	55%	10%	35%

MALES

	A	E	R
PILOT STUDY	57%	9%	34%
FINAL STUDY	59%	11%	30%

TOTAL SUBJECTS

	A	E	R
PILOT STUDY	49%	8%	43%
FINAL STUDY	57%	10%	33%

SOCIAL RECREATION-N8

(ASSESSMENT ITEMS NO. 6, 17, 20, 35, 40, 51, 53, 58)

FEMALES

	A	E	R
PILOT STUDY	11%	17%	72%
FINAL STUDY	15%	19%	66%

MALES

	A	E	R
PILOT STUDY	7%	22%	72%
FINAL STUDY	13%	25%	62%

TOTAL SUBJECTS

	A	E	R
PILOT STUDY	9%	19%	72%
FINAL STUDY	14%	21%	65%

OUTDOOR/HIGH RISK/CHALLENGE ACTIVITIES -N8
(ASSESSMENT ITEMS NO. 10, 13, 16, 22, 30, 38, 43, 57)

FEMALES

	A	E	R
PILOT STUDY	28%	48%	24%
FINAL STUDY	41%	45%	14%

MALES

	A	E	R
PILOT STUDY	40%	41%	17%
FINAL STUDY	49%	38%	13%

TOTAL SUBJECTS

	A	E	R
PILOT STUDY	32%	46%	22%
FINAL STUDY	44%	42%	14%

'FREE' ACTIVITIES - N19

(ASSESSMENT ITEMS NO. 2, 3, 5, 7, 12, 14, 15, 19, 26, 31, 32, 33, 34, 37, 45, 46, 49, 55, 56)

FEMALES

	A	E	R
PILOT STUDY	26%	18%	56%
FINAL STUDY	34%	19%	47%

MALES

	A	E	R
PILOT STUDY	28%	19%	53%
FINAL STUDY	36%	21%	43%

TOTAL SUBJECTS

	A	E	R
PILOT STUDY	27%	19%	55%
FINAL STUDY	35%	20%	45%

ACTIVITIES THAT CAN BE DONE ALONE-N20

(ASSESSMENT ITEMS NO. 7, 10, 13, 14, 16, 18, 21, 24, 28, 30, 32, 34, 38, 39, 43, 48, 49, 50, 55, 57)

FEMALES

	A	E	R
PILOT STUDY	46%	28%	26%
FINAL STUDY	56%	26%	18%

MALES

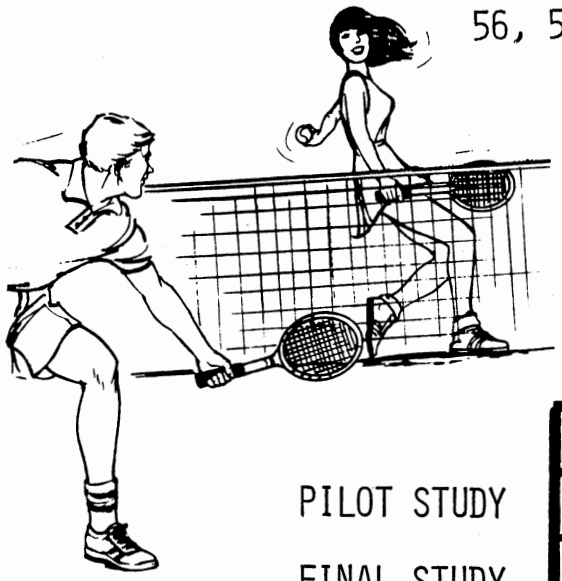
	A	E	R
PILOT STUDY	53%	28%	19%
FINAL STUDY	59%	25%	16%

TOTAL SUBJECTS

	A	E	R
PILOT STUDY	49%	28%	23%
FINAL STUDY	57%	26%	17%

ACTIVITIES THAT PREFER TWO PARTICIPANTS - DYADIC -N22

(ASSESSMENT ITEMS NO. 2, 3, 5, 12, 15, 19, 20, 22, 25, 26, 31, 36, 37, 40, 42, 44, 46, 52, 53, 54, 56, 58)



FEMALES

	A	E	R
PILOT STUDY	27%	16%	57%
FINAL STUDY	64%	19%	17%

MALES

	A	E	R
PILOT STUDY	31%	16%	54%
FINAL STUDY	34%	20%	46%

TOTAL SUBJECTS

	A	E	R
PILOT STUDY	28%	16%	56%
FINAL STUDY	49%	20%	31%

GROUP / TEAM ACTIVITIES - N16

(ASSESSMENT ITEMS NO. 1, 4, 6, 8, 9, 11, 17, 23, 27, 29, 33, 35, 41, 45, 47, 51)

FEMALES

	A	E	R
PILOT STUDY	33%	10%	57%
FINAL STUDY	44%	11%	45%

MALES

	A	E	R
PILOT STUDY	40%	12%	48%
FINAL STUDY	46%	13%	41%

TOTAL SUBJECTS

	A	E	R
PILOT STUDY	35%	11%	54%
FINAL STUDY	45%	8%	43%

APPENDIX D

DATA BASE IN TABULAR FORM

DATA Base for Hypotheses I, VI, VII

A=Activity	P=Participant
E=Environment	S=Spectator
R=Relationships	N=Neither

Item 1

	P	S	N	ROW TOT
A	122 83.0	19 12.9	6 4.1	147 59.8
E	4 36.4	6 54.5	1 9.1	11 4.5
R	49 55.7	32 36.4	7 8.0	88 35.8
COL TOT	175 71.1	57 23.2	14 5.7	246 100.0

X^2=27.35706 with 4 df p=.0000

Item 2

	P	S	N	ROW TOT
A	81 96.4	1 1.2	2 2.4	84 34.1
E	66 95.7	3 4.3	0 0.0	69 28.0
R	91 97.8	1 1.1	1 1.1	93 37.8
COL TOT	238 96.7	5 2.0	3 1.2	246 100.0

X^2=4.33973 with 4 df p=.3620

Item 3

	P	S	N	ROW TOT
A	51	12	25	88
	58.0	13.6	38.4	35.8
E	10	5	8	23
	43.5	21.7	34.8	9.3
R	58	27	50	135
	43.0	20.0	37.0	54.9
COL TOT	119	44	83	246
	48.4	17.9	33.7	100.0

X^2=5.20114 with 4 df p=.2673

Item 4

	P	S	N	ROW TOT
A	79	4	0	83
	95.2	4.8	0.0	33.7
E	30	4	1	35
	85.7	11.4	2.9	14.2
R	119	7	2	128
	93.0	5.5	1.6	52.0
COL TOT	228	15	3	246
	92.7	6.1	1.2	100.00

X^2=4.08245 with 4 df p=.3950

Item 5

	P	S	N	ROW TOT
A	62	8	1	71
	37.2	11.3	1.4	28.9
E	31	20	4	55
	56.4	36.4	7.3	22.4
R	75	39	6	120
	62.5	32.5	5.0	48.8
COL TOT	168	67	11	246
	68.3	27.2	4.5	100.0

X^2=17.58151 with 4 df p=.0015

Item 6

	P	S	N	ROW TOT
A	20	0	0	20
	100.0	0.0	0.0	8.1
E	22	5	4	31
	71.0	16.1	12.9	12.6
R	175	17	3	195
	89.7	8.7	1.5	79.3
COL TOT	217	22	7	246

X^2=75175 with 4 df p=.0014

Item 7

	P	S	N	ROW TOT
A	94 75.2	22 17.6	9 7.2	125 50.8
E	10 38.5	10 38.5	6 23.1	26 10.6
R	54 56.8	26 27.4	15 15.6	95 38.6
COL TOT	158 64.2	58 23.6	30 12.2	246 100.0

X^2=16.84225 with 4 df p=.0021

Item 8

	P	S	N	ROW TOT
A	97 57.1	69 40.6	4 2.4	170 69.1
E	10 27.0	25 67.6	2 5.4	37 15.0
R	19 48.7	17 43.6	3 7.7	39 15.9
COL TOT	126 51.2	111 45.1	9 37.	246 100.0

X^2=13.16839 with 4 df p=.0105

Item 9

	P	S	N	ROW TOT
A	61 50.0	39 32.0	22 18.0	122 49.6
E	9 15.0	41 68.3	10 16.7	60 24.4
R	17 26.6	27 42.2	20 31.3	64 26.0
COL TOT	87	107	52	246

χ^2=32.30965 with 4 df p=.0000

Item 10

	P	S	N	ROW TOT
A	66 88.0	5 6.7	4 5.3	75 30.5
E	94 88.7	3 3.8	9 8.5	106 43.1
R	57 87.7	3 5.6	5 7.7	65 26.4
COL TOT	217	11	18	246

χ^2=2.07020 with 4 df p=.7228

Item 11

	P	S	N	ROW TOT
A	119 88.1	13 9.6	3 2.2	135 54.9
E	6 50.0	5 41.7	1 8.3	12 4.9
R	83 83.8	9 9.1	7 7.1	99 40.2
COL TOT	208	27	11	246

χ^2=16.17198 with 4 df p=.0028

Item 12

	P	S	N	ROW TOT
A	44 91.7	2 4.2	2 4.2	48 19.5
E	36 72.0	12 24.0	2 4.0	50 20.3
R	125 84.5	20 13.5	3 2.0	148 60.2
COL TOT	205	34	7	246

χ^2=9.06568 with 4 df p=.0593

Item 13

	P	S	N	ROW TOT
A	115 85.2	7 5.2	13 9.6	135 55.1
E	59 66.3	16 18.0	14 15.7	89 36.3
R	15 71.4	3 14.3	3 14.3	21 8.6
COL TOT	189	26	30	245

χ^2=12.85086 with 4 df p=.0120

Item 14

	P	S	N	ROW TOT
A	96 56.5	43 25.3	31 18.2	170 69.4
E	20 48.8	16 39.0	5 12.2	41 16.7
R	11 32.4	17 50.0	6 17.6	34 13.9
COL TOT	127	76	42	245

χ^2=10.55887 with 4 df p=.0319

Item 15

	P	S	N	ROW TOT
A	59 89.4	2 3.0	5 7.6	66 26.9
E	82 89.1	7 7.6	3 3.3	92 37.6
R	76 87.4	8 9.2	3 3.4	87 35.5
COL TOT	217	17	11	245

χ^2=4.09338 with 4 df p=.3935

Item 16

	P	S	N	ROW TOT
A	67 27.2	47 33.1	28 19.7	142 58.0
E	31 36.9	45 53.6	8 9.5	84 34.3
R	10 52.6	6 31.6	3 15.8	19 7.8
COL TOT	108	98	39	245

χ^2=10.94802 with 4 df p=.0272

Item 17

	P	S	N	ROW TOT
A	42 93.3	1 2.2	2 4.4	45 18.4
E	43 84.3	4 7.8	4 7.8	51 20.8
R	140 94.0	5 3.4	4 2.7	149 60.8
COL TOT	225	10	10	245

χ^2=5.23477 with 4 df p=.2640

Item 18

	P	S	N	ROW TOT
A	53 31.3	84 41.8	54 26.9	201 82.0
E	6 28.6	11 52.4	4 19.0	21 8.6
R	11 47.8	10 43.5	2 8.7	23 9.4
COL TOT	80	105	60	245

χ^2=5.39424 with 4 df p=.2492

Item 19

	P	S	N	ROW TOT
A	57 79.2	7 9.7	8 11.1	72 29.4
E	9 69.2	3 23.1	1 7.7	13 5.3
R	128 80.0	18 11.3	14 8.8	160 65.3
COL TOT	194	28	23	245

X^2=2.24431 with 4 df p=.6909

Item 20

	P	S	N	ROW TOT
A	26 59.1	6 13.6	12 27.3	44 18.0
E	38 76.0	7 14.0	5 10.0	50 20.4
R	125 82.8	12 7.9	14 9.3	151 61.6
COL TOT	189 77.1	25 10.2	31 12.7	245 100.0

X^2=13.53256 with 4 df p=.0089

Item 21

	P	S	N	ROW TOT
A	113 52.8	49 22.9	52 24.3	214 87.3
E	4 36.4	3 27.3	4 36.4	11 4.5
R	8 40.0	5 25.0	7 35.0	20 8.2
COL TOT	125 51.0	57 23.3	63 25.7	245 100.0

