

AN ANALYSIS OF THE RELATIONSHIP BETWEEN LEISURE
INTERESTS AND REPRESENTATIONAL SYSTEMS AMONG
COLLEGE FRESHMAN STUDENTS WITH
IMPLICATIONS FOR LEISURE
COUNSELING

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CHAPTER I

INTRODUCTION

Recreation professionals for decades have been saying to the world, "We have a good thing going. Let us help you enjoy yourselves more." Until recently, leisure was generally considered sinful in a work ethic oriented society. The major portion of one's day used to be devoted to earning a living; but, during the 1970s a greater portion of an individual's day has become discretionary time. These periods can be used by the individual to seek adventure by rock climbing or rock throwing, constructively or destructively. One can relax peacefully at a river's edge, at a concert, before the television or drinking with friends. Caught up in the demanding challenge of providing services and varied opportunities for the public, leisure professionals neglected conducting scientific studies to provide valid answers to numerous questions related to leisure and support the claims of the worth of leisure pursuits. In the past decade, a vast wave of interest in the study of leisure has erupted not only among recreation professionals but also among sociologists, psychologists, educators, law enforcement personnel, and leisure counselors.

It is becoming more apparent that use of one's leisure time is of utmost importance in fulfilling the physical, psychological and emotional needs of individuals. Studies have been conducted by Murphy, Neulinger, Simon¹ and others on leisure as a sociological phenomenon;

and they have found that, although more complex, modern societal needs and expressions of these needs have not changed significantly over the years.

Throughout history there is evidence of man's outlet for self-expression through the arts. Pottery-making and sculpture were found among the early civilizations of Egypt and Babylonia. Hunting, spear throwing and wrestling were also vital to man for entertainment as well as survival. It has been stated that the quality of its leisure activity sets the tone of any society, defines its version of the good life and measures the level of its civilization.²

It is vital that social scientists, mental health and recreation professionals have a scientific understanding of recreation and leisure. A more thorough knowledge is needed about the value particular activities have for individuals and how the leisure activities contribute to personal well being. Goodman, Gunn, Mercer and Wolf³ have conducted various studies relating needs of individuals to leisure pursuits; and their studies indicated that if leisure activities are not satisfying individual needs, by providing an avenue for self-expression or fulfillment, the activities are inadequate, a disappointment to the participant and as a result often discarded. Therefore, the broadening of our scope in understanding how to provide an enjoyable, satisfying and rewarding leisure experience for individuals is a continual challenge and one of the greatest needs in the people-oriented field of recreation.

A comparatively recent evolvement in the recreation profession is the area of leisure counseling, which originated in 1955 at the Veterans Administration Hospital of Kansas City where rehabilitated veterans were given assistance in spending their newfound leisure.⁴

This is basically a helping process for those who can use assistance in developing a broader base of satisfying and rewarding leisure involvements. Background information needed to facilitate this process includes the determination of what an individual does with his leisure; with whom he finds satisfying, rewarding leisure; if he truly likes to play; if the play experience has value to him; what his most rewarding experiences are; and what new leisure experiences he would like to explore. Additional information helpful to the leisure counselor is a new concept related to an individual's kinesthetic, auditory and visual sensory modes and their influence on participation in leisure activities. If assistance is to be given individuals in the discovery of a satisfying leisure lifestyle, the answers to these and other questions must be sought. The Guilford-Schneideman-Zimmerman Interest survey perhaps formed the bridge from vocation to avocation and the need for determining a person's leisure activities. The survey included eighteen interest traits with "hobby" scores as well as "vocational" scores.⁵ In the early 1970s, tools were specifically developed for leisure counseling based on the Strong Vocational Interest Blank and the Kuder Preference Record, both widely used tests developed by psychologists for use in educational and vocational counseling.⁶ In 1974, the schools in Milwaukee, Wisconsin, provided leisure counseling for the general public by administering leisure interest inventories to determine the top three leisure interests which were matched to a computerized listing of all recreation activities available in the area.⁷

As interest and training in leisure counseling have continued to expand, new techniques have been incorporated including the use of

neuro-linguistic programming (NLP), which concentrates on the identification of sensory modes or representational systems used by individuals as they consciously react to their exposures and lead systems expressive of their subconscious reactions.⁸

Business executives, lawyers, sales people, teachers, marriage counselors, doctors, managers and therapists are receiving NLP training and applying its principles in their respective specialties.⁹

Educators are aware that individuals learn in different ways. Research conducted at Penn State University and Miami University by Macomber and Siegel support the effectiveness of the use of educational television. Postlethwait's audiotutorial method developed for use at Purdue University has been examined by various researchers and was found to be a useful technique.¹⁰ The values of these methods varies depending upon the objective, characteristics of the students and the excellence of the materials. If educators can learn more effective methods of detecting how their individual students receive information, they can then adapt their teaching technique to communicate more directly with each student in his primary sensory mode. For example, if it can be detected that an individual is visually oriented, the exposure of that student to educational materials through visual media, including reading, will probably be more effective than the lecture or discussion methods for that student.

Just as some strategies are better for coping with life than others, there are strategies that are more successful in performing various skills. Grinder said:

You can't do chemistry well without making constructed images at a certain point. But that's not the best way to write poetry or compose music. Ideally, people should have

a whole range of strategies available to them, so they can fit the best one to the demands of the situation.¹¹

By being alert to both auditory and visual clues, one can match systems to establish good rapport with another individual. If a person is selling a car and the client is auditory, it would be well to talk about the purr of the motor and the squeal of the radial tires. If the individual is kinesthetic, the tight feel of the steering, the low center of gravity and the comfort of the bucket seats might be more appealing. A visually oriented person would probably be more intrigued with the color, style and lines. When teaching tennis to an auditorially sensitive individual, speaking of and demonstrating the swish of the racquet or the "thunk" in the sweet spot as opposed to the rattle when hit at the edges, would register in his sensory system effectively.

Recognizing the values and the need for research in the field of leisure counseling, this study of sensory systems in relation to leisure interests has been conducted.

Need for Study

Very few research studies have been conducted to record the sensory representational systems used by different individuals, and there are no studies dealing with the possible relationship between the sensory modes and leisure activities. If this could be determined, it might give a better understanding of why people participate in certain leisure activities. It could also help clarify why some are more successful in certain activities than others. Consequently, this knowledge could assist educators, program planners and counselors in providing more effective communication and leisure services.

The technology of classroom education contains the results of the realization that a learner is most likely to learn a fact or concept if it is presented to as many of the learner's sensory channels as is possible.¹² The emphasis on multi-media and multi-modal presentation has developed from this realization.

Different individuals learn best through different sensory modes or input channels.¹³ If the learner can become aware of the most effective or most highly developed sensory channel, two results may be affected. The learner may continue to pursue knowledge via the preferred channel or may choose to develop more fully the other sensory channels by exposure to learning experiences which more directly emphasize those modes. The scientific identification of leisure activities to related sensory modes (kinesthetic, auditory, visual), could assist individuals in the learning process, aid instructors in the teaching process and broaden the general understanding of the learning process.

For many years, counseling and guidance professionals have lacked detailed descriptive tools for discovering the "thinking state" of a client.

Grinder, Bandler and associates in the development of Neuro-Linguistic Programming, an approach to developing a technology of learning and communication, have researched various methods of determining how someone is thinking and/or learning.

Grinder was a former linguistics professor at the University of California, Santa Cruz, and the co-author of a methodological classic, A Guide to Transformational Grammar. Bandler had been a mathematician before becoming a Gestalt therapist. Leslie Cameron-Bandler, their associate and co-developer, was trained in psychology and counseling

and Judith DeLozier, another associate, had background in religious studies.¹⁴

Bandler's challenge to Grinder was to do for therapy and counseling what linguists did for language: transform it into a working model.

They reduced to formulas and a notational system borrowed from linguistics how a person takes in sensory impressions, mentally organizes them in cognitive processes like memory and decision-making and then translates the sequence into a response. It codifies and synthesizes the insights of linguistics, kinesics (body language) and cybernetics (the study of communications systems).¹⁵ Gregory Bateson applauds its success in "making linguistics into a Base for Theory and simultaneously a tool for therapy."¹⁶

Bandler and Grinder have analyzed the kind of systematic therapeutic behavior that well-known therapists such as Satir, Perls and Erickson, use with clients. One of their major findings, reported in 1975, is that in establishing and maintaining rapport for counseling purposes, the therapist can listen to predicates--the verbs, adverbs and adjectives--the client uses, to find out what representational system the individual is accessing in his/her ongoing internal experience.¹⁷ In other words, the predicate indicates to the listener what aspects of the experience is consciously understood.