$X2=2.50934$ with 4 df p=.6430

Item 22

	P	S	N	ROW TOT
A	36 92.3	1 2.6	2 5.1	39 15.9
E	136 92.5	4 2.7	7 4.8	147 59.8
R	57 95.0	2 3.3	1 1.7	50 24.4
COL TOT	229 93.1	7 2.8	10 4.1	246 100.0

$\chi^2=1.23337$ with 4 df p=.8725

Item 23

	P	S	N	ROW TOT
A	58 68.2	18 21.2	9 10.6	85 34.6
E	8 44.4	9 50.0	1 5.6	18 7.3
R	95 66.4	36 25.2	12 8.4	143 58.1
COL TOT	151 65.4	63 25.6	22 8.9	246 100.0

X^2=6.71633 with 4 df p=.1517

Item 24

	P	S	N	ROW TOT
A	160 83.8	20 10.5	11 5.8	191 77.6
E	32 74.4	8 18.6	3 7.0	43 17.5
R	7 58.3	2 16.7	3 25.0	12 4.9
COL TOT	199 80.9	30 12.2	17 5.9	246 100.0

χ^2=9.33282 with 4 df p=.0533

Item 25

	P	S	N	ROW TOT
A	24 12.3	97 49.7	74 37.9	195 79.3
E	3 14.3	9 42.9	9 42.9	21 8.5
R	4 13.3	10 33.3	16 53.3	30 12.2
COL TOT	31 12.6	116 47.2	99 40.2	246 100.0

X^2=3.21624 with 4 df p=.5223

Item 26

	P	S	N	ROW TOT
A	44 69.8	9 14.3	10 15.9	63 25.6
E	70 71.4	22 22.4	6 5.1	98 39.8
R	60 70.6	12 14.1	13 15.3	85 34.6
COL TOT	174 70.7	43 17.5	29 11.8	246 100.0

χ^2=6.76237 with 4 df p=.1490

Item 27

	P	S	N	ROW TOT
A	58 30.5	81 42.6	51 26.8	190 77.2
E	4 22.2	10 55.6	3 22.2	18 7.3
R	17 44.7	11 28.9	10 26.3	38 15.4
COL TOT	79 32.1	102 41.5	65 26.4	246 100.0

X^2=5.07630 with 4 df p=.2795

Item 28

	P	S	N	ROW TOT
A	78 90.7	2 2.3	6 7.0	86 35.1
E	38 86.4	4 9.1	2 4.5	44 18.0
R	108 93.9	5 4.3	2 1.7	115 46.9
COL TOT	224 91.4	11 4.5	10 4.1	245 100.0

χ^2=6.51839 with 4 df p=.1636

Item 29

	P	S	N	ROW TOT
A	60 33.9	68 38.4	49 27.7	177 72.0
E	8 23.5	15 44.1	11 32.4	34 13.8
R	12 34.3	7 20.0	16 45.7	35 14.2
COL TOT	80 32.5	90 36.6	76 30.9	246 100.0

X^2=7.40555 with 4 df p=.1159

Item 30

	P	S	N	ROW TOT
A	62 78.5	5 6.3	12 15.2	79 32.1
E	82 74.5	11 10.0	17 15.5	110 4.7
R	42 73.7	7 12.3	8 14.0	57 23.2
COL TOT	186 75.6	23 9.3	37 15.0	246 100.0

χ^2=1.52701 with 4 df p=.8218

Item 31

	P	S	N	ROW TOT
A	11 73.3	2 13.3	2 13.3	15 6.1
E	4 40.0	2 20.0	4 40.0	10 4.1
R	194 87.8	16 7.2	11 5.0	221 89.8
COL TOT	209 85.0	20 8.1	17 6.9	246 100.0

X^2=23.20770 with 4 df p=.0001

Item 32

	P	S	N	ROW TOT
A	87 51.8	54 32.1	27 16.1	168 68.3
E	17 32.1	23 43.4	13 24.5	53 21.5
R	17 68.0	7 28.0	1 4.0	25 10.2
COL TOT	121 49.2	84 34.1	41 16.7	246 100.0

X^2=11.39446 with 4 df p=.0225

Item 33

	P	S	N	ROW TOT
A	120 87.0	12 8.7	6 4.3	138 56.1
E	12 75.0	3 18.8	1 6.3	16 6.5
R	87 94.6	3 3.2	2 2.2	92 37.4
COL TOT	219 89.0	18 7.3	9 3.7	246 100.0

X^2=7.04954 with 4 df p=.1333

Item 34

	P	S	N	ROW TOT
A	46 76.7	9 15.0	5 8.3	60 24.4
E	59 54.1	28 25.7	22 20.2	109 44.3
R	44 57.1	18 23.4	15 19.5	77 31.3
COL TOT	149 60.6	55 22.4	42 17.1	246 100.0

X^2=9.05529 with 4 df p=.0597

Item 35

	P	S	N	ROW TOT
A	15 62.5	3 12.5	6 25.0	24 9.8
E	20 74.1	4 14.8	3 11.1	27 11.0
R	184 94.4	7 3.6	4 2.1	195 79.3
COL TOT	219 89.0	14 5.7	13 5.3	246 100.0

X^2=33.86018 with 4 df p=.0000

Item 36

	P	S	N	ROW TOT
A	94 84.7	9 8.1	8 7.2	111 45.1
E	34 75.6	5 11.1	6 13.3	45 18.3
R	78 86.7	7 7.8	5 5.6	90 36.6
COL TOT	206 83.7	21 8.5	19 7.7	246 100.0

X^2=3.31736 with 4 df p=.5062

Item 37

	P	S	N	ROW TOT
A	24 77.4	4 12.9	3 9.7	31 12.6
E	72 75.8	14 14.7	9 9.5	95 38.6
R	102 85.0	13 10.8	5 4.2	120 48.8
COL TOT	198 80.5	31 12.6	17 6.9	246 100.0

$X2$=3.79797 with 4 df p=.4340

Item 38

	P	S	N	ROW TOT
A	83 62.4	16 12.0	34 25.6	133 54.1
E	51 50.0	28 27.5	23 22.5	102 41.5
R	7 63.6	2 18.2	2 18.2	11 4.5
COL TOT	141 57.3	46 18.7	59 24.0	246 100.0

χ^2=9.35382 with 4 df p=.0528

Item 39

	P	S	N	ROW TOT
A	91 53.8	38 22.5	40 23.7	169 68.7
E	17 40.5	12 28.6	13 31.0	42 17.1
R	20 57.1	8 22.9	7 20.0	35 14.2
COL TOT	128 52.0	58 23.6	60 24.4	246 100.0

X^2=2.95216 with 4 df p=.5659

Item 40

	P	S	N	ROW TOT
A	19 63.3	1 3.3	10 33.3	30 12.2
E	12 44.4	7 25.9	8 29.6	27 11.0
R	143 75.7	23 12.2	23 12.2	189 76.8
COL TOT	174 70.7	31 12.6	41 16.7	246 100.0

X^2=19.41203 with 4 df p=.0007

Item 41

	P	S	N	ROW TOT
A	53 70.7	16 21.3	6 8.0	75 30.5
E	5 62.5	3 37.5	0 0.0	8 3.3
R	138 84.7	19 11.7	6 3.7	163 66.3
COL TOT	196 79.7	38 15.4	12 4.9	246 100.0

X^2=9.65375 with 4 df p=.0467

Item 42

	P	S	N	ROW TOT
A	47 22.6	114 54.8	47 22.6	208 84.6
E	3 18.8	9 56.3	4 25.0	16 6.5
R	7 31.8	9 40.9	6 27.3	22 8.9
COL TOT	7 31.8	9 40.9	6 27.3	22 8.9

χ^2=1.82475 with 4 df p=.7680

Item 43

	P	S	N	ROW TOT
A	66 74.2	5 5.6	18 20.2	89 36.2
E	103 79.2	5 3.8	22 16.9	130 52.8
R	19 70.4	3 11.1	5 18.5	27 11.0
COL TOT	188 76.4	13 5.3	45 18.3	246 100.0

X^2=2.90120 with 4 df p=.5745

Item 44

	P	S	N	ROW TOT
A	175 81.0	25 11.6	16 7.4	216 87.8
E	1 16.7	4 66.7	1 16.7	6 2.4
R	22 91.7	1 4.2	1 4.2	24 9.8
COL TOT	198 80.5	30 12.2	18 7.3	246 100.0

X^2=20.39642 with 4 df p=.0004

Item 45

	P	S	N	ROW TOT
A	89 76.1	15 12.8	13 11.1	117 47.6
E	18 72.0	5 20.0	2 8.0	25 10.2
R	87 83.7	9 8.7	8 7.7	104 42.3
COL TOT	194 78.9	29 11.8	23 9.3	246 100.0

X^2=3.71290 with 4 df p=.4463

Item 46

	P	S	N	ROW TOT
A	15 44.1	10 29.4	9 26.5	34 13.8
E	5 25.0	8 40.0	7 35.0	20 8.1
R	122 63.5	42 21.9	28 14.6	192 78.0
COL TOT	142 57.7	60 24.4	44 17.9	246 100.0

χ^2=14.62088 with 4 df p=.0056

Item 47

	P	S	N	ROW TOT
A	123 60.6	61 30.0	19 9.4	203 82.5
E	1 12.5	6 75.0	1 12.5	8 3.3
R	19 54.3	13 37.1	3 8.6	35 14.2
COL TOT	143 58.1	80 32.5	23 9.3	246 100.0

X^2=8.32381 with 4 df p=.0804

Item 48

	P	S	N	ROW TOT
A	170 90.9	6 3.2	11 5.9	187 76.0
E	44 100.0	0 0.0	0 0.0	44 17.9
R	12 80.0	3 20.0	0 0.0	15 6.1
COL TOT	226 91.9	9 3.7	11 4.5	246 100.0

X^2=16.69801 with 4 df p=.0022

Item 49

	P	S	N	ROW TOT
A	91 55.2	28 17.0	46 27.9	165 67.1
E	25 39.7	22 34.9	16 25.4	63 25.6
R	9 50.0	5 27.8	4 22.2	18 7.3
COL TOT	125 50.8	55 22.4	66 26.8	246 100.0

X^2=9.23413 with 4 df p=.0555

Item 50

	P	S	N	ROW TOT
A	149 81.0	24 13.0	11 6.0	184 74.8
E	36 78.3	8 17.4	2 4.3	46 18.7
R	14 87.5	2 12.5	0 0.0	16 6.5
COL TOT	199 80.9	34 13.8	13 5.3	246 100.0

χ^2=1.74030 with 4 df p=.7834

Item 51

	P	S	N	ROW TOT
A	27	10	9	46
	58.7	21.7	19.6	18.7
E	21	29	21	71
	29.6	40.8	29.6	28.9
R	77	36	16	129
	59.7	27.9	12.4	52.4
COL TOT	125	75	46	246
	50.8	30.5	18.7	100.0

X^2=20.04515 with 4 df p=.0005

Item 52

	P	S	N	ROW TOT
A	48	9	6	63
	76.2	14.3	9.5	25.6
E	5	1	0	6
	83.3	16.7	0.0	2.4
R	167	4	6	177
	94.4	2.3	3.4	72.0
COL TOT	220	140	12	246
	89.4	5.7	4.9	100.0

X^2=18.73143 with 4 df p=.0009

Item 53

	P	S	N	ROW TOT
A	16 72.7	3 13.6	3 13.6	22 8.9
E	19 33.3	21 36.8	17 29.8	57 23.2
R	119 71.3	36 21.6	12 7.2	167 67.9
COL TOT	154 62.6	60 24.4	32 13.0	246 100.0

X^2=32.12570 with 4 df p=.0000

Item 54

	P	S	N	ROW TOT
A	150 71.8	37 17.7	22 10.5	209 85.0
E	8 61.5	3 23.1	2 15.4	13 5.3
R	20 83.3	3 12.5	1 4.2	24 9.8
COL TOT	178 72.4	43 17.5	25 10.2	246 100.0

X^2=2.42435 with 4 df p=.6582

Item 55

	P	S	N	ROW TOT
A	68 95.8	0 0.0	3 4.2	71 28.9
E	30 93.8	2 6.3	0 0.0	32 13.0
R	134 93.7	5 3.5	4 2.8	143 58.1
COL TOT	232 94.3	7 2.8	7 2.8	246 100.0