The representational system is used as a foundation for a model of accessing cues described by Grinder, Bandler and other Neuro-Linguistic Programming workers. Each person has a partly idiosyncratic, partly commonly-shared set of behavioral patterns or cues which are connected with how that person is representing internal experience.¹⁸

A major pattern of assessing cues is linguistic. The cues are the verbs and total predicates that the person uses in his verbalization. The representational system model asserts that people internally represent or understand their world in a system that corresponds to sensory input modes: visual, auditory, kinesthetic, gustatory and olfactory.¹⁹ The first three are the primary modes. An example of the visual mode would be when a person says, "I see what you're saying" or "I get the picture" in which he is speaking of his own internal experience or actually trying to access a picture clearly and being able to do so. Expressions such as "You're coming through loud and clear" or "That sounds right" indicate the individual is auditorily representing his internal experience. Accessing via a kinesthetic internal representation might be revealed through expressions of "That gives me a warm feeling" or "That feels right."

Other behavior patterns include eye scanning, breathing, facial tone and color, pupil dilation, pulse rate, voice pitch and rate, body postures and ideomotor movements, moisture level in eyes and on the skin.²⁰

Research Questions

Included in any research study is the search for answers to questions related to the primary purpose of the study. The two presented here are vital to the completion of this research.

- 1) Is there a dominance of one representational system in describing leisure experience?
- 2) Are there combinations of representational systems in describing leisure experiences?

Hypotheses

Primary and related statements which will be considered as this study is conducted are those as presented:

- 1) There is no significant relationship between a person's most valued representational system and the leisure interest categories.
- 2) There is no significant difference between male and female students in their leisure activity interests.
- 3) There is no significant difference between males and females in their most valued representational systems.
- 4) There is no significant difference between freshman students in the six colleges in each leisure interest category.
- 5) There is no significant difference between the students in the various colleges in each of the three representational systems.
- 6) There is no significant difference between students in preferred activity groups in the three most valued representational systems.
- 7) There is no significant difference between size of participation groups and their representational systems.
- 8) There is no significant difference between size of home town and leisure interest groups.
- 9) There is no significant difference between size of home town and representational systems.

Limitations of the Study

Although standard research methods have been incorporated into this study, the following limitations remain:

- 1) The use of Oklahoma State University freshman students as subjects for this study limits the results to this segment of the university community.
- 2) Although a random cluster sampling was used, those students who had "tested out" of English composition were not included in this sample.
- 3) The use of "written predicates" versus recorded or individual interviews is a limiting factor.
- 4) The data depends on each person's ability to express himself/herself in writing.

Basic Assumptions

Based on the research of the authorities in the fields of psychology and recreation/leisure science, the following basic assumptions were made concerning this study:

- 1) No two people are alike, but people do possess observable similarities.²¹
- 2) The students in expressing themselves in writing concerning a favorite leisure activity will reveal identifiable representational system preference.
- 3) The activity scale used is reliable and valid.²²

Definitions

Leisure - Any pursuit which is voluntary, devoid of obligation, unnecessary for subsistence, and engaged in for its intrinsic enjoyment; a state of mind.

Leisure Counseling - "is. . . a helping process that utilizes verbal facilitation techniques to promote self awareness; awareness of leisure attitudes, values and feelings; and the development of decision-making and problem-solving skills related to leisure participation with self, others, and the environment."²³

Representational Systems - Sensory modes individuals consciously use to gather information about the world, organize it and express themselves.

Most Valued Representational System - The most highly developed or preferred sensory channel.

Visual - Pertaining to sights or pictures.

Auditory - Pertaining to sounds or hearing.

Kinesthetic - A body sensation or feeling.

Leisure Interest Categories - Groupings or clusters of leisure activities.

Preferred Activity Groups - Groups of leisure activities described as very meaningful.

Participation Groups - Those with whom individuals choose to share their meaningful leisure experiences.

FOOTNOTES

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²Scout Lee Gunn, "A Comparative Study of Selected Personality Traits in College Students and Their Participation in Selected Outdoor Recreational Activities" (unpub. Ed.D. dissertation, University of Georgia, 1972), p. 40.

³M. Goodman, M. Bley and D. Dye, "The Adjustment of Aged Users of Leisure Programs," American Journal of Orthopsychology, 44:1 (1974), p. 142; Gunn., p. 41; D. Mercer, "The Role of Perception in the Recreation Experience: A Review and Discussion," Journal of Leisure Research, 3:4 (1971), p. 261; W. Wolf, "Dealing Constructively with Our Increased Leisure," Journal of Psychotherapy, 2 (1970), p. 440.

⁴A.E. Epperson, Peter Witt, and Gerald Hithusen, Leisure Counseling: An Aspect of Leisure Education (Springfield, 1974), p. 83.

⁵Ann Walshe Willoughby, "Leisure and Personality," Leisure Counseling (Springfield, 1974), p. 88.

⁶Ibid.

⁷Gene A. Hayes, "Profession and Leisure Counseling," Journal of Health, Physical Education and Recreation (April, 1977), p. 36.

⁸Richard Bandler and John Grinder, Patterns of Hypnotic Techniques of Milton H. Erickson, M.D., 1 (Cupertino, 1975), p. 14.

⁹Daniel Goleman, "People Who Read People," Psychology Today (July, 1979), p. 66.

¹⁰Wilbert J. McKeachie, Teaching Tips (Lexington, 1978), p. 123.

¹¹Goleman, p. 42.

¹²Stephen R. Lankton, Practical Magic: The Clinical Applications of Neuro-Linguistics Programming (Meta Publications, 1979), p. 64.

¹³Ibid.

¹⁴Goleman, p. 45

¹⁵Ibid.

¹⁶John Grinder and Richard Bandler, The Structure of Magic II (Palo Alto, 1975), p. 102.

¹⁷Richard Bandler and John Grinder, The Structure of Magic I (Palo Alto, 1975), p. 78.

¹⁸Ibid.

¹⁹Lankton, p. 64.

²⁰Bandler, The Structure of Magic I, p. 83.

²¹Gunn, p. 28.

²²George E. McKechnie, Manual for the McKechnie Leisure Activities Blank (Palo Alto, 1974), p. 6.

²³Scout Lee Gunn and Carol Ann Peterson, Therapeutic Recreation Program, Design, Principles and Procedures (Inglewood Cliffs, 1978), p. 214.

CHAPTER II

REVIEW OF SELECTED LITERATURE

One's leisure, uncommitted or discretionary time can be the most valuable and rewarding period. On the other hand, it can be disastrous for both the individual and the society, contingent upon how it is handled. It is vital that individual needs, choices and learning patterns are understood and continually expanded. Contrary to the situation in the ancient Greek culture in which leisure and education were reserved for the well born,¹ both are available to most people today. MacLean vividly describes this concept by stating,

Within the past six decades, the work week has dropped from over 60 hours to fewer than 40. The New York Electrical Unions are now working a 25 hour week. The new GM contract retires a 30 year man at 56. The combination of automation, labor laws and medical advances which have advanced the life-span, and compulsory retirement, have added leisure in significantly larger chunks than ever before. Hours, two day weekends, one or two week vacations, the experimental three month vacation now in effect in some industries, five to eight hour work days--why this is the Utopia that Sir Thomas Moore described four centuries ago.²

The United States has undergone dynamic changes in the process of urbanization. The majority of its citizens are presently residents of a city rather than rural environment. The pressures/stresses of today affect all phases of one's life. . . . including leisure choices.

MacLean emphasizes,

We are living in a hyper-productive, affluent, overpopulated, cybernated, questioning (nothing is sacred), production-oriented, work-oriented, very young (one-third of the

population will be under 15 by 1985), success-oriented, noise bombarded, hyper-mobile nation.

Life styles are changing at a breathless pace and the chasms are widening not only between age groups but between the sexes, between campuses and communities, the races, the haves and the have-nots, the ecologists and the industrialists, the urban and the rural populations and almost any other polarization which you want to make.³

During the recent decade, extension of available leisure time has become a reality for many through four-day work weeks, earlier retirement and new levels of technology.

In Toffler's Future Shock, he warns that:

The increased speed of broad scientific technological, and social change makes itself felt in the life of the individual. A great deal of human behavior is motivated by attraction or antagonism toward the pace of life enforced on the individual by the society or group within which he is embedded. Failure to grasp this principle lies behind the dangerous incapacity of education and the psychology to prepare people for fruitful roles in a superindustrial society.⁴

MacLean comments that,

Leisure may bring opportunity for enjoyment of art, music, and science; for development of health, strength and satisfaction; for acquisition of inner resources which lead to contentment, for following a just and rewarding cause. Conversely, it may bring boredom, delinquency, illness, over-indulgence, deterioration, frustration, and corruption. The recreation profession has an obligation to make the first⁵ alternatives more comprehensible, exciting and rewarding.

Leisure Counseling

Leisure counseling is one area of the leisure services profession that has been especially noted for its humanistic orientation. The satisfaction of needs and its implied consequence of "self realization" have been held as the main goals of most public leisure service agencies.

Fain stated that the goal of leisure counseling is to bridge the gap between an individual's real and ideal leisure profile. "The

real is what a person actual does in his leisure; the ideal is what he would like to do," according to Fain.⁶

A basic problem is that people frequently do not know how to utilize leisure in a manner which would profit them most. Overs comments that, "Life is only tolerable when it holds meaning." He believes that meaningful involvement (a phenomenological approach) in an activity is essential for long-term satisfaction with it.⁷

Overs recognized three types of counseling: avocational, vocational, and personal adjustment. Although personality change is not a goal of avocational counseling, clarification of self-image and an increased awareness of personal value systems and their influence on choice and behavior are often essential steps that are taken by the person who is able to accurately assess his talents or freely express his interests.⁸

The two most often used criteria of success and satisfaction in avocational activities are interpersonal relationships among the people in the activities and displays of skill, accomplishments, and competence of the individual participants.⁹

Motivation is enhanced by activities which have the greatest interest to the individual. As Overs states it,

Among those who can benefit from avocational counseling are retirees, those about to retire, the disabled, high school students attempting to select avocational abilities in line with their developmental needs and educational and occupational goals. College students can be helped to pinpoint with more precision avocational activities related to occupational goals or specifically designed to offer contrasting activities as a change of pace from occupational careers.¹⁰

Wilson, Mirenda and Rutkowski emphasize serving three distinct populations through leisure counseling: 1) The individual in the mainstream of society can become aware of the abundance of leisure

activities available in the community. 2) Those in a "halfway or sheltered population" while readjusting to "mainstream" life; the drug addict, alcoholic, prison inmate and others, will find leisure counseling helpful in accessing personal potential and assistance for referral to activities. 3) The special population (aged, ill, handicapped and culturally disadvantaged) can benefit through re-discovering personal worth via meaningful activity involvement.¹¹

The holistic view of leisure is reflected in a new trend of the recreation profession in which recreators are being educated in the concept of human lifestyle development. This new philosophy was well stated by David Gray when he said, 'We must recognize the potential role of recreation in the development of people. The goal of organized recreation programs is to provide people opportunities for the exercise of their power, opportunity for recreational experience, opportunity for the development of positive self image.'¹²

A counseling model may be looked at as comprising two essential elements; first, a philosophical or theoretical construct related to the nature of man and his behavior; and second, an established set of techniques for conducting the behavioral change process.

McKechnie stated,

The client improperly counseled to take up pursuits--activities that he subsequently dislikes or finds otherwise unsuitable--will (may) become frustrated and lose faith both in the leisure counseling process and in leisure itself.¹³

Brammar and Shastrum have also suggested that the pursuit of change in a client without first a solid set of assumptions upon which to base counseling, results in nothing more than applying cookbook techniques.¹⁴ The process of leisure counseling should be the ultimate relationship between an individual's leisure behavior and his physical and psychological well-being and adjustment. Leisure counseling is a helping process which facilitates interpretive, affective and/or

behavioral changes in others toward the attainment of their total leisure well-being.¹⁵

McDowell stated that the function of the leisure counselor is to act as an interpreter between the behavior and conditions of the person, and the leisure experience (this assumes the counselor is sensitive to and comprehensively knowledgeable of the nature of the leisure experience); or to act as a liaison between the community and/or the client's personal leisure resources, and the essential nature (attitudes, values, self-concept, etc.) and circumstances (physical, mental, social, economical, geographical, cultural, etc.) limitations of the client.¹⁶

Three leisure counseling orientations are: 1) information-retrieval dissemination service (assessment of present and future leisure interests to "match" individual with community or personal resources); 2) developmental-education service (self understanding, decision-making, and problem-solving); 3) remedial-therapeutic service which provide him with skills, resource information and ancillary information that will ultimately allow the patient to integrate into community problems.¹⁷

McDowell cited eight steps in the leisure counseling model:

- 1) Identification of general leisure goals.
- 2) Identification of underlying needs being met.
- 3) Identification of specific performance (lifestyle) criteria.
- 4) Identification of possible obstacles which may be preventing leisure actualization.
- 5) Deliberation and judgment of specific leisure experience/behavior alternatives and consequences.

- 6) Dissemination, sharing of information and planning.
- 7) Participation and evaluation.
- 8) Termination and follow-up.¹⁸

Perhaps the most challenging orientation to the recreation specialist is the lifestyle development and education. It assumes a "verbal" medium to the specialist's thinking, competence or responsibility-- something which Acuff has purported to be foreign to the recreator's usual "activity" orientation.¹⁹

Glasser, in his book, Identity Society, explains his belief that in western society man's basic needs have switched from survival, the need for sustenance and shelter, to identity.²⁰ Identity refers to the need for love and worth. Love is caring, friendship and confidence, whereas worth means self-esteem or a feeling of happiness and satisfaction. Attaining these two basic needs will strengthen a successful identity.²¹

Depressed individuals seek solitary activity with repetition of experiences perceived as successes and quick rejection of those perceived as failures, which can result in confirmation of a low self-concept. This was supported by Gastorf and Robbins' study. According to Lavinsohn and Graef depression affects the level of functioning for an individual, and there are many social implications of the findings that depressed populations tend to identify fewer pleasant activities in which they engage. Both clinical observations and empirical studies support the premise that depressed individuals have leisure patterns different from the rest of the population.²²

Among the "coping strategies" mentioned by Menninger, president of the Menninger Foundation, are exercise, meditation, hobbies or

of drawing support from groups. He emphasized that each individual should examine how he or she actually spends his limited supply of time, money and energy. Too often they are involved in a lot of relatively unimportant things, or things that are important to other people.²³

Individual choices of use of leisure are a reflection of whether individuals are prepared to enjoy it or react adversely to the stresses of life by escape through drugs or anti-social acts. The ability to cope with anxieties and to benefit from available leisure seems to have a positive relationship according to Menninger.²⁴

Leisure Participation and Preference

Behavioral scientists tend to agree that people engage in activities which they have come to understand and appreciate and which bring satisfaction and pleasure. Some moralists rebel at the pleasure-ridden society of today, and perhaps rightly so, in their narrow interpretation of pleasure as sensual gratification of frivolous amusement. However, pleasure can imply the sense of joy or delight which comes from hitting the ball well on the golf course, increasing a bowling average, conquering the slalom ski, engaging in deep conversation with friends, hearing a brilliant rendition of a favorite opera, reading a new intriguing book, or perhaps making something for the home in the workshop.²⁵

Kelly suggested that each individual has a definite pattern to his leisure. This may reflect both needs and sensory modes. Chase emphasized the complementary paradigm, that was previously suggested

by Romsa and Beaman, which contains the idea that activities can be grouped on the basis of their supportive characteristics.²⁶

The leisure counselor would assist the individual in searching for sets of activities that are mutually supportive or those catalyst activities that are necessary for the occurrence of other activities.²⁷

Chase also suggested that more time should also be spent on determining with whom participation occurs, the significant others paradigm which was identified by Field and Cheek.²⁸ Knowledge about the type and size of the group in which the individual feels at ease should be understood in order to assist in the development of social settings most conducive to his or her leisure participation.