X^2=4.94624 with 4 df p=.2929

Item 56

	P	S	N	ROW TOT
A	30 81.1	4 10.8	3 8.1	37 15.0
E	37 75.5	8 16.3	4 8.2	49 19.9
R	133 83.1	24 15.0	3 1.9	160 65.0
COL TOT	200 81.3	36 14.6	10 4.1	246 100.0

X^2=6.14811 with 4 df p=.1884

Item 57

	P	S	N	ROW TOT
A	130 76.0	16 9.4	25 14.6	171 69.5
E	44 65.7	11 16.4	12 17.9	67 27.2
R	7 87.5	0 0.0	1 12.5	8 3.3
COL TOT	131 73.6	27 11.0	38 15.4	246 100.0

X^2=4.39728 with 4 df p=.3549

Item 58

	P	S	N	ROW TOT
A	39 75.0	9 17.3	4 7.7	52 21.1
E	51 49.0	29 27.9	24 23.1	104 42.3
R	66 73.3	13 14.4	11 12.2	90 36.6
COL TOT	156 63.4	51 20.7	39 15.9	246 100.0

χ^2=16.81914 with 4 df p=.0021

DATA BASE FOR HYPOTHESIS II

F=Female
M=Male

A=Activity
E=Environment
R=Relationships

Item 1

	A	E	R	ROW TOT
F	74 50.7	10 6.8	62 42.5	146 59.1
M	74 73.3	1 1.0	26 25.7	101 40.9
COL TOT	148 59.9	11 4.5	88 35.6	247 100.0

χ^2=14.36948 with 2 df p=.0008

Item 2

	A	E	R	ROW TOT
F	51 34.9	41 28.1	54 37.0	146 59.1
M	34 33.7	28 27.7	39 38.6	101 40.9
COL TOT	85 34.4	69 27.9	93 37.7	247 100.0

χ^2=.07266 with 2 df p=.9643

Item 3

	A	E	R	ROW TOT
F	36 24.7	12 8.2	98 67.1	146 59.1
M	53 52.5	11 10.9	37 36.6	101 40.9
COL TOT	89 36.0	23 9.3	135 54.7	247 100.0

χ^2=23.43301 with 2 df p=.0000

Item 4

	A	E	R	ROW TOT
F	53 36.3	18 12.3	75 51.4	146 59.1
M	31 30.7	17 16.8	53 52.5	101 40.9
COL TOT	84 34.0	35 14.2	128 51.8	247 100.0

χ^2=1.42049 with 2 df p=.4915

Item 5

	A	E	R	ROW TOT
F	48 32.9	29 19.9	69 47.3	146 59.1
M	24 23.8	26 25.7	51 50.5	101 40.9
COL TOT	72 29.1	55 22.3	120 48.6	247 100.0

χ^2=2.75675 with 2 df p=.2520

Item 6

	A	E	R	ROW TOT
F	14 9.6	21 14.4	111 76.0	146 59.1
M	6 5.9	10 9.9	85 84.2	101 40.9
COL TOT	20 8.1	31 12.6	196 79.4	247 100.0

χ^2=2.43464 with 2 df p=.2960

Item 7

	A	E	R	ROW TOT
F	65 44.5	14 9.6	67 45.9	146 59.1
M	61 60.4	12 11.9	28 27.7	101 40.9
COL TOT	126 51.0	26 10.5	95 38.5	247 100.0

χ^2=8.37082 with 2 df p=.0152

Item 8

	A	E	R	ROW TOT
F	92 63.0	25 17.1	29 19.9	146 59.1
M	79 78.2	12 11.9	10 9.9	101 40.9
COL TOT	171 69.2	37 15.0	39 15.8	247 100.0

χ^2=6.84097 with 2 df p=.0327

Item 9

	A	E	R	ROW TOT
F	88 60.3	23 15.8	35 24.0	146 59.1
M	34 33.7	37 36.6	30 29.7	101 40.9
COL TOT	122 49.4	60 24.3	65 26.3	247 100.0

χ^2=20.01898 with 2 df p=.0000

Item 10

	A	E	R	ROW TOT
F	38 26.0	69 47.3	39 26.7	146 59.1
M	38 37.6	37 36.6	26 25.7	101 40.9
COL TOT	76 30.8	106 42.9	65 26.3	247 100.0

χ^2=4.20144 with 2 df p=.1224

Item 11

	A	E	R	ROW TOT
F	85 58.2	5 3.4	56 38.4	146 59.1
M	51 50.5	7 6.9	43 42.6	101 40.9
COL TOT	136 55.1	12 4.9	99 40.1	247 100.0

χ^2=2.42242 with 2 df p=.2978

Item 12

	A	E	R	ROW TOT
F	29 19.9	25 17.1	92 63.0	146 59.1
M	20 19.8	25 24.8	56 55.4	101 40.9
COL TOT	49 19.8	50 20.2	148 59.9	247 100.0

χ^2=2.28735 with 2 df p=.3186

Item 13

	A	E	R	ROW TOT
F	76 52.1	55 37.7	15 10.3	146 59.3
M	60 60.0	34 34.0	6 6.0	100 40.7
COL TOT	136 55.3	89 36.2	21 8.5	246 100.0

χ^2=2.16875 with 2 df p=.3381

Item 14

	A	E	R	ROW TOT
F	107 73.3	20 13.7	19 13.0	146 59.3
M	63 63.0	21 21.0	16 16.0	100 40.7
COL TOT	170 69.1	41 16.7	35 14.2	246 100.0

χ^2=3.17931 with 2 df p=.2040

Item 15

	A	E	R	ROW TOT
F	35 24.0	63 43.2	48 32.9	146 59.3
M	32 32.0	29 29.0	39 39.0	100 40.7
COL TOT	67 27.2	92 37.4	87 35.4	246 100.0

χ^2=5.21116 with 2 df p=.0739

Item 16

	A	E	R	ROW TOT
F	79 54.1	52 35.6	15 10.3	146 59.3
M	64 64.0	32 32/0	4 4.0	100 40.7
COL TOT	143 58.1	84 34.1	19 7.7	246 100.0

χ^2=4.25075 with 2 df p=.1194

Item 17

	A	E	R	ROW TOT
F	31 21.2	30 20.5	85 58.2	146 59.3
M	15 15.0	21 21.0	64 64.0	100 40.7
COL TOT	46 18.7	51 20.7	149 60.6	246 100.0

χ^2=1.56632 with 2 df p=.4570

Item 18

	A	E	R	ROW TOT
F	122 83.6	8 5.5	16 11.0	146 59.3
M	80 80.0	13 13.0	7 7.0	100 40.6
COL TOT	202 82.1	21 8.5	23 9.3	246 100.0

χ^2=5.01875 with 2 df p=.0813

Item 19

	A	E	R	ROW TOT
F	45 30.8	4 2.7	97 66.4	146 59.3
M	28 28.0	9 9.0	63 63.0	100 40.7
COL TOT	73 29.7	13 5.3	160 65.0	246 100.0

χ^2=4.66859 with 2 df p=.0969

Item 20

	A	E	R	ROW TOT
F	29 19.9	26 17.8	91 62.3	146 59.3
M	15 15.0	24 24.0	61 61.0	100 40.7
COL TOT	44 17.9	50 20.3	152 61.8	246 100.0

χ^2=1.92114 with 2 df p=.3827

Item 21

	A	E	R	ROW TOT
F	122 83.6	8 5.5	16 11.0	146 59.3
M	93 93.0	3 3.0	4 4.0	100 40.7
COL TOT	215 87.4	11 4.5	20 8.1	246 100.0

χ^2=4.95602 with 2 df p=.0839

Item 22

	A	E	R	ROW TOT
F	18 12.3	98 67.1	30 20.5	146 59.1
M	22 21.8	49 48.5	30 29.7	101 40.9
COL TOT	40 16.2	147 59.5	60 24.3	247 100.0

χ^2=8.82797 with 2 df p=.0121

Item 23

	A	E	R	ROW TOT
F	48 32.9	13 8.9	85 58.2	146 59.1
M	38 37.6	5 5.0	58 57.4	101 40.9
COL TOT	86 34.8	18 7.3	143 57.9	247 100.0

χ^2=1.67341 with 2 df p=.4331

Item 24

	A	E	R	ROW TOT
F	115 78.8	25 17.1	6 4.1	146 59.1
M	77 76.2	18 17.8	6 5.9	101 40.9
COL TOT	192 77.7	43 17.4	12 4.9	247 100.0

χ^2=0.47785 with 2 df p=.7875

Item 25

	A	E	R	ROW TOT
F	116 79.5	7 4.8	23 15.8	146 59.1
M	79 78.2	14 13.9	8 7.9	101 40.9
COL TOT	195 78.9	21 8.5	31 12.6	247 100.0

χ^2=8.70238 with df p=.0129

Item 26

	A	E	R	ROW TOT
F	38 26.0	51 34.9	57 39.0	146 59.1
M	26 25.7	47 46.5	28 27.7	101 40.9
COL TOT	64 25.9	98 39.7	85 34.4	247 100.0

χ^2=4.25007 with df p=.1194

Item 27

	A	E	R	ROW TOT
F	107 73.3	12 8.2	27 18.5	146 59.1
M	84 83.2	6 5.9	11 10.9	101 40.9
COL TOT	191 77.3	18 7.3	38 15.4	247 100.0

χ^2=3.42167 with 2 df p=.1807

Item 28

	A	E	R	ROW TOT
F	52 35.9	22 15.2	71 49.0	145 58.9
M	35 34.7	22 21.8	44 43.6	101 41.1
COL TOT	87 35.4	44 17.9	115 46.7	246 100.0

χ^2=1.85024 with 2 df p=.3965

Item 29

	A	E	R	ROW TOT
F	102 69.9	22 15.1	22 15.1	146 59.1
M	76 75.2	12 11.9	13 12.9	101 40.9
COL TOT	178 72.1	34 13.8	35 14.2	247 100.0

χ^2=.88419 with 2 df p=.6427

Item 30

	A	E	R	ROW TOT
F	39 26.7	69 47.3	38 26.0	146 59.1
M	41 40.6	41 40.6	19 18.8	101 40.9
COL TOT	80 32.4	110 44.5	57 23.1	247 100.0

χ^2=5.49460 with 2 df p=.0641

Item 31

	A	E	R	ROW TOT
F	6 4.1	4 2.7	136 93.2	146 59.1
M	9 8.9	6 5.9	86 85.1	101 40.9
COL TOT	15 6.1	10 4.0	222 89.9	247 100.0

χ^2=4.20236 with 2 df p=.1223

Item 32

	A	E	R	ROW TOT
F	103 70.5	29 19.9	14 9.6	146 59.1
M	65 64.4	24 23.8	12 11.9	101 40.9
COL TOT	168 68.0	53 21.5	26 10.5	247 100.0

χ^2=1.05750 with 2 df p=.5893

Item 33

	A	E	R	ROW TOT
F	77	6	63	146
	52.7	4.1	43.2	59.1
M	62	10	29	101
	61.4	9.9	28.7	40.9
COL TOT	139	16	92	247
	56.3	6.5	37.2	100.0

χ^2=7.22537 with 2 df p=.0270

Item 34

	A	E	R	ROW TOT
F	44	58	44	146
	30.1	39.7	30.1	59.1
M	16	52	33	101
	15.8	51.5	32.7	40.9
COL TOT	60	110	77	247
	24.3	44.5	31.2	100.0

χ^2=6.99931 with 2 df p=.0302

Item 35

	A	E	R	ROW TOT
F	10	13	123	146
	6.8	8.9	84.2	59.1
M	14	14	73	101
	13.9	13.9	72.3	40.9
COL TOT	24	27	196	247
	9.7	10.9	79.4	100.0

χ^2=5.44102 with 2 df p=.0658

Item 36

	A	E	R	ROW TOT
F	66 45.2	31 21.2	49 33.6	146 59.1
M	46 45.5	14 13.9	41 40.6	101 40.9
COL TOT	112 45.3	45 18.2	90 36.4	247 100.0

χ^2=2.59243 with 2 df p=.2736

Item 37

	A	E	R	ROW TOT
F	11 7.5	64 43.8	71 48.6	146 59.1
M	20 19.8	31 30.7	50 49.5	101 40.9
COL TOT	31 12.6	95 38.5	121 49.0	247 100.0

χ^2=9.84922 with 2 df p=.0073

Item 38

	A	E	R	ROW TOT
F	76 52.1	64 43.8	6 4.1	146 59.1
M	58 57.4	38 37.6	5 5.0	101 40.9
COL TOT	134 54.3	102 41.3	11 4.5	247 100.0

χ^2=0.97009 with 2 df p=.6157

Item 39

	A	E	R	ROW TOT
F	97	24	25	146
	66.4	16.4	17.1	59.1
M	73	18	10	101
	72.3	17.8	9.9	40.9
COL TOT	170	42	35	247
	68.9	17.0	14.2	100.0

χ^2=2.56065 with 2 df p=.2780

Item 40

	A	E	R	ROW TOT
F	20	9	117	146
	13.7	6.2	80.1	59.1
M	10	18	73	101
	9.9	17.8	72.3	40.9
COL TOT	30	27	190	247
	12.1	10.9	76.9	100.0

χ^2=8.61021 with 2 df p=.0135

Item 41

	A	E	R	ROW TOT
F	42	4	100	146
	28.8	2.7	68.5	59.1
M	33	4	64	101
	32.7	4.0	63.4	40.9
COL TOT	75	8	164	247
	30.4	3.2	66.4	100.0

χ^2=.81097 with 2 df p=.6667

Item 42

	A	E	R	ROW TOT
F	118 80.8	9 6.2	19 13.0	146 59.1
M	91 90.1	7 6.9	3 3.0	101 40.9
COL TOT	209 84.6	16 6.5	22 8.9	247 100.0

χ^2=7.42238 with 2 df p=.0244

Item 43

	A	E	R	ROW TOT
F	49 33.6	80 54.8	17 11.6	146 59.1
M	41 40.6	50 49.5	10 9.9	101 40.9
COL TOT	90 36.4	130 52.6	27 10.9	247 100.0

χ^2=1.29356 with 2 df p=.5237

Item 44

	A	E	R	ROW TOT
F	126 86.3	2 1.4	18 12.3	146 59.1
M	91 90.1	4 4.0	6 5.9	101 40.9
COL TOT	217 87.9	6 2.4	24 9.7	247 100.0

χ^2=4.25466 with 2 df p=.1192

Item 45

	A	E	R	ROW TOT
F	72 49.3	14 9.6	60 41.1	146 59.1
M	46 45.5	11 10.9	44 43.6	101 40.9
COL TOT	118 47.8	25 10.1	104 42.1	247 100.0

χ^2=.36406 with 2 df p=.8336

Item 46

	A	E	R	ROW TOT
F	24 16.4	7 4.8	115 78.8	146 59.1
M	10 9.9	14 13.9	77 76.2	101 40.0
COL TOT	34 13.8	21 8.5	192 77.7	247 100.0

χ^2=7.67525 with 2 df p=.0215

Item 47

	A	E	R	ROW TOT
F	120 82.2	2 1.4	24 16.4	146 59.1
M	84 83.2	6 5.9	11 10.9	101 40.9
COL TOT	204 82.6	8 3.2	35 14.2	247 100.0

χ^2=5.15421 with 2 df p=.0760

Item 48

	A	E	R	ROW TOT
F	109 74.7	28 19.2	9 6.2	146 59.1
M	79 78.2	16 15.8	6 5.9	101 40.9
COL TOT	189 76.1	44 17.8	15 6.1	247 100.0

χ^2=.47743 with 2 df p=.7876

Item 49

	A	E	R	ROW TOT
F	100 68.5	36 24.7	10 6.8	146 59.1
M	65 64.4	27 26.7	9 8.9	101 40.9
COL TOT	165 66.8	63 25.5	19 7.7	247 100.0

χ^2=.58358 with 2 df p=.7469

Item 50

	A	E	R	ROW TOT
F	105 71.9	31 21.2	10 6.8	146 59.1
M	80 79.2	15 14.9	6 5.9	101 40.9
COL TOT	185 74.9	46 18.6	16 6.5	247 100.0

χ^2=1.80513 with 2 df p=.4055

Item 51

	A	E	R	ROW TOT
F	25 17.1	41 28.1	80 54.8	146 59.1
M	21 20.8	31 30.7	49 48.5	101 40.9
COL TOT	46 18.6	72 29.1	129 52.2	247 100.0

χ^2=1.02186 with 2 df p=.5999

Item 52

	A	E	R	ROW TOT
F	43 29.5	2 1.4	101 69.2	146 59.1
M	21 20.8	4 4.0	76 75.2	101 40.9
COL TOT	64 25.9	6 2.4	177 71.7	247 100.0

χ^2=3.68414 with 2 df p=.1585

Item 53

	A	E	R	ROW TOT
F	16 11.0	24 16.4	106 72.6	147 59.1
M	6 5.9	33 32.7	62 61.4	101 40.9
COL TOT	22 8.9	57 23.1	168 68.0	247 100.0

χ^2=9.61095 with 2 df p=.0082

Item 54

	A	E	R	ROW TOT
F	123 84.2	4 2.7	19 13.0	146 59.1
M	87 86.1	9 8.9	5 5.0	101 40.9
COL TOT	210 85.0	13 5.3	24 9.7	247 100.0

χ^2=8.33959 with 2 df p=.0155

Item 55

	A	E	R	ROW TOT
F	39 26.7	21 14.4	86 58.9	146 59.1
M	33 32.7	11 10.9	57 56.4	101 40.9
COL TOT	72 29.1	32 13.0	143 57.9	247 100.0

χ^2=1.35264 with 2 df p=.5085

Item 56

	A	E	R	ROW TOT
F	16 11.0	34 23.3	96 65.8	146 59.1
M	21 20.8	16 15.8	64 63.4	101 40.9
COL TOT	37 15.0	50 20.2	160 64.8	247 100.0

χ^2=5.54121 with 2 df p=.0626

Item 57

	A	E	R	ROW TOT
F	98 67.1	42 28.8	6 4.1	146 59.1
M	74 73.3	25 24.8	2 2.0	101 40.9
COL TOT	172 69.6	67 27.1	8 3.2	247 100.0

χ^2=1.51415 with 2 df p=.4690

Item 58

	A	E	R	ROW TOT
F	32 21.9	55 37.7	59 40.4	146 59.1
M	20 19.8	50 49.5	31 30.7	101 40.9
COL TOT	52 21.1	105 42.5	90 36.4	247 100.0

χ^2=3.64090 with 2 df p=.1620

DATA BASE FOR HYPOTHESIS III

S=Single
M=Married

A=Activity
E=Environment
R=Relationships

Item 1

	A	E	R	ROW TOT
S	137	9	83	229
	59.8	3.9	36.2	92.7
M	11	2	5	18
	61.1	11.1	27.8	7.3
COL TOT	148	11	88	247
	59.9	4.5	35.6	100.0

X^2=2.27272 with 2 df p=.3210

Item 2

	A	E	R	ROW TOT
S	79	65	85	229
	34.5	28.4	37.1	92.7
M	6	4	8	18
	33.3	22.2	44.4	7.3
COL TOT	85	69	93	247

X^2=.47133 with 2 df p=.7900

Item 3

	A	E	R	ROW TOT
S	85 37.1	22 9.6	122 53.3	229 92.7
M	4 22.2	1 5.6	13 72.2	18 7.3
COL TOT	89 36.0	23 9.3	135 54.7	247 100.0

χ^2=2.41793 with 2 df p=.2985

Item 4

	A	E	R	ROW TOT
S	80 34.9	34 14.8	115 50.2	229 92.7
M	4 22.2	1 5.6	13 72.2	18 7.3
COL TOT	84 34.0	35 14.2	128 51.8	247 100.0

χ^2=3.36895 with 5 df p=.1855

Item 5

	A	E	R	ROW TOT
S	67 29.3	53 23.1	109 47.6	229 92.7
M	5 27.8	2 11.1	11 61.1	18 7.3
COL TOT	72 29.1	55 22.3	120 48.6	247 100.0

χ^2=1.72492 with 2 df p=.4221

Item 6

	A	E	R	ROW TOT
S	19 8.3	30 13.1	180 78.6	229 92.7
M	1 5.6	1 5.6	16 88.9	18 7.3
COL TOT	20 8.1	31 12.6	196 79.4	247 100.0

χ^2=1.13433 with 2 df p=.5671

Item 7

	A	E	R	ROW TOT
S	117 51.1	25 10.9	87 38.0	229 92.7
M	9 50.0	1 5.6	8 44.4	18 7.3
COL TOT	126 51.0	26 10.5	95 38.5	247 100.0

χ^2=.64031 with 2 df p=.7260

Item 8

	A	E	R	ROW TOT
S	159 69.4	32 14.0	38 16.6	229 92.7
M	12 66.7	5 27.8	1 5.6	18 7.3
COL TOT	171 69.2	37 15.0	39 15.8	247 100.0

χ^2=3.42907 with 2 df p=.1800

Item 9

	A	E	R	ROW TOT
S	118 51.5	52 22.7	59 25.8	229 92.7
M	4 22.2	8 44.4	6 33.3	18 7.3
COL TOT	122 49.4	60 24.3	65 26.3	247 100.0

χ^2=6.51117 with 2 df p=.0386

Item 10

	A	E	R	ROW TOT
S	71 31.0	98 42.8	60 26.2	229 92.7
M	5 27.8	8 44.4	5 27.8	18 7.3
COL TOT	76 30.8	106 42.9	65 26.3	247 100.0

χ^2=.08282 with 2 df p=.9594

Item 11

	A	E	R	ROW TOT
S	128 55.9	10 4.4	91 39.7	229 92.7
M	8 44.4	2 11.1	8 44.4	18 7.3
COL TOT	136 55.1	12 4.9	99 40.1	247 100.0

χ^2=2.05206 with 2 df p=.3584

Item 12

	A	E	R	ROW TOT
S	48 21.0	45 19.7	136 59.4	229 92.7
M	1 5.6	5 27.8	12 66.7	18 7.3
COL TOT	49 19.8	50 20.2	148 59.9	247 100.0

χ^2=2.68842 with 2 df p=.2607

Item 13

	A	E	R	ROW TOT
S	123 53.9	85 37.3	20 8.8	228 92.7
M	13 72.2	4 22.2	1 5.6	18 7.3
COL TOT	136 55.3	89 36.2	21 8.5	246 100.0

χ^2=2.25561 with 2 df p=.3237

Item 14

	A	E	R	ROW TOT
S	159 69.7	38 16.7	31 13.6	228 92.7
M	11 61.1	3 16.7	4 22.2	18 7.3
COL TOT	170 69.1	41 16.7	35 14.2	246 100.0

χ^2=1.05205 with 2 df p=.5909

Item 15

	A	E	R	ROW TOT
S	64 28.1	85 37.3	79 34.6	228 92.7
M	3 16.7	7 38.9	8 44.4	18 7.3
COL TOT	67 27.2	92 37.4	87 35.4	246 100.0

χ^2=1.26069 with 2 df p=.5324

Item 16

	A	E	R	ROW TOT
S	133 58.3	79 34.6	16 7.0	228 92.7
M	10 55.6	5 27.8	3 16.7	18 7.3
COL TOT	143 58.1	84 34.1	19 7.7	246 100.0

χ^2=2.26390 with 2 df p=.3224

Item 17

	A	E	R	ROW TOT
S	42 18.4	48 21.1	138 60.5	228 92.7
M	4 22.2	3 16.7	11 61.1	18 7.3
COL TOT	46 18.7	51 20.7	149 60.6	246 100.0

χ^2=.28465 with 2 df p=.8673

Item 18

	A	E	R	ROW TOT
S	185 81.1	20 8.8	23 10.1	228 92.7
M	17 94.4	1 5.6	0 0.0	18 7.3
COL TOT	202 82.1	21 8.5	23 9.3	246 100.0

χ^2=2.37757 with 2 df p=.3046

Item 19

	A	E	R	ROW TOT
S	66 28.9	10 4.4	152 66.7	228 92.7
M	7 38.9	3 16.7	8 44.4	18 7.3
COL TOT	73 29.7	13 5.3	160 65.0	246 100.0

χ^2=6.58343 with 2 df p=.0372

Item 20

	A	E	R	ROW TOT
S	39 17.1	47 20.6	142 62.3	228 92.7
M	5 27.8	3 16.7	10 55.6	18 7.3
COL TOT	44 17.9	50 20.3	152 61.8	246 100.0