In Chase's view, leisure activities are seen as an invented symbolic system. He proposed the model of man as inventor in contrast to Plato's classic model of the rational or intellectual man, Rousseau's voluntaristic model of man that emphasized freedom and autonomy, B.F. Skinner's deterministic view of man and Marx's model of productive or materialistic man, all of which Chase sees as incomplete views of human nature.²⁹

This broader view of man as inventor, focuses on man's ability to create, to be a symbolmaker. It is supposed that man's essence lies in his ability to create and manipulate complex systems of symbols. This includes all of man's activities--art, politics, social relations, science, leisure activities, and, possibly foremost, language. All are viewed as constructed symbolic systems.³⁰

More recently, recreation researchers have begun to examine the structure of leisure activities. Co-varying participation rates, joint occurrence and mutual preferredness have been investigated producing interesting results and spawning the intriguing question of recreation activity substitution.³¹

Researchers who have worked on identifying types of recreation activity through factor analysis have led to the substitution concept. This implies that individual leisure activity choices are guided more by general interest areas than by specific activities that fall within those areas of interest.³² In Becker's study of similarities among recreational activities, he examined that technique of nonmetric Multi-dimensional Scaling which converts weakly ordered (ordinal) similarities judgments into metric (ratio) scaled distances. It is a powerful methodology for attacking the problem of identifying substitute and unique leisure activities. It also allows the investigator to determine the perceptual dimensions or characteristics of individual use to organize their view of leisure activities.³³

According to Fain, interests are seasonal and subject to constantly changing facts. Needs are not associated with such rapid change, they are more basic. Meaningful activities help the individual to acquire values and attitudes, skills and knowledge essential for him to enjoy leisure and life in the manner he chooses and will continue on his own. If he wants to drink in leisure, what needs, psychological, social, emotional and physical are fulfilled by drinking? An individual should discover and then search for more healthy means of meeting those needs.³⁴

In Switzerland, Gendre and others found through the use of a leisure activities questionnaire and Holland's Personal Inventory that there was positive correlation between leisure interests and self concept and that discrimination in leisure activity choices contributed positively to the self image and to job interests.³⁵

Gentry and Doering examined the sex role orientation and leisure activities among college students at Kansas State University. They found that:

In general, sex (male-female) was related to attitudes toward and usage of leisure activities and to media usage more frequently than were the masculinity-femininity measures.

Androgynous (high masculinity and high femininity) respondents were more likely to watch ballet, ride bicycles, go to car races, go to movies (except X-rated) and go swimming.³⁶

The need for further research on leisure choices is supported by Gunn who stated:

The need to play is as great as the need for work satisfaction, intellectual satisfaction, and satisfaction in the areas of physical development, social development, emotional stability, sexual identity and spiritual growth. To be lacking in any of these areas affects the total person.

A deficiency in a person's ability to play greatly impairs his ability to cope with novel, complex and dissonant situations. It is, therefore, imperative that persons with apparent deficiencies in the area of physical well-being be allowed the opportunity to meet their needs for optimal arousal through play.

In order for the individual to meet his needs for optimal arousal, the play activity must allow for self-regulation, increasingly complex skill acquisition, intrinsic rewards, creative and imaginative responses and must be free of as many external constraints as possible.

The ability to play in such a way as to meet the need for optimal arousal is a learned behavior in the same manner that learning to choose kinds and amounts of food that adequately meet the need to eat is learned behavior. This ability to play can only be taught by an individual who himself has learned to play.³⁷

This statement is supported by Mobley, past president of the Society of Park and Recreation Education, a branch of the National Recreation and Parks Association, who says,

Americans have more leisure, more money and more opportunities to spend both than ever in history. But they are so overwhelmed by the work ethic that they don't know how to handle it. They erect all sorts of mental barriers that prevent them from enjoying themselves. Leisure counselors help break down the barriers.³⁸

Despite the wide range of potential leisure interests, it has been found possible to identify categories of interests which serve the needs of individuals or offer them several satisfying options. However, "Americans are confused by today's smorgasbord of leisure choices," stated McDowell and "they want expert guidance in deciding among them."³⁹

Leisure Interest Surveys are used extensively to determine the activities preferred by individuals. Several reliable and valid leisure interest surveys are in use including the McKechnie Leisure Activities Blank, the Mirinda Leisure Interest Finder, the Overs Card Sort and the Avocational Activities Inventory. The McKechnie Leisure Activities Blank is the choice for the purpose of the study due to its ease of administration, well-documented research use and categorization of items on the survey.

The Mirinda Leisure Interest Finder contains ninety items with a range of five responses from "like very much" to "dislike very much." The categories designated for this tool include: 1) games, 2) sports, 3) nature activities, 4) collection, 5) homemaking and homecraft activities, 6) art and music, 7) education, entertainment and cultural, 8) volunteer and 9) organizational.⁴⁰

The Overs Card Sort consists of an extensive assortment of pictures of activities which each individual is instructed to separate into piles of level of interest.⁴¹ This technique would particularly appeal to visually-oriented people.

The McKechnie Leisure Activities Blank (LAB) is a psychological assessment instrument developed to:

- 1) collect in a standard form, a wide base of information from individuals on their past leisure and recreation behaviors, as well as their intended future involvement in these activities
- 2) provide normative data on the statistical organization of these activity patterns; and
- 3) explore the psychological meaning and implications of self-reported involvement (or desire for involvement) in the various recreation clusters by providing systematized data on the demographic and personality correlates of actual or desired participation.⁴²

The LAB was developed to fill both the research and applied needs of recreation specialists and psychologists. It consists of a set of 120 recreation activities judged to have high participation rates in the United States.

The empirical evaluation and cross-validation of the LAB included the use of the following empirically reliable and valid instruments: Gough and Heilbrun, Adjective Checklist; Myers Type Indicator designed to assess extraversion-introversion, sensation-intuition, thinking-feeling, and judging-perceiving; Block, California Q-sort description of individuals; Allport, Vernon and Lindsey's Study of Values dealing with six value orientations (theoretical, economic, aesthetic, social, political and religious); the Barron Welsh Art Scale of the Welsh Figure Preference Test, a measure of aesthetic sensitivity; Gough's California Psychological Inventory; Strong Vocational Interest Blank; and Hathaway and McKinley's Minnesota Multiphasic Personality Inventory.

Although this extensive validation research has resulted in generalized descriptions of high and low scorers in each of the clusters,

the LAB's primary use continues to be as a tool for leisure counseling rather than a predictor of personality traits.⁴⁴

Gastorf and Robbins used the LAB in their study of adolescents.⁴⁵ Their findings of a significant increase in involvement in the Glamour Sports cluster over time fits well with Espenschade's study which indicated that females with a high level of physical activity interest in youth, continue to be more physically active than those who are not physically active in their youth.⁴⁶

Jaynes of the Human Resource Development Center, Oklahoma State University, has used a leisure activities questionnaire derived from the Over's, O'Connor, and DeMarco classification system; the Worker Motivation Scale; and a combination of Gordon's bureaucratic orientation items, Rotter's locus of control items, Guilford and Zimmerman's restraint items and Smith's achievement items. Separate analyses of leisure activities were made partly on the basis of factors found by McKechnie. He also divided the subjects in his study into two component loadings, directive/dominant and impulsive/carefree. For men, directive/dominant component loadings were positive for exercise/games and negative for glamour sports/sensation seeking and negative for sports, and crafts. Women were more difficult to interpret but somewhat similar in glamour/sports sensation seeking and crafts/mechanics, using McKechnie's categories.⁴⁷

An example of a more personalized technique of determining one's needs and interests is that used by therapist/leisure counselor, Scout Lee Gunn when she asks the individual to engage in a "guided fantasy" of describing what type of lake the client is. "My surface is very placid and smooth; I have no ripples, no waves, no storms,"

was the immediate description of one person. The client then added, "But sometimes I'm rough. My waves toss and crash on the shore. The wind blows hard, and my surface is covered with whitecaps." The "placid" self was the one who had formerly been content with leisure activities of crocheting, reading and visiting relatives. The "rough water" self became the hiker, canoer, and backpacker along with friends of similar interests.⁴⁸ Similar techniques are being used by leisure counselors trained in neuro-linguistic programming.