χ^2=1.31241 with 2 df p=.5188

Item 21

	A	E	R	ROW TOT
S	199 87.3	11 4.8	18 7.9	228 92.7
M	16 88.9	0 0.0	2 11.1	18 7.3
COL TOT	215 87.4	11 4.5	20 8.1	246 100.0

χ^2=1.08564 with 2 df p=.5811

Item 22

	A	E	R	ROW TOT
S	39 17.0	137 59.8	53 23.1	229 92.7
M	1 5.6	10 55.6	7 38.9	18 7.3
COL TOT	40 16.2	147 59.5	60 24.3	247 100.0

χ^2=3.11110 with 2 df p=.2111

Item 23

	A	E	R	ROW TOT
S	82 35.8	14 6.1	133 58.1	229 92.7
M	4 22.2	4 22.2	10 55.6	18 7.3
COL TOT	86 34.8	18 7.3	143 57.9	247 100.0

χ^2=6.84531 with 2 df p=.0326

Item 24

	A	E	R	ROW TOT
S	176 76.9	42 18.3	11 4.8	229 92.7
M	16 88.9	1 5.6	1 5.6	18 7.3
COL TOT	192 77.7	43 17.4	12 4.9	247 100.0

χ^2=1.89719 with 2 df p=.3873

Item 25

	A	E	R	ROW TOT
S	182 79.5	17 7.4	30 13.1	229 92.7
M	13 72.2	4 22.2	1 5.6	18 7.3
COL TOT	195 78.9	21 8.5	31 12.6	247 100.0

χ^2=5.16680 with 2 df p=.0755

Item 26

	A	E	R	ROW TOT
S	62 27.1	92 40.2	75 32.8	229 92.7
M	2 11.1	6 33.3	10 55.6	18 7.3
COL TOT	64 25.9	98 39.7	85 34.4	247 100.0

χ^2=4.35998 with 2 df p=.1130

Item 27

	A	E	R	ROW TOT
S	177 77.3	16 7.0	36 15.7	229 92.7
M	14 77.8	2 11.1	2 11.1	18 7.3
COL TOT	191 77.3	18 7.3	38 15.4	247 100.0

χ^2=.62049 with 2 df p=.7333

Item 28

	A	E	R	ROW TOT
S	81 35.5	41 18.0	106 46.5	228 92.7
M	6 33.3	3 16.7	9 50.0	18 7.3
COL TOT	87 35.4	44 17.9	115 46.7	246 100.0

χ^2=.08277 with 2 df p=.9595

Item 29

	A	E	R	ROW TOT
S	169 73.8	29 12.7	31 13.5	229 92.7
M	9 50.0	5 27.8	4 22.2	18 7.3
COL TOT	178 72.1	34 13.8	35 14.2	247 100.0

χ^2=4.96941 with 2 df p=.0834

Item 30

	A	E	R	ROW TOT
S	75	103	51	229
	32.8	45.0	22.3	92.7
M	5	7	6	18
	27.8	38.9	33.3	7.3
COL TOT	80	110	57	247
	32.4	44.5	23.1	100.0

χ^2=1.15139 with 2 df p=.5623

Item 31

	A	E	R	ROW TOT
S	15	8	206	229
	6.6	3.5	90.0	92.7
M	0	2	16	18
	0.0	11.1	88.9	7.3
COL TOT	15	10	222	247
	6.1	4.0	89.9	100.0

χ^2=3.57310 with 2 df p=.1675

Item 32

	A	E	R	ROW TOT
S	155	50	24	229
	67.7	21.8	10.5	92.7
M	13	3	2	18
	72.2	16.7	11.1	7.3
COL TOT	168	53	26	247
	68.0	21.5	10.5	100.0

χ^2=.26448 with 2 df p=.9871

Item 33

	A	E	R	ROW TOT
S	129 56.3	14 6.1	86 37.6	229 92.7
M	10 55.6	2 11.1	6 33.3	18 7.3
COL TOT	139 56.3	16 6.5	92 37.2	247 100.0

χ^2=.72506 with 2 df p=.6959

Item 34

	A	E	R	ROW TOT
S	57 24.9	102 44.5	70 30.6	229 92.7
M	3 16.7	8 44.4	7 38.9	18 7.3
COL TOT	60 24.3	110 44.5	77 31.2	247 100.0

χ^2=.83537 with 2 df p=.6586

Item 35

	A	E	R	ROW TOT
S	21 9.2	26 11.4	182 79.5	229 92.7
M	3 16.7	1 5.6	14 77.8	18 7.3
COL TOT	24 9.7	27 10.9	196 79.4	247 100.0

χ^2=1.48447 with 2 df p=.4760

Item 36

	A	E	R	ROW TOT
S	107 46.7	42 18.3	80 34.9	229 92.7
M	5 27.8	3 16.7	10 55.6	18 7.3
COL TOT	112 45.3	45 18.2	90 36.4	247 100.0

χ^2=3.29443 with 2 df p=.1926

Item 37

	A	E	R	ROW TOT
S	28 12.2	90 39.3	111 48.5	229 92.7
M	3 16.7	5 27.8	10 55.6	18 7.3
COL TOT	31 12.6	95 38.5	121 49.0	247 100.0

χ^2=1.00921 with 2 df p=.6037

Item 38

	A	E	R	ROW TOT
	125 54.6	94 41.0	10 4.4	229 92.7
M	9 50.0	8 44.4	1 5.6	18 7.3
COL TOT	134 54.3	102 41.3	11 4.5	247 100.0

χ^2=.16424 with 2 df p=.9212

Item 39

	A	E	R	ROW TOT
S	156 68.1	40 17.5	33 14.4	229 92.7
M	14 77.8	2 11.1	2 11.1	18 7.3
COL TOT	170 68.8	42 17.0	35 14.2	247 100.0

χ^2=.75076 with 2 df p=.6870

Item 40

	A	E	R	ROW TOT
S	27 11.8	26 11.4	176 76.9	229 92.7
M	3 16.7	1 5.6	14 77.8	18 7.3
COL TOT	30 12.1	27 10.9	190 76.9	247 100.0

χ^2=.84180 with 2 df p=.6565

Item 41

	A	E	R	ROW TOT
	78 30.6	8 3.5	151 65.9	229 92.7
M	5 27.8	0 0.0	13 72.2	18 7.2
COL TOT	75 30.4	8 3.2	164 66.4	247 100.0

χ^2=.77083 with 2 df p=.6802

Item 42

	A	E	R	ROW TOT
	195 85.2	13 5.7	21 9.2	229 92.7
M	14 77.8	3 16.7	1 5.6	18 7.3
COL TOT	209 84.6	16 6.5	22 8.9	247 100.0

χ^2=3.46358 with 2 df p=.1770

Item 43

	A	E	R	ROW TOT
	83 36.2	119 52.0	27 11.8	229 92.7
M	7 38.9	11 61.1	0 0.0	18 7.3
COL TOT	90 36.4	130 52.6	27 10.9	247 100.0

χ^2=2.41953 with 2 df p=.2983

Item 44

	A	E	R	ROW TOT
	199 86.9	6 2.6	24 10.5	229 92.7
M	18 100.0	0 0.0	0 0.0	18 7.3
COL TOT	217 87.9	6 2.4	24 9.7	247 100.0

χ^2=2.68408 with 2 df p=.2613

Item 45

	A	E	R	ROW TOT
S	109	23	97	229
	47.6	10.0	42.4	92.7
M	9	2	7	18
	50.0	11.1	38.9	7.3
COL TOT	118	25	104	247
	47.8	10.1	42.1	100.0

χ^2=.08664 with 2 df p=.9576

Item 46

	A	E	R	ROW TOT
S	32	20	177	229
	14.0	8.7	77.3	92.7
M	2	1	15	18
	11.1	5.6	83.3	7.3
COL TOT	34	21	192	247
	13.8	8.5	77.7	100.0

χ^2=.37594 with 2 df p=.8286

Item 47

	A	E	R	ROW TOT
S	188	7	34	229
	82.1	3.1	14.8	92.7
M	16	1	1	18
	88.9	5.6	5.6	7.3
COL TOT	204	8	35	247
	82.6	3.2	14.2	100.0

χ2=1.43172 with 2 df p=.4888

Item 48

	A	E	R	ROW TOT
S	174 76.0	41 17.9	14 6.1	229 92.7
M	14 77.8	3 16.7	1 5.6	18 7.3
COL TOT	188 76.1	44 17.8	15 6.1	247 100.0

χ^2=.02996 with 2 df p=.9851

Item 49

	A	E	R	ROW TOT
S	151 65.9	60 26.2	18 7.9	229 92.7
M	14 77.8	3 16.7	1 5.6	18 7.3
COL TOT	165 66.8	63 25.5	19 7.7	247 100.0

χ^2=1.06013 with 2 df p=.5886

Item 50

	A	E	R	ROW TOT
S	170 74.2	45 19.7	14 6.1	229 92.7
M	15 83.3	1 5.6	2 11.1	18 7.3
COL TOT	185 74.9	46 18.6	16 6.5	247 100.0

χ^2=2.60812 with 2 df p=.2714

Item 51

	A	E	R	ROW TOT
S	43	63	123	229
	18.8	27.5	53.7	92.7
M	3	9	6	18
	16.7	50.0	33.3	7.3
COL TOT	46	72	129	247
	18.6	29.1	52.2	100.0

χ^2=4.26235 with 2 df p=.1187

Item 52

	A	E	R	ROW TOT
S	62	4	163	229
	27.1	1.7	71.2	92.7
M	2	2	14	18
	11.1	11.1	77.8	7.3
COL TOT	64	6	177	247
	25.9	2.4	71.7	100.0

χ^2=7.76703 with 2 df p=.0206

Item 53

	A	E	R	ROW TOT
S	21	53	155	229
	9.2	23.1	67.7	92.7
M	1	4	13	18
	5.6	22.2	72.2	7.3
COL TOT	22	57	168	247
	8.9	23.1	68.0	100.0

χ^2=.30146 with 2 df p=.8601

Item 54

	A	E	R	ROW TOT
S	192 83.8	13 5.7	24 10.5	229 92.7
M	18 100.0	0 0.0	0 0.0	19 7.3
COL TOT	210 85.0	13 5.3	24 9.7	247 100.0

χ^2=3.42071 with 2 df p=.1808

Item 55

	A	E	R	ROW TOT
S	65 28.4	31 13.5	133 58.1	229 92.7
M	7 38.9	1 5.6	10 55.6	18 7.3
COL TOT	72 29.1	32 13.0	143 57.9	247 100.0

χ^2=1.47069 with 2 df p=.4793

Item 56

	A	E	R	ROW TOT
S	32 14.0	49 21.4	148 64.6	229 92.7
M	5 27.8	1 5.6	12 66.7	18 7.3
COL TOT	37 15.0	50 20.2	160 64.8	247 100.0

χ^2=4.20247 with 2 df p=.1123

Item 57

	A	E	R	ROW TOT
S	157	64	8	229
	68.6	27.9	3.5	92.7
M	15	3	0	18
	83.3	16.7	0.0	7.3
COL TOT	172	67	8	247
	69.6	27.1	3.2	100.0

χ^2=1.93487 with 2 df p=.3801

Item 58

	A	E	R	ROW TOT
S	49	98	82	229
	21.4	42.8	35.8	92.7
M	3	7	8	18
	16.7	38.9	44.4	7.3
COL TOT	52	105	90	247
	21.1	42.5	36.4	100.0

χ^2=.57892 with 2 df p=.7487

DATA BASE FOR HYPOTHESIS IV

Age 18-21
Age 22-25

A=Activity
E=Environment
R=Relationships

Item 1

	A	E	R	ROW TOT
18-21	118 58.4	9 4.5	75 37.1	202 81.8
22-25	30 66.7	2 4.4	13 28.9	45 18.2
COL TOT	148 59.9	11 4.5	88 35.6	247 100.0

χ^2=1.11944 with 2 df p=.5714

Item 2

	A	E	R	ROW TOT
18-21	69 34.2	61 30.2	72 35.6	202 81.8
22-25	16 35.6	8 17.8	21 46.7	45 18.2
COL TOT	85 34.4	69 27.9	93 37.7	247 100.0

χ^2=3.24077 with 2 df p=.1978

Item 3

	A	E	R	ROW TOT
18-21	69 34.2	16 7.9	117 57.9	202 81.8
22-25	20 44.4	7 15.6	18 40.0	45 18.2
COL TOT	89 36.0	23 9.3	135 54.7	247 100.0

χ^2=5.54676 with 2 df p=.0625

Item 4

	A	E	R	ROW TOT
18-21	71 35.1	28 13.9	103 51.0	202 81.8
22-25	13 28.9	7 15.6	25 55.6	45 18.2
COL TOT	84 34.0	35 14.2	128 51.8	247 100.0

χ^2=.64658 with 2 df p=.7238

Item 5

	A	E	R	ROW TOT
18-21	58 28.7	47 23.3	97 48.0	202 81.8
22-25	14 31.1	8 17.8	23 51.1	45 18.2
COL TOT	72 29.1	55 22.3	120 48.6	247 100.0

χ^2=.64305 with 2 df p=.7250

Item 6

	A	E	R	ROW TOT
18-21	19 9.4	26 12.9	157 77.7	202 81.8
22-25	1 2.2	5 11.1	39 86.7	45 18.2
COL TOT	20 8.1	31 12.6	196 79.4	247 100.0

χ^2=2.80732 with 2 df p=.2457

Item 7

	A	E	R	ROW TOT
18-21	100 49.5	20 9.9	82 40.6	202 81.8
22-25	26 57.8	6 13.3	13 28.9	45 18.2
COL TOT	126 51.0	26 10.5	95 36.5	247 100.0

χ^2=2.21660 with 2 df p=.3301

Item 8

	A	E	R	ROW TOT
18-21	137 67.8	30 14.9	35 17.3	202 81.8
22-25	34 75.6	7 15.6	4 8.9	45 18.2
COL TOT	171 69.2	37 15.0	39 15.8	247 100.0

χ^2=1.98957 with 2 df p=.3698

Item 9

	A	E	R	ROW TOT
18-21	104	48	50	202
	51.5	23.8	24.8	81.8
22-25	18	12	15	45
	40.0	26.7	32.3	18.2
COL TOT	122	60	65	247
	49.4	24.3	26.3	100.0

χ^2=2.14032 with 2 df p=.3430

Item 10

	A	E	R	ROW TOT
18-21	62	90	50	202
	30.7	44.6	24.8	81.8
22-25	14	16	15	45
	31.1	35.6	33.3	18.2
COL TOT	76	106	65	247
	30.8	42.9	26.3	100.0

χ^2=1.72623 with 2 df p=.4218

Item 11

	A	E	R	ROW TOT
18-21	116	7	79	202
	57.4	3.5	39.1	81.8
22-25	20	5	20	45
	44.4	11.1	44.4	18.2
COL TOT	136	12	99	247
	55.1	4.9	40.1	100.0

χ^2=5.81587 with 2 df p=.0546

Item 12

	A	E	R	ROW TOT
18-21	44 21.8	35 17.3	123 60.9	202 81.8
22-25	5 11.1	15 33.3	25 55.6	45 18.2
COL TOT	49 19.8	50 20.2	148 59.9	247 100.0

χ^2=6.94520 with 2 df p=.0310

Item 13

	A	E	R	ROW TOT
18-21	108 53.7	75 37.3	18 9.0	201 81.7
22-25	28 62.2	14 31.1	3 6.7	45 18.3
COL TOT	136 55.3	89 36.2	21 8.5	246 100.0

χ^2=1.09603 with 2 df p=.5781

Item 14

	A	E	R	ROW TOT
18-21	146 72.6	29 14.4	26 12.9	201 81.7
22-25	24 53.3	12 26.7	9 20.0	45 18.3
COL TOT	170 69.1	41 16.7	35 14.2	246 100.0

χ^2=6.57686 with 2 df p=.0373

Item 15

	A	E	R	ROW TOT
18-21	53 26.4	78 38.8	70 34.8	201 81.7
22-25	14 31.1	14 31.1	17 37.8	45 18.3
COL TOT	67 27.2	92 37.4	87 35.4	246 100.0

χ^2=.97641 with 2 df p=.6137

Item 16

	A	E	R	ROW TOT
18-21	114 56.7	70 34.8	17 8.5	201 81.7
22-25	29 64.4	14 31.1	2 4.4	45 18.3
COL TOT	143 58.1	84 34.1	19 7.7	246 100.0

χ^2=1.29309 with 2 df p=.5239

Item 17

	A	E	R	ROW TOT
18-21	36 17.9	44 21.9	121 60.2	201 81.7
22-25	10 22.2	7 15.6	28 62.2	45 18.3
COL TOT	46 18.7	51 20.7	149 60.6	246 100.0

χ^2=1.10217 with 2 df p=.5763

Item 18

	A	E	R	ROW TOT
18-21	166 82.6	15 7.5	20 10.0	201 81.7
22-25	36 80.-	6 13.3	3 6.7	45 18.3
COL TOT	202 82.1	21 8.5	23 9.3	246 100.0

χ^2=1.93841 with 2 df p=.3794

Item 19

	A	E	R	ROW TOT
18-21	62 30.8	9 4.5	130 64.7	201 81.7
22-25	11 24.4	4 8.9	30 66.7	45 18.3
COL TOT73	13 29.7	160 5.3	246 65.0	 100.0

χ^2=1.88403 with 2 df p=.3989

Item 20

	A	E	R	ROW TOT
18-21	37 18.4	39 19.4	125 62.2	201 81.7
22-25	7 15.6	11 24.4	27 60.0	45 18.3
COL TOT	44 17.9	50 20.3	152 61.8	246 100.0

χ^2=.65555 with 2 df p=.7205

Item 21

	A	E	R	ROW TOT
18-21	176 87.6	10 5.0	15 7.5	201 81.7
22-25	39 86.7	1 2.2	5 11.1	45 18.3
COL TOT	215 87.4	11 4.5	20 8.1	246 100.0

χ^2=1.22852 with 2 df p=.5410

Item 22

	A	E	R	ROW TOT
18-21	32 15.8	131 64.9	39 19.3	202 81.8
22-25	8 17.8	16 35.6	21 46.7	45 18.2
COL TOT	40 16.2	147 59.5	60 24.3	247 100.0

χ^2=16.73294 with 2 df p=.0002

Item 23

	A	E	R	ROW TOT
18-21	67 33.2	15 7.4	120 59.4	81.8
22-25	19 42.2	3 6.7	23 51.1	45 18.2
COL TOT	86 34.8	18 7.3	143 57.9	247 100.0

χ^2=1.33290 with 2 df p=.5135

Item 24

	A	E	R	ROW TOT
18-21	156 77.2	36 17.8	10 5.0	202 81.8
22-25	36 80.0	7 15.6	2 4.4	45 18.2
COL TOT	192 77.7	43 17.4	12 4.9	247 100.0

X^2=.16435 with 2 df p=.9211

Item 25

	A	E	R	ROW TOT
18-21	165 81.7	12 5.9	25 12.4	202 81.8
22-25	30 66.7	9 20.0	6 13.3	45 18.2
COL TOT	195 78.9	21 8.5	31 12.6	247 100.0

X^2=9.63416 with 2 df p=.0081

Item 26

	A	E	R	ROW TOT
18-21	52 25.7	79 39.1	71 35.1	202 81.8
22-25	12 26.7	19 42.2	14 31.1	45 18.2
COL TOT	64 25.9	98 39.7	85 34.4	247 100.0

X^2=.27635 with 2 df p=..8709

Item 27

	A	E	R	ROW TOT
18-21	156 77.2	12 5.9	34 16.8	202 81.8
22-25	35 77.8	6 13.3	4 8.9	45 18.2
COL TOT	191 77.3	18 7.3	38 15.4	247 100.0

χ^2=4.27053 with 2 df p=.1182

Item 28

	A	E	R	ROW TOT
18-21	72 35.8	36 17.9	93 46.3	201 81.7
22-25	15 33.3	8 17.8	22 48.9	45 18.3
COL TOT	87 35.4	44 17.9	115 46.7	246 100.0

χ^2=0.11870 with 2 df p=.9424

Item 29

	A	E	R	ROW TOT
18-21	147 72.8	28 13.9	27 13.4	202 81.8
22-25	31 68.9	6 13.3	8 17.8	45 18.2
COL TOT	178 72.1	34 13.8	35 14.2	247 100.0

χ^2=0.58989 with 2 df p=.7446

Item 30

	A	E	R	ROW TOT
18-21	67 33.2	92 45.5	43 21.3	202 81.8
22-25	13 28.9	18 40.0	14 31.1	45 18.2
COL TOT	80 32.4	110 44.5	57 23.1	247 100.0

χ^2=2.00122 with 2 df p=.3677

Item 31

	A	E	R	ROW TOT
18-21	9 4.5	8 5.0	185 91.6	202 81.8
22-25	6 13.3	2 4.4	37 82.2	45 18.2
COL TOT	15 6.1	10 4.0	222 89.9	247 100.0

χ^2=5.15648 with 2 df p=.0759

Item 32

	A	E	R	ROW TOT
18-21	141 69.8	38 18.8	23 11.4	202 81.8
22-25	27 60.0	15 33.3	3 6.7	45 18.2
COL TOT	168 68.0	53 21.5	26 10.5	247 100.0

χ^2=4.91523 with 2 df p=.0856

Item 33

	A	E	R	ROW TOT
18-21	114	10	78	202
	56.4	5.0	38.6	81.8
22-25	25	6	14	45
	55.6	13.3	31.1	18.2
COL TOT	139	16	92	247
	56.3	6.5	37.2	100.0

χ^2=4.55357 with 2 df p=.1926

Item 34

	A	E	R	ROW TOT
18-21	52	88	62	202
	25.7	43.6	30.7	81.8
22-25	8	22	15	45
	17.8	48.9	33.3	18.2
COL TOT	60	110	77	247
	24.3	44.5	31.2	100.0

χ^2=1.27766 with 2 df p=.5279

Item 35

	A	E	R	ROW TOT
18-21	17	22	163	202
	8.4	10.9	80.7	81.8
22-25	7	5	33	45
	15.6	11.1	73.3	18.2
COL TOT	24	27	196	247
	9.7	10.9	79.4	100.0

χ^2=2.18353 with 2 df p=.3356

Item 36

	A	E	R	ROW TOT
18-21	94 46.5	36 17.8	72 35.6	202 81.8
22-25	18 40.0	9 20.0	18 40.0	45 18.2
COL TOT	112 45.3	45 18.2	90 36.4	247 100.0

χ^2=0.63409 with 2 df p=.7283

Item 37

	A	E	R	ROW TOT
18-21	27 13.4	81 40.1	94 46.5	202 81.8
22-25	4 8.9	14 31.1	27 60.0	45 18.2
COL TOT	31 12.6	95 38.5	121 49.0	247 100.0

χ^2=2.72292 with 2 df p=.2563

Item 38

	A	E	R	ROW TOT
18-21	107 53.0	87 43.1	8 4.0	202 81.8
22-25	27 60.0	15 33.3	3 6.7	45 18.2
COL TOT	134 54.3	102 41.3	11 4.5	247 100.0

χ^2=1.78518 with 2 df p=.4096

Item 39

	A	E	R	ROW TOT
18-21	139 68.8	35 1713	28 13.9	202 81.8
22-25	31 68.9	7 15.6	7 15.6	45 18.2
COL TOT	170 68.8	42 17.0	35 14.2	247 100.0

χ^2=0.14247 with 2 df p=.9312

Item 40

	A	E	R	ROW TOT
18-21	23 11.4	18 8.9	161 79.7	202 81.8
22-25	7 15.6	9 20.0	29 64.4	45 18.2
COL TOT	30 12.1	27 10.9	190 76.9	247 100.0

χ^2=5.78053 with 2 df p=.0556

Item 41

	A	E	R	ROW TOT
18-21	62 30.7	7 3.5	133 65.8	202 81.8
22-25	13 28.9	1 2.2	31 68.9	45 18.2
COL TOT	75 30.4	8 3.2	164 66.4	247 100.0