Neuro-Linguistic Programming

Psycholinguistics has been an extensively researched segment of psychology and education for decades, and a relatively new (1975) outgrowth of this broad spectrum is the neuro-linguistic programming.

Examples of this psycholinguistic research are studies that were conducted by Farb in Word Play; by Brown with Gilman and others; Rommetvert's "Words, Meanings and Messages; Theory and Experiments in Psycholinguistics" and papers edited by MacDonald and Leeper for the Curriculum Research Institute of the NEA on "Language and Meaning."⁴⁹

In the neuro-linguistic programming area, the NLP model is based on the premise that every person tends to have a "primary representational system", the sensory mode in which a person is most sensitive, in which the individual can make the finest distinctions. A highly visual person, for instance, would habitually translate information into an image to represent its meaning, or rely on seeing rather than hearing and feeling. One use of NLP is to help a person become more sensitive in senses long dormant, to savor events more fully.⁵⁰ It has been found that by habit, and especially under stress, people rely

on a favored sensory mode to gather information about the world, organize it, and express themselves. Family therapist, Satir, is a master at shifting her own language to fit the favored mode of the person to whom she is speaking, thereby, giving the person a sense that his or her inner world is understood.⁵¹

Bandler and Grinder declared that the same principles in NLP can be used for remedial work and to study people who are unusually talented in order to determine the structure of that talent. NLP was developed initially through the systematic study of Satir, Erickson, Perls and other therapeutic "wizards."⁵²

They call themselves modelers. What they essentially do is to pay very little attention to what people say they do and a great deal of attention to what they do. Then they build themselves a model of what they do. They're not offering something that's true, just things that are useful.

If one wishes to establish rapport, it would be useful to match the representational system indicated by the predicates (adjectives, adverbs and verbs). What is called the "lead system" is the system that is used to go after some information. The "representational system" is what is in consciousness, indicated by predicates. The "reference system" is how one decides whether what he now knows, having already assessed it and knowing it in consciousness, is true or not.⁵³

A client may have been using visual words like "look, see, show, focus, perspective" while the therapist was using feeling words like "grasp, handle, feel, smooth, rough." What they noticed was that different people actually think differently and that their differences

correspond to the three principal senses: vision, hearing and feeling, which is called kinesthetics.⁵⁴

Grinder suggested that rather than thinking of oneself as being visually oriented, kinesthetically or auditorily oriented, individuals should take what they do best as a statement about which system they already have well-developed and refined. If some time and energy is put into developing the other systems with the same refinement and the same fluidity and creativity that has already been devoted in the most developed system, then the other systems can become more effective.⁵⁵

Grinder and Bandler's claim is that everyone is using all systems all the time. In a particular situation one sensory system may be more dominant. Examples of this are athletics and lovemaking, kinesthetic; reading or movie viewing, visual. An individual can shift from one strategy to another. Most people don't have a large number of strategies to do anything. They use the same kind of strategy to do everything and what happens is that they are good at some things and no good at others. These counselors have found that most people have only three or four basic strategies. A really flexible person may have a dozen.⁵⁶

Grinder and Bandler stated that when they have studied individuals in mental hospitals in the United States, they have discovered that the majority of the hallucinations are auditory, because people in this culture do not pay much attention to the auditory system. About 90% of what goes on in therapy is changing the kinesthetic responses that people have to auditory and visual stimuli.⁵⁷

The influence of cybernetic and linguistic methods on NLP is clear from the symbolic shorthand used in teaching its basics. The scheme can be used to represent not just communication styles but, also the habitual way in which a person performs almost any task. One proponent of NLP analyzed a Harvard psychologist, Goleman, about his strategy for writing articles and reduced it to a single formula, part of which is:

$$\text{Ad}^e(\text{V}^c \rightarrow \text{K} \rightarrow \text{Ad}^i \rightarrow \text{V}^c\text{Ad} \rightarrow \text{K})\text{E}$$

The formula says that when Dr. Goleman thinks about or hears someone say something on a topic (Ad^e), it triggers the chain within the brackets that will determine whether he actually writes about it. First comes the visualization of the passage (V^c), followed by the feelings about it (K), then the imagination of saying it to someone, (Ad^i) and then seeing and hearing their imagined responses (V^cAd). Again, the feeling it evokes is checked, and if he likes the feelings (K), he proceeds to write it (E).⁵⁸

Even though NLP's proponents can produce scores of testimonials bearing out their claims, there is minute experimental proof that the method works. The primary reason is that NLP is only four years old, and, secondly, the developers consider it a working model and not a formal theory with hypotheses that can be treated. Their only criterion for the model's validity is whether it works in actual use; if it doesn't, they simply change the model. Despite this, researchers at different universities who are trained in NLP are attempting to test the assumptions of the model and its effectiveness in practice.

FOOTNOTES

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CHAPTER III

METHODS AND PROCEDURES

This study was designed to analyze leisure interests and preferred representational systems of college freshman men and women and to determine what the relationship was and whether a difference existed between preferred leisure activities and preferred representational systems.

Selection of the Subjects

Subjects for this study were 300 male and female students enrolled in freshman English composition classes at Oklahoma State University. Since this course is a general education requirement taken by all students, it encompasses a cross-section of students from all colleges and disciplines. A random cluster sampling technique was used to determine the subjects. The subjects ranged in age from 17 to 25 years and included 135 females and 159 males. Sixteen classes of 15-25 students were randomly selected by the coordinator of freshman composition classes providing a total of 300 subjects. Hubbard supports the fact that this cluster sampling technique is an accepted research method in education.¹ Packets containing interest surveys, sheets for the descriptive paragraph, and basic instructions were distributed to each instructor for administration during the fall semester, 1979.

Selection of the Instruments

The McKechnie Leisure Activity Blank was the leisure interest survey selected for this study to determine the preferred activities and interests for future leisure pursuits. (Refer to Appendix).

The factors or categories of the particular design incorporating 120 activities include six in the past interest phase and eight in the future interest phase. Since the activity list is identical for both past and future interests, and since time constraint was a factor, for the purpose of this study the future interest phase was primarily utilized. The students were asked to specify by number their future intentions of pursuing each activity:

- 1) Do not expect to do it in the future.
- 2) Am uncertain or don't know.
- 3) Do expect to do it sometime in the future.

The interest categories involved in the study were adventure, mechanics, crafts, easy living, intellectual, ego recognition, slow living and clean living. (See Appendix for category items).

Demographic information requested included age, sex, university major and college (Business, Arts and Science, etc.) and size of home town by category a) less than 5,000; b) 5,000-20,000; c) 20,000-50,000; d) over 50,000.

The second technique used in the study was having each student write a paragraph describing a very special personal leisure experience. They were to think of themselves involved in the activity and give a description of that involvement.

Following the data collected from the 300 students by the instructors in the sixteen classes, templates denoting numerical responses in

each of the eight interest categories on the Leisure Activities Blank were applied to each student's interest sheet resulting in a total score in the categories of adventure, mechanics, crafts, easy living, intellectual, ego-recognition, slow living and clean living.

The descriptive paragraphs dealing with the special personal leisure experience were analyzed using the Neuro-linguistic Programming approach developed by Grinder, Bandler and associates. The objective of the analysis was the identification of the predicates (i.e., verbs, adverbs and adjectives) which each individual used in order to determine his/her most valued representational system. The three systems under consideration were visual, auditory and kinesthetic, or a combination of all three.

This analysis was completed by three qualified and similarly trained specialists who read each paragraph and delineated the classification of each predicate according to their judgment. All three judges read each paragraph giving a total number of predicates in each category of visual, kinesthetic and auditory. The totals of these three judges were used to determine the representational system or combinations for each individual. The following seven categories were possible:

- 1) Highly kinesthetic
- 2) Highly visual
- 3) Highly auditory
- 4) Combined kinesthetic - visual
- 5) Combined kinesthetic - auditory
- 6) Combined visual - auditory
- 7) Combined kinesthetic - visual - auditory

Tests for objectivity and reliability of the procedure used in identifying the subjects' representational systems were performed. A Pearson Product Moment Correlation Coefficient was used to compare the three judges' scores for each subject in each of the three representational systems. In addition, a test-retest reliability check was accomplished by using a randomly selected sampling of twenty subjects' paragraphs which were typed, duplicated and distributed to the three judges for re-examination three months after the first judgment took place. A Pearson Product Moment Correlation Coefficient was used to determine the consistency of their decisions.

Based on the special activities described in the written paragraphs, the grouping of types of special leisure experiences was determined by listing each activity and clustering those with similarities which resulted in the following thirteen categories:

- 1) Hiking/camping/rapelling
- 2) Water skiing
- 3) Snow skiing
- 4) Music, listening
- 5) Competitive sports
- 6) Relaxing by water
- 7) Travel
- 8) Boating
- 9) Fishing/hunting
- 10) Miscellaneous
- 11) Informal performance (music, dance, drama)
- 12) Cycling, flying, jumping
- 13) Drinking, table games, visiting

A similar procedure was used to cluster the participation groups or those with whom each student shared the special leisure experience described. The five categories evolving from this analysis were:

- 1) Alone
- 2) With one friend
- 3) With relatives
- 4) With a crowd or many people
- 5) With several friends.

The LAB scores in each interest category, the three judges' total predicate scores in the visual, kinesthetic and auditory representational systems, the demographic information, the identified special interest activity from the descriptive paragraph and the category of who shared that special interest activity were all computerized.

Methods and Procedures of Statistical Analysis

The Oklahoma State University statistics personnel assisted in the statistical analysis of the data collected. Statistical methods used in this study were the use of an F test for homogeneity of variance, t tests and analysis of variance to examine relationships and differences as presented by the stated hypotheses. The .05 level was used to test for statistical significance. On all t ratios a preliminary F test for equality of variances was performed. If this was deemed significant, the t test with heterogeneity of variance was reported. Otherwise, a t test with homogeneity of variance was used.²

FOOTNOTES

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CHAPTER IV

RESULTS

The primary purpose of this study was to determine relationships and if significant differences existed between expressed leisure interests of freshman students at Oklahoma State University on the McKechnie Leisure Activities Blank and to identify the dominant representational systems/sensory modes of each subject, as determined by a panel of three judges, from a paragraph written by each subject describing his/her favorite leisure activity. In addition, the study was to determine relationships and if significant differences existed between the representational systems of each subject and the types of activities described and those who accompanied them in his/her favored activity.

The results of the tests for objectivity of the procedure used in identifying the subjects' representational systems showed that Judges I and II were in high agreement in the auditory sensory mode (.90) and the kinesthetic mode (.84) as well as fairly high in the visual mode (.78). Judges I and III were fairly high in the auditory mode (.78). Judges II and III showed fairly high agreement in both the auditory mode (.77) and the visual mode (.75). Judges I and III showed only a reasonable agreement in the visual mode (.68) and the kinesthetic mode (.60). Judges II and III showed the least agreement in their judgment in the kinesthetic mode (.52).

When the test-retest method was implemented to determine consistency of judgment of the predicates used in the descriptive paragraphs by having each of the judges repeat their analysis of twenty subjects' paragraphs after a three month time period had elapsed, it was found that Judge II showed high consistency in auditory (.95) and visual (.88) but only reasonable consistency in kinesthetic (.63). Judge III showed high consistency of judgment in kinesthetic (.93), visual (.84) and auditory (.81). Judge I showed high consistency in kinesthetic (.87), fairly high in auditory (.76) and only reasonable consistency in the visual realm (.62).

From results of the comparison of the totals of the three judges ratings in each of the sensory modes during the test-retest procedures, a high degree of consistency was found with the following correlation coefficients in kinesthetic (.85), auditory (.89) and visual (.81).

Overall, there was a high degree of consistency shown by the three judges which supports the use of this method of determining subjects' representational systems although there seems to be need for further refinement of this procedure.

Leisure Interests and Representational Systems

A Pearson Product Moment Correlation coefficient was used to determine if a relationship existed between the most valued representational system and the leisure interest categories. As indicated in Table I, there were no significant relationships at the .05 level between the interests and representational systems. The three percentages for the representational systems are independent of the leisure activity groups. Ratings for kinesthetic, auditory or visual sensory

TABLE I
CORRELATION BETWEEN LEISURE INTEREST CATEGORIES
AND REPRESENTATIONAL SYSTEMS

| Leisure Interest Categories | (n = 300) | K | A | V |
|-----------------------------------|-----------|------|------|-------|
| AD* | | .05 | .01 | -.06 |
| ME | | .01 | -.01 | -.004 |
| CR | | .014 | .08 | -.08 |
| EL | | .03 | -.04 | .001 |
| IN | | .03 | .03 | -.05 |
| SL | | .11 | -.10 | -.05 |
| CL | | .02 | .02 | -.03 |

*AD = adventure
 ME = mechanics
 CR = crafts
 EL = easy living
 IN = intellectual
 ER = ego recognition
 SL = slow living
 CL = clean living

modes cannot be predicted from the indicated interests as measured by the LAB.

Leisure Interests Sex Differences

A t ratio was used to test for differences between male and female student leisure activity interests. As can be seen from Table II, significant differences were found between males and females in the leisure activity categories of mechanical, crafts, slow living and clean living. The females were significantly higher in their interest in crafts, slow living and clean living while males were higher in mechanics. No significant difference was found between males and females in the adventure, easy living, intellectual and ego-recognition leisure interests as can be seen in Figure 1.

It is of particular interest to note that many of the sports (i.e., softball, basketball, table tennis, bowling and roller skating) were included in the clean living category; therefore, counselors might assume that the male interest in the clean living category would rank higher than the female in this category. However, this was not true with this sample.

Males are often assumed to be more adventuresome and more ego-oriented. However, from the results of this study the females indicated interests and needs similar to males. This is also revealing for program planners and counselors in the future.

Representational Systems Sex Differences

A t test was used to determine whether differences existed between male and female students in their representational systems. As can be

TABLE II
LEISURE INTEREST CATEGORIES BY SEX

| | | Means | S.D. | T | P |
|-----|---|-------|------|----------|---------|
| AD* | F | 53.89 | 8.89 | - .1186 | .9057 |
| | M | 54.02 | 9.65 | | |
| ME | F | 28.89 | 6.14 | -13.6145 | .0001** |
| | M | 39.39 | 7.22 | | |
| CR | F | 28.14 | 6.68 | 11.8745 | .0001** |
| | M | 20.01 | 4.82 | | |
| EL | F | 26.28 | 5.32 | - .3665 | .7143 |
| | M | 26.50 | 4.58 | | |
| IN | F | 23.49 | 4.26 | 1.3381 | .1819 |
| | M | 22.81 | 4.48 | | |
| ER | F | 18.47 | 4.26 | - 2.7992 | .0055** |
| | M | 19.80 | 3.96 | | |
| SL | F | 41.06 | 6.18 | 3.7700 | .0002** |
| | M | 38.65 | 4.59 | | |
| CL | F | 25.63 | 4.98 | 3.4116 | .0007** |
| | M | 23.67 | 4.93 | | |

*AD = adventure
ME = mechanics
CR = crafts
EL = easy living

IN = intellectual
ER = ego recognition
SL = slow living
CL = clean living

**significant at the .01 level of confidence

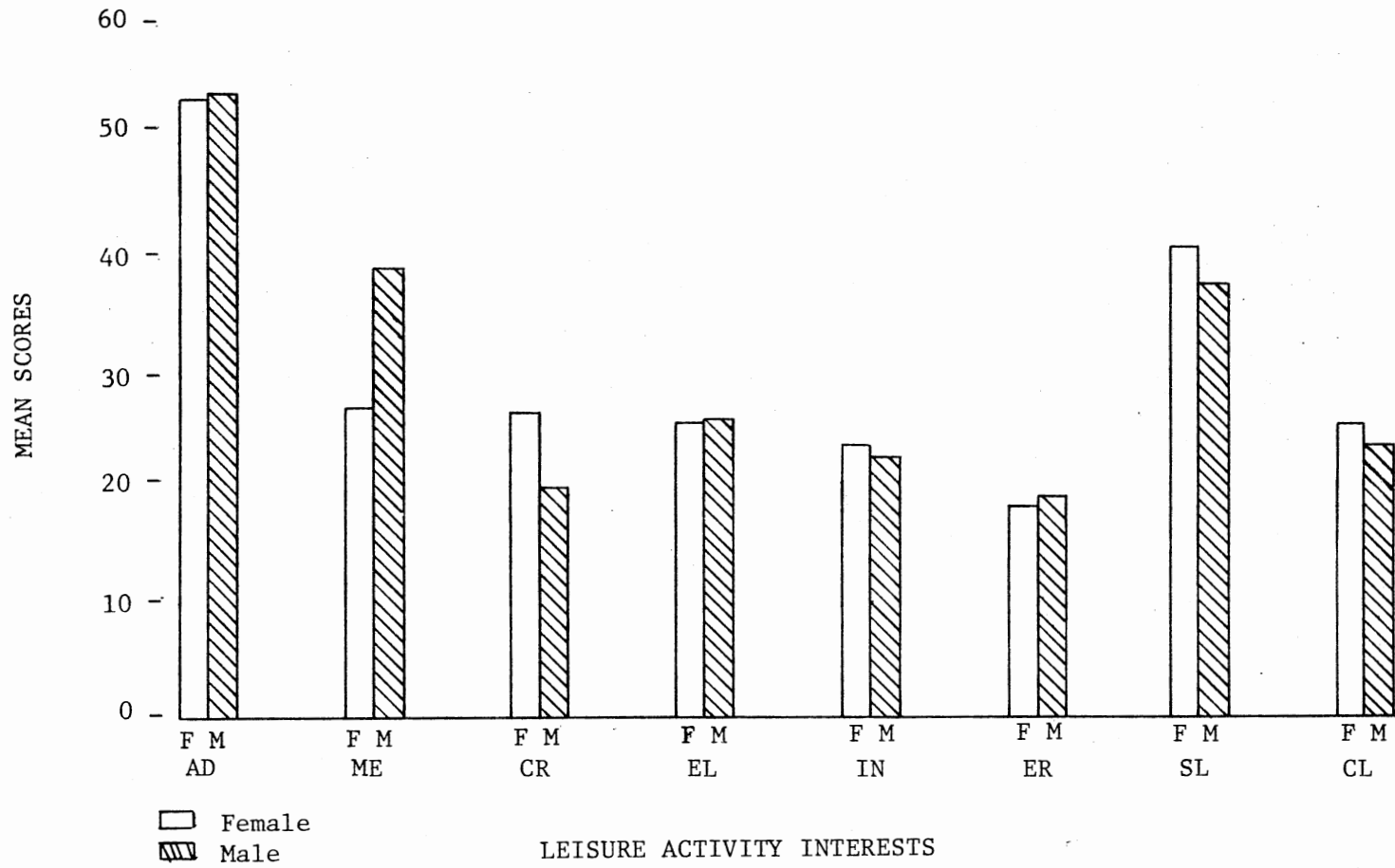


Figure 1. Leisure Interest Categories by Sex

seen in Table III, no significant difference was found at the .05 level of significance between males and females in their representational systems in any of the three areas of kinesthetic, auditory or visual.

This is again particularly interesting for leisure counselors in their contacts with both males and females. Rather than supporting evidence of differences between the sexes, it reinforces similarities. Females have often been considered more sensitive, more feeling oriented. Results of this study indicate the male and female college freshmen have similar orientation in the feeling or kinesthetic realm.

Leisure Interests in Six Colleges

An analysis of variance was used to determine if a significant difference existed between students in the six colleges and each interest area. Using the .05 level of significance it was found, as can be seen in Table IV, that a significant difference did exist between the chosen college and the leisure interest categories of mechanical, crafts and easy living while no significant difference was found in the categories of adventure, intellectual, ego recognition, slow living and clean living.

The greatest differences in the mechanical category was between the College of Agriculture (mean: 40.13) and the College of Education (mean: 28.0) as can be seen in Table V. The Division of Home Economics (mean: 30.86) and the College of Agriculture (mean: 19.70) showed the greatest difference in the craft category as can be seen in Figure 2. In the easy living category there was not as great a difference between the various colleges although the College of Education (mean: 24.0)

TABLE III
 REPRESENTATIONAL SYSTEMS BY SEX

| | | Mean % | S.D. | T | P* |
|----------|---------|--------|------|---------|-------|
| <u>K</u> | Females | 77 | .17 | .2126 | .8318 |
| | Males | 76 | .17 | | |
| <u>A</u> | Females | 8.83 | .12 | 1.6598 | .0982 |
| | Males | 6.64 | .16 | | |
| <u>V</u> | Females | 14.55 | .12 | -1.6132 | .1078 |
| | Males | 17.16 | .16 | | |

Females = 135

Males = 159

*no significant difference

TABLE IV
ANOVA: LEISURE INTEREST CATEGORIES BY COLLEGES

| College | n | AD* | ME | CR | EL | IN | ER | SL | CL |
|----------|----------|---------|---------|---------|----------|-------|-------|-------|-------|
| A & S | 85 | 54.24 | 33.38 | 24.65 | 26.22 | 23.29 | 19.18 | 39.67 | 24.85 |
| Bus. | 101 | 54.34 | 32.61 | 23.96 | 27.67 | 23.03 | 19.05 | 40.25 | 24.67 |
| Agric. | 23 | 53.26 | 40.13 | 19.70 | 26.35 | 23.13 | 18.39 | 39.26 | 24.00 |
| Educ. | 16 | 50.69 | 28.00 | 26.13 | 24.00 | 22.06 | 17.81 | 41.69 | 25.19 |
| Eng. | 59 | 54.44 | 39.75 | 21.75 | 25.37 | 23.41 | 20.24 | 38.58 | 23.81 |
| Home Ec. | <u>7</u> | 54.86 | 33.57 | 30.86 | 24.71 | 24.57 | 20.43 | 42.00 | 26.29 |
| | 291 | | | | | | | | |
| | | | | | | | | | |
| | MSE | = 86.83 | 61.96 | 46.30 | 23.62 | 19.32 | 17.18 | 30.16 | 25.70 |
| | F | = .54 | 9.43 | 4.38 | 2.42 | .48 | 1.24 | 1.24 | .49 |
| | P | = .78 | .0001** | .0005** | .0266*** | .8226 | .2838 | .2856 | .8153 |

*AD = adventure
ME = mechanics
CR = crafts
EL = easy living

IN = intellectual
ER = ego recognition
SL = slow living
CL = clean living

**significant at the .01 level
***significant at the .05 level

TABLE V
LEISURE INTEREST CATEGORIES BY COLLEGES - SIGNIFICANTLY
DIFFERENT MEANS FROM TABLE IV

| Educ. | Bus. | A&S | H.Ec. | Eng. | Agric. |
|-------|-------------|------|-------------|--------------|--------------|
| 28 | <u>32.6</u> | 33.4 | <u>33.6</u> | <u>39.74</u> | <u>40.13</u> |

Any two means not underscored by the same line are significantly different. Any two means underscored by the same line are not significantly different.¹

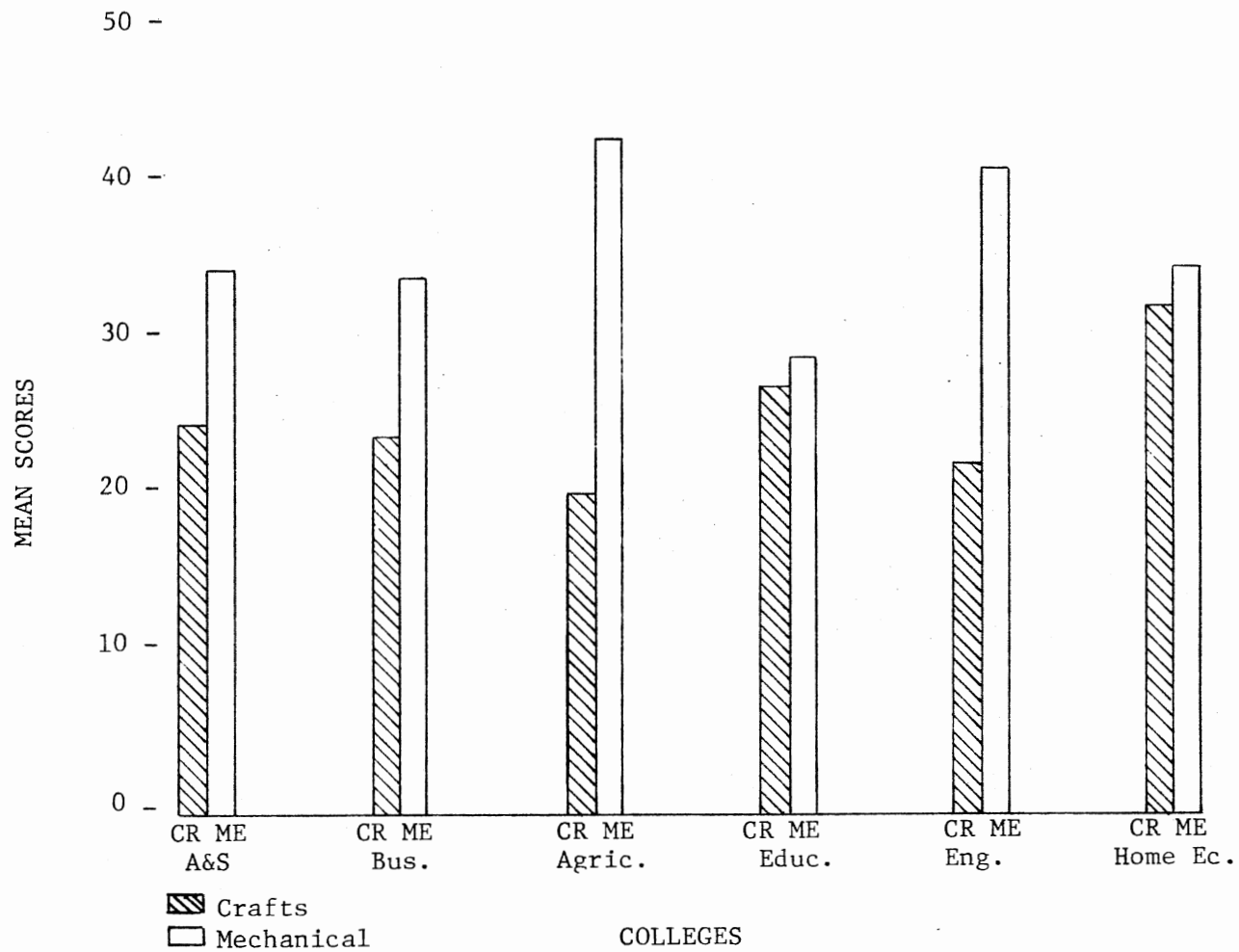


Figure 2. Representational Systems by Colleges

and the College of Business (mean: 27.67) showed the greatest difference.

Representational Systems in Six Colleges

An analysis of variance was used to determine if there was a significant difference between students in the various colleges in the three representational systems. Using the .05 level of significance it was found, as can be seen in Table VI, that no significant difference existed between the colleges in the three representational systems of kinesthetic, auditory and visual.

Representational Systems and Preferred Leisure Activity

An analysis of variance was used to determine whether differences existed between students in preferred activity groups in their representational systems as measured by the predicates used in the descriptive paragraph.

As can be seen in Table VII, a significant difference was found between the types of preferred activities described in all three of the representational systems.

Those individuals in the preferred activity category of music listening ranked highest in the auditory representational system at 22% followed by the individuals in the category of informal performance in music, dance and drama at 15% as can be seen in Table VIII. This appears to be consistent and what would be expected since the sense of hearing is directly involved in these activities.

TABLE VI
ANOVA: REPRESENTATIONAL SYSTEMS BY COLLEGES

| College | n | K | A | V | |
|----------|----------|--------|-------|--------|-------|
| A & S | 83 | 76.34% | 8.19% | 15.47% | |
| Bus. | 99 | 76.95% | 7.98% | 15.07% | |
| Agric. | 22 | 75.54% | 7.52% | 16.95% | |
| Educ. | 16 | 79.39% | 6.92% | 13.69% | |
| Eng. | 58 | 74.24% | 6.68% | 19.08% | |
| Home Ec. | <u>7</u> | 75.77% | 8.65% | 19.08% | |
| | 285 | | | | |
| ----- | | | | | |
| | MSE | = | 2.89 | 1.23 | 2.02 |
| | F | = | .26 | .18 | .64 |
| | p* | = | .9526 | .9817 | .7049 |

*not significant

TABLE VII
ANOVA: REPRESENTATIONAL SYSTEMS BY
PREFERRED ACTIVITY GROUPS

| Category | n In Each Category | K | A | V | |
|----------|-----------------------|-----|-------|-------|-------|
| 1* | 27 | 66% | 8% | 26% | |
| 2 | 30 | 81% | 6% | 13% | |
| 3 | 30 | 80% | 4% | 16% | |
| 4 | 13 | 63% | 22% | 14% | |
| 5 | 55 | 82% | 8% | 11% | |
| 6 | 23 | 76% | 8% | 16% | |
| 7 | 6 | 65% | 4% | 31% | |
| 8 | 12 | 74% | 6% | 30% | |
| 9 | 14 | 76% | 8% | 16% | |
| 10 | 44 | 76% | 4% | 19% | |
| 11 | 9 | 74% | 15% | 11% | |
| 12 | 24 | 76% | 10% | 14% | |
| 13 | <u>11</u> | 77% | 8% | 14% | |
| | 298 | | | | |
| ----- | | | | | |
| | MSE | = | 2.66 | 1.11 | 1.87 |
| | F | = | 2.65 | 3.31 | 2.93 |
| | p** | = | .0025 | .0003 | .0010 |

| | |
|-------------------------------|--------------------------------------------------|
| *1 = hiking/camping/rapelling | 8 = boating |
| 2 = water skiing | 9 = fishing/hunting |
| 3 = snow skiing | 10 = miscellaneous |
| 4 = music, listening | 11 = informal performance (music/dance/drama) |
| 5 = competitive sports | 12 = cycling/flying/jumping |
| 6 = relaxing by water | 13 = drinking/table games/visiting |
| 7 = travel | |

**significant at the .01 level

TABLE VIII
 REPRESENTATIONAL SYSTEMS BY PREFERRED ACTIVITY GROUPS
 SIGNIFICANTLY DIFFERENT MEANS FROM TABLE VII

| <u>Kinesthetic</u> | | | | | | | | | | | | | |
|--------------------|----------|-----------|-----------|----|----------|----------|----------|----------|-----------|-----------|----------|----------|-----------|
| Mean % | 82 | 81 | 80 | 77 | 76 | 76 | 76 | 76 | 74 | 74 | 66 | 65 | 63 |
| Activity Group | <u>5</u> | <u>2</u> | <u>3</u> | 13 | 6 | 9 | 10 | 12 | 8 | 11 | 1 | 7 | 4 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| <u>Auditory</u> | | | | | | | | | | | | | |
| Mean % | 22 | 13 | 10 | 8 | 8 | 8 | 8 | 8 | 6 | 6 | 4 | 4 | 4 |
| Activity Group | 4 | <u>11</u> | <u>12</u> | 1 | 5 | 6 | 9 | 13 | 2 | 8 | 3 | 7 | 10 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| <u>Visual</u> | | | | | | | | | | | | | |
| Mean % | 31 | 30 | 26 | 19 | 16 | 16 | 16 | 14 | 14 | 14 | 13 | 11 | 11 |
| Activity Group | <u>7</u> | <u>8</u> | 1 | 10 | <u>3</u> | <u>6</u> | <u>9</u> | <u>4</u> | <u>12</u> | <u>13</u> | <u>2</u> | <u>5</u> | <u>11</u> |

Any two means not underscored by the same line are significantly different. Any two means underscored by the same line are not significantly different.²

Likewise, the individuals in the travel category ranked highest in the visual representational system at 31% followed by the individuals in the preferred activity category of hiking/camping/rapelling at 26% as presented in Figure 3.

The individuals in the categories of competitive sports, water skiing and snow skiing with 82%, 81% and 80% respectively ranked highest in the kinesthetic/feeling representational system.

The significant differences found in this portion of the study in contrast to the findings when McKechnie's activity blank was administered may give preliminary evidence that other methods should be employed when analyzing individuals' representational systems rather than the traditionally developed activity inventories.

The categories which evolved in this portion of the study were not pre-conceived but were developed from the choices made by the students when asked to describe a very special leisure experience.

Representational Systems and Participation Groups

An analysis of variance was used to determine if a difference existed between participation groups in representational systems. As indicated in the data presented in Table IX, the difference between the participation groups the individuals described as sharing