χ^2=0.26651 with 2 df p=.8752

Item 42

	A	E	R	ROW TOT
18-21	171	11	20	202
	84.7	5.4	9.9	81.8
22-25	38	5	2	45
	84.4	11.1	4.4	18.2
COL TOT	209	16	22	247
	84.6	6.5	8.9	100.0

χ^2=3.05400 with 2 df p=.2172

Item 43

	A	E	R	ROW TOT
18-21	70	111	21	202
	34.7	55.0	10.4	81.8
22-25	20	19	6	45
	44.4	42.2	13.3	18.2
COL TOT	90	130	27	247
	3614	52.6	10.9	100.0

χ^2=2.39150 with 2 df p=.3025

Item 44

	A	E	R	ROW TOT
18-21	177	4	21	202
	87.6	2.0	10.4	81.8
22-25	40	2	3	45
	88.9	4.4	6.7	18.2
COL TOT	217	6	24	247
	87.9	2.4	9.7	100.0

χ^2=1.45347 with 2 df p=.4835

Item 45

	A	E	R	ROW TOT
18-21	100 49.5	18 8.9	84 41.6	202 81.8
22-25	18 40.0	7 15.6	20 44.4	45 18.2
COL TOT	118 47.8	25 10.1	104 42.1	247 100.0

χ^2=2.37281 with 2 df p=.3053

Item 46

	A	E	R	ROW TOT
18-21	28 13.9	13 6.4	161 79.7	202 81.8
22-25	6 13.3	8 17.8	31 68.9	45 18.2
COL TOT	34 13.8	21 8.5	192 77.7	247 100.0

χ^2=6.12956 with 2 df p=.0467

Item 47

	A	E	R	ROW TOT
18-21	168 83.2	6 3.0	28 13.9	202 81.8
22-25	36 80.0	2 4.4	7 15.6	45 18.2
COL TOT	204 82.6	8 3.2	35 14.2	247 100.0

χ^2=0.36619 with 2 df p=.8327

Item 48

	A	E	R	ROW TOT
18-21	150 74.3	39 19.3	13 6.4	202 81.8
22-25	38 84.4	5 11.1	2 4.4	45 18.2
COL TOT	188 76.1	44 17.8	15 6.1	247 100.0

χ^2=2.12974 with 2 df p=.3448

Item 49

	A	E	R	ROW TOT
18-21	138 68.3	50 24.8	14 6.9	202 81.8
22-25	27 60.0	13 28.9	5 11.1	45 18.2
COL TOT	165 66.8	63 25.5	19 7.7	247 100.0

χ^2=1.46401 with 2 df p=.4809

Item 50

	A	E	R	ROW TOT
18-21	150 74.3	39 19.3	13 6.4	202 81.8
22-25	35 77.8	7 15.6	3 6.7	45 18.2
COL TOT	185 74.9	46 18.6	16 6.5	247 100.0

χ^2=0.34202 with 2 df p=.8428

Item 51

	A	E	R	ROW TOT
18-21	38	55	109	202
	18.8	27.2	54.0	81.8
22-25	8	17	20	45
	17.8	37.8	44.4	18.2
COL TOT	46	72	129	247
	18.6	29.1	52.2	100.0

χ^2=2.06442 with 2 df p=.3562

Item 52

	A	E	R	ROW TOT
18-21	53	4	145	202
	26.2	2.0	71.8	81.8
22-25	11	2	32	45
	24.4	4.4	71.1	18.2
COL TOT	64	6	177	247
	25.9	2.4	71.7	100.0

χ^2=0.96797 with 2 df p=.6163

Item 53

	A	E	R	ROW TOT
18-21	21	39	142	202
	10.4	19.3	70.3	81.8
22-25	1	18	26	45
	2.2	40.0	57.8	18.2
COL TOT	22	57	168	247
	8.9	23.1	68.0	100.0

χ^2=10.43726 with 2 df p=.0054

Item 54

	A	E	R	ROW TOT
18-21	171 84.7	9 4.5	22 10.9	202 81.8
22-25	39 86.7	4 8.9	2 4.4	45 18.2
COL TOT	210 85.0	13 5.3	24 9.7	247 100.0

χ^2=2.96597 with 2 df p=.2270

Item 55

	A	E	R	ROW TOT
18-21	60 29.7	27 13.4	115 56.9	202 81.8
22-25	12 26.7	5 11.1	28 62.2	45 18.2
COL TOT	72 29.1	32 13.0	143 57.9	247 100.0

χ^2=0.43886 with 2 df p=.8030

Item 56

	A	E	R	ROW TOT
18-21	30 14.9	39 19.3	133 65.8	202 81.8
22-25	7 15.6	11 24.4	27 60.0	45 18.2
COL TOT	37 15.0	50 20.2	160 64.8	247 100.0

χ^2=0.68589 with 2 df p=.7097

Item 57

	A	E	R	ROW TOT
18-21	139 68.8	55 27.2	8 4.0	202 81.8
22-25	33 73.3	12 26.7	0 0.0	45 18.2
COL TOT	172 69.6	67 27.1	8 3.2	247 100.0

χ^2=1.89449 with 2 df p=.3878

Item 58

	A	E	R	ROW TOT
18-21	46 22.8	82 40.6	74 36.6	202 81.8
22-25	6 13.3	23 51.1	16 35.6	45 18.2
COL TOT	52 21.1	105 42.5	90 36.4	247 100.0

χ^2=2.52672 with 2 df p=.2827

DATA BASE FOR HYPOTHESIS V

Bus. Admin.=Business Administration Students
HPEL=Health, Physical Education and Leisure Services Students

A=Activity
E=Environment
R=Relationships

Item 1

	A	E	R	ROW TOT
Bus. Admin.	48 53.9	2 2.2	39 43.8	89 36.0
HPEL	100 63.3	9 5.7	49 31.0	158 64.0
COL TOT	148 59.9	11 4.5	88 35.6	247 100.0

χ^2=4.97403 with 2 df p=.0832

Item 2

	A	E	R	ROW TOT
Bus. Admin.	34 38.2	26 29.2	29 32.6	89 36.0
HPEL	51 32.3	43 27.2	64 40.5	158 64.0
COL TOT	85 34.4	69 27.9	93 37.7	247 100.0

χ^2=1.61085 with 2 df p=.4469

Item 3

	A	E	R	ROW TOT
Bus. Admin.	33 37.1	10 11.2	46 51.7	89 36.0
HPEL	56 35.4	13 8.2	89 56.3	158 64.0
COL TOT	89 36.0	23 9.3	135 54.7	247 100.0

χ^2=0.82012 with 2 df p=.6636

Item 4

	A	E	R	ROW TOT
Bus. Admin.	33 37.1	13 14.6	43 48.3	89 36.0
HPEL	51 32.3	22 13.9	85 53.8	158 64.0
COL TOT	84 34.0	35 14.2	128 51.8	247 100.0

χ^2=.73471 with 2 df p=.6926

Item 5

	A	E	R	ROW TOT
Bus. Admin.	30 33.7	18 20.2	41 46.1	89 36.0
HPEL	42 26.6	37 23.4	79 50.0	158 64.0
COL TOT	72 29.1	55 22.3	120 48.6	247 100.0

χ^2=1.43353 with 2 df p=.4883

Item 6

	A	E	R	ROW TOT
Bus. Admin.	8 9.0	12 13.5	69 77.5	89 36.0
HPEL	12 7.6	19 12.0	127 80.4	158 64.0
COL TOT	20 8.1	31 12.6	196 79.4	247 100.0

χ^2=.29134 with 2 df p=.8644

Item 7

	A	E	R	ROW TOT
Bus. Admin.	46 41.7	8 9.0	35 39.3	89 36.0
HPEL	80 50.6	18 11.4	60 38.0	158 64.0
COL TOT	126 51.0	26 10.5	95 38.5	247 100.0

χ^2=0.35186 with 2 df p=.8387

Item 8

	A	E	R	ROW TOT
Bus. Admin.	56 62.9	16 1810	17 19.1	89 36.0
HPEL	115 72.8	21 13.3	22 13.9	158 64.0
COL TOT	171 69.2	37 15.0	39 15.8	247 100.0

χ^2=2.60110 with 2 df p=.2724

Item 9

	A	E	R	ROW TOT
Bus. Admin.	53 59.6	19 21.3	17 19.1	89 36.0
HPEL	69 43.7	41 25.9	48 30.4	158 64.0
COL TOT	122 49.4	60 24.3	65 26.3	247 100.0

χ^2=6.15464 with 2 df p=.0461

Item 10

	A	E	R	ROW TOT
Bus. Admin.	29 32.6	33 37.1	27 30.3	89 36.0
HPEL	47 29.7	73 4612	38 24.1	158 64.0
COL TOT	76 30.8	106 42.9	65 26.3	247 100.0

χ^2=2.10825 with 2 df p=.3485

Item 11

	A	E	R	ROW TOT
Bus. Admin.	47 52.8	4 4.5	38 42.7	89 36.0
HPEL	89 56.3	8 5.1	61 38.6	158 64.0
COL TOT	136 55.1	12 4.9	99 40.1	247 100.0

χ^2=0.40354 with 2 df p=.8173

Item 12

	A	E	R	ROW TOT
Bus. Admin.	26 29.2	17 19.1	46 51.7	89 36.0
HPEL	23 14.6	33 20.9	102 64.6	158 64.0
COL TOT	49 19.8	50 20.2	148 59.9	247 100.0

χ^2=7.82847 with 2 df p=.0200

Item 13

	A	E	R	ROW TOT
Bus. Admin.	51 58.0	29 33.0	8 9.1	88 35.8
HPEL	85 53.8	60 38.0	13 8.2	158 64.2
COL TOT	136 55.3	89 36.2	21 8.5	246 100.0

χ^2=0.61971 with 2 df p=.7336

Item 14

	A	E	R	ROW TOT
Bus. Admin.	63 71.6	12 13.6	13 14.8	88 35.8
HPEL	107 67.7	29 18.4	22 13.9	158 64.2
COL TOT	170 69.1	41 16.7	35 14.2	246 100.0

χ^2=0.90596 with 2 df p=.6357

Item 15

	A	E	R	ROW TOT
Bus. Admin.	26 29.5	33 36.5	29 33.0	88 35.8
HPEL	41 25.9	59 37.3	58 36.7	158 64.2
COL TOT	67 27.2	92 37.4	87 35.4	246 100.0

χ^2=0.49400 with 2 df p=.7811

Item 16

	A	E	R	ROW TOT
Bus. Admin.	54 61.4	27 30.7	7 8.0	88 35.8
HPEL	89 56.3	57 36.1	12 7.6	158 64.2
COL TOT	143 58.1	84 34.1	19 7.7	246 100.0

χ^2=0.73753 with 2 df p=.6916

Item 17

	A	E	R	ROW TOT
Bus. Admin.	20 22.7	18 20.5	50 56.8	88 35.8
HPEL	26 16.5	33 20.9	99 62.7	158 64.2
COL TOT	46 18.7	51 20.7	149 60.6	246 100.0

χ^2=1.51221 with 2 df p=.4695

Item 18

	A	E	R	ROW TOT
Bus. Admin.	71 80.7	10 11.4	7 8.0	88 35.8
HPEL	131 82.9	11 7.0	16 10.1	158 64.2
COL TOT	202 82.1	21 8.5	23 9.3	246 100.0

χ^2=1.60217 with 2 df p=.4488

Item 19

	A	E	R	ROW TOT
Bus. Admin.	33 37.5	5 5.7	50 56.8	88 35.8
HPEL	40 25.3	8 5.1	110 69.6	158 64.2
COL TOT	73 29.7	13 5.3	160 65.0	246 100.0

χ^2=4.29239 with 2 df p=.1169

Item 20

	A	E	R	ROW TOT
Bus. Admin.	16 18.2	21 23.9	51 58.0	88 35.8
HPEL	28 17.7	29 18.4	101 63.9	158 64.2
COL TOT	44 17.9	50 20.3	152 61.8	246 100.0

χ^2=1.17667 with 2 df p=.5553

Item 21

	A	E	R	ROW TOT
Bus. Admin.	78 88.6	6 6.8	4 4.5	88 35.8
HPEL	136 86.7	5 3.2	16 10.1	158 64.2
COL TOT	215 87.4	11 4.5	20 8.1	246 100.0

χ^2=3.87681 with 2 df p=.1439

Item 22

	A	E	R	ROW TOT
Bus. Admin.	14 15.9	53 60.2	21 23.9	88 35.6
HPEL	26 16.4	94 59.1	39 24.5	159 64.4
COL TOT	40 16.2	147 59.5	60 24.3	247 100.0

χ^2=0.02885 with 2 df p=.9857

Item 23

	A	E	R	ROW TOT
Bus. Admin.	35 39.8	8 9.1	45 51.1	88 35.6
HPEL	51 32.1	10 6.3	98 61.6	159 64.4
COL TOT	86 34.8	18 7.3	143 57.9	247 100.0

χ^2=2.65259 with 2 df p=.2755

Item 24

	A	E	R	ROW TOT
Bus. Admin.	68 77.3	16 18.2	4 4.5	88 35.6
HPEL	124 78.0	27 17.0	8 5.0	159 64.4
COL TOT	192 77.7	43 17.4	12 4.9	247 100.0

X^2=0.07817 with 2 df p=.9617

Item 25

	A	E	R	ROW TOT
Bus. Admin.	71 80.7	7 8.0	10 11.4	88 35.6
HPEL	124 78.0	14 8.8	21 13.2	159 64.4
COL TOT	195 78.9	21 8.5	31 12.6	247 100.0

X^2=0.25375 with 2 df p=.8808

Item 26

	A	E	R	ROW TOT
Bus. Admin.	30 34.1	30 34.1	28 31.8	88 35.6
HPEL	34 21.4	68 42.8	57 35.8	159 64.4
COL TOT	64 25.9	98 39.7	85 34.4	247 100.0

X^2=4.87251 with 2 df p=.0875

Item 27

	A	E	R	ROW TOT
Bus. Admin.	67 76.1	7 8.0	14 15.9	88 35.6
HPEL	124 78.0	11 6.9	24 15.1	159 64.4
COL TOT	191 77.3	18 7.3	38 15.4	247 100.0

χ^2=0.13302 with 2 df p=.9357

Item 28

	A	E	R	ROW TOT
Bus. Admin.	35 39.8	16 18.2	37 42.0	88 35.8
HPEL	52 32.9	28 17.7	78 49.4	158 64.2
COL TOT	87 35.4	44 17.9	115 46.7	246 100.0

χ^2=1.40720 with 2 df p=.4948

Item 29

	A	E	R	ROW TOT
Bus. Admin.	65 73.9	10 11.4	13 14.8	88 35.6
HPEL	113 71.1	24 15.1	22 13.8	159 64.4
COL TOT	178 72.1	34 13.8	35 14.2	247 100.0

χ^2=0.66920 with 2 df p=.7156

Item 30

	A	E	R	ROW TOT
Bus. Admin.	28 31.8	41 46.6	19 21.6	88 35.6
HPEL	52 32.7	69 43.4	38 23.9	159 64.4
COL TOT	80 32.4	110 44.5	57 23.1	247 100.0

χ^2=0.27437 with 2 df p=.8718

Item 31

	A	E	R	ROW TOT
Bus. Admin.	7 8.0	3 3.4	78 88.6	88 35.6
HPEL	8 5.0	7 4.4	144 90.6	159 64.4
COL TOT	15 6.1	10 4.0	222 89.9	247 100.0

χ^2=0.95859 with 2 df p=.6192

Item 32

	A	E	R	ROW TOT
Bus. Admin.	67 76.1	14 15.9	7 8.0	88 35.6
HPEL	101 63.5	39 24.5	19 11.9	159 64.4
COL TOT	168 68.0	53 21.5	26 10.5	247 100.0

χ^2=4.14549 with 2 df p=.1258

Item 33

	A	E	R	ROW TOT
Bus. Admin.	60 68.2	4 4.5	24 27.3	88 35.6
HPEL	79 49.7	12 7.5	68 42.8	159 64.4
COL TOT	139 56.3	16 6.5	92 37.2	247 100.0

χ^2=7.88304 with 2 df p=.0194

Item 34

	A	E	R	ROW TOT
Bus. Admin.	29 33.0	37 42.0	22 25.0	88 35.6
HPEL	31 19.5	73 45.9	55 34.6	159 64.4
COL TOT	60 24.3	110 44.5	77 31.2	247 100.0

χ^2=6.08524 with 2 df p=.0477

Item 35

	A	E	R	ROW TOT
Bus. Admin.	12 13.6	10 11.4	66 75.0	88 35.6
HPEL	12 7.5	17 10.7	130 81.8	159 64.4
COL TOT	24 9.7	27 10.9	196 79.4	246 100.0

χ^2=2.51137 with 2 df p=.2849

Item 36

	A	E	R	ROW TOT
Bus. Admin.	43 48.9	16 18.2	29 33.0	88 35.6
HPEL	69 43.4	29 18.2	61 38.4	159 64.4
COL TOT	112 45.3	45 18.2	90 36.4	247 100.0

χ^2=0.82861 with 2 df p=.6608

Item 37

	A	E	R	ROW TOT
Bus. Admin.	13 14.8	26 29.5	49 55.7	88 35.6
HPEL	18 11.3	69 43.4	72 45.3	159 64.4
COL TOT	31 12.6	95 38.5	121 49.0	247 100.0

χ^2=4.61383 with 2 df p=.0996

Item 38

	A	E	R	ROW TOT
Bus. Admin.	48 54.5	36 40.9	4 4.5	88 35.6
HPEL	86 54.1	66 41.5	7 4.4	159 64.4
COL TOT	134 54.3	102 41.3	11 4.5	247 100.0

χ^2=0.00973 with 2 df p=.9951

Item 39

	A	E	R	ROW TOT
Bus. Admin.	60 68.2	16 18.2	12 13.6	88 35.6
HPEL	110 69.2	26 16.4	23 14.5	159 64.4
COL TOT	170 68.8	42 17.0	35 14.2	247 100.0

X^2=0.14724 with 2 df p=.9290

Item 40

	A	E	R	ROW TOT
Bus. Admin.	12 13.6	12 13.6	64 72.7	88 35.6
HPEL	18 11.3	15 9.4	126 79.2	159 64.4
COL TOT	30 12.1	27 10.9	190 76.9	247 100.0

X^2=1.47814 with 2 df p=.4776

Item 41

	A	E	R	ROW TOT
Bus. Admin.	29 33.0	4 4.5	55 62.5	88 35.6
HPEL	46 28.9	4 2.5	109 68.6	159 64.4
COL TOT	75 30.4	8 3.2	164 66.4	247 100.0

X^2=1.33524 with 2 df p=.5129

Item 42

	A	E	R	ROW TOT
Bus. Admin.	80 90.9	4 4.5	4 4.5	88 35.6
HPEL	129 81.1	12 715	18 11.3	159 64.4
COL TOT	209 84.6	16 6.5	22 8.9	247 100.0

X^2=4.34743 with 2 df p=.1138

Item 43

	A	E	R	ROW TOT
Bus. Admin.	33 37.5	45 51.1	10 11.4	88 35.6
HPEL	57 35.8	85 53.5	17 10.7	159 64.4
COL TOT	90 36.4	130 52.6	27 10.9	247 100.0

X^2=0.12383 with 2 df p=.9400

Item 44

	A	E	R	ROW TOT
Bus. Admin.	82 93.2	2 2.3	4 4.5	88 35.6
HPEL	135 84.9	4 2.5	20 12.6	159 64.4
COL TOT	217 87.9	6 2.4	24 9.7	247 100.0

X^2=4.21761 with 2 df p=.1214

Item 45

	A	E	R	ROW TOT
Bus. Admin.	50 56.8	5 5.7	33 37.5	88 35.6
HPEL	68 42.8	20 12.6	71 44.7	159 64.4
COL TOT	118 47.8	25 10.1	104 42.1	247 100.0

X^2=5.69177 with 2 df p=.0581

Item 46

	A	E	R	ROW TOT
Bus. Admin.	16 18.2	5 5.7	67 76.1	88 35.6
HPEL	18 11.3	16 10.1	125 78.6	159 64.4
COL TOT	34 13.8	21 8.5	192 77.7	247 100.0

X^2=3.26091 with 2 df p=.1958

Item 47

	A	E	R	ROW TOT
Bus. Admin.	72 81.8	2 2.3	14 15.9	88 35.6
HPEL	132 83.0	6 3.8	21 13.2	159 64.4
COL TOT	204 82.6	8 3.2	35 14.2	247 100.0

X^2=0.69563 with 2 df p=.7062

Item 48

	A	E	R	ROW TOT
Bus. Admin.	71 80.7	18 14.8	4 4.5	88 35.6
HPEL	117 73.6	31 19.5	11 6.9	159 64.4
COL TOT	188 76.1	44 17.8	15 6.1	247 100.0

X^2=1.60972 with 2 df p=.4472

Item 49

	A	E	R	ROW TOT
Bus. Admin.	65 73.9	17 19.3	6 6.8	88 35.6
HPEL	100 62.9	46 28.9	13 8.2	159 64.4
COL TOT	165 66.8	63 25.5	19 7.7	247 100.0

X^2=3.20861 with 2 df p=.2010

Item 50

	A	E	R	ROW TOT
Bus. Admin.	69 78.4	14 15.9	5 5.7	88 35.6
HPEL	116 73.0	32 20.1	11 6.9	159 64.4
COL TOT	185 74.9	46 18.6	16 6.5	247 100.0

X^2=0.89943 with 2 df p=.6378

Item 51

	A	E	R	ROW TOT
Bus. Admin.	21 23.9	29 33.0	38 43.2	88 35.6
HPEL	25 1517	43 27.0	91 57.2	159 64.4
COL TOT	46 18.6	72 2911	129 52.2	247 100.0

X^2=4.83591 with 2 df p=.0891

Item 52

	A	E	R	ROW TOT
Bus. Admin.	24 27.3	1 1.1	63 71.6	88 35.6
HPEL	40 25.2	5 3.1	114 71.7	159 64.4
COL TOT	64 25.9	6 2.4	177 71.7	247 100.0

X^2=1.03848 with 2 df p=.5950

Item 53

	A	E	R	ROW TOT
Bus. Admin.	10 11.4	23 26.1	55 62.5	88 35.6
HPEL	12 7.5	34 21.4	113 71.1	159 64.4
COL TOT	22 8.9	57 23.1	168 68.0	247 100.0

X^2=2.09242 with 2 df p=.3513

Item 54

	A	E	R	ROW TOT
Bus. Admin.	82 93.2	2 2.3	4 4.5	88 35.6
HPEL	128 80.5	11 6.9	20 12.6	159 64.4
COL TOT	210 85.0	13 5.3	24 9.7	247 100.0

X^2=7.15599 with 2 df p=.0279

Item 55

	A	E	R	ROW TOT
Bus. Admin.	32 36.4	9 10.2	47 53.4	88 35.6
HPEL	40 25.2	23 14.5	95 60.4	159 64.4
COL TOT	72 29.1	32 13.0	143 57.9	247 100.0

X^2=3.70100 with 2 df p=.1572

Item 56

	A	E	R	ROW TOT
Bus. Admin.	20 22.7	14 15.9	54 61.4	88 35.6
HPEL	17 10.7	36 22.6	106 66.7	159 64.4
COL TOT	37 15.0	50 20.2	160 64.8	247 100.0

X^2=6.99206 with 2 df p=.0303

Item 57

	A	E	R	ROW TOT
Bus. Admin.	60 68.2	23 26.1	5 5.7	88 35.6
HPEL	112 70.4	44 27.7	3 1.9	159 64.4
COL TOT	172 69.6	67 27.1	8 3.2	247 100.0

X^2=2.60975 with 2 df p=.2712

Item 58

	A	E	R	ROW TOT
Bus. Admin.	25 28.4	33 37.5	30 34.1	88 35.6
HPEL	27 17.0	72 45.3	60 37.7	159 64.4
COL TOT	52 21.1	105 42.5	90 36.4	247 100.0

X^2=4.52786 with 2 df p=.1039

VITA

Jan Summers

Candidate for the Degree of

Doctor of Education

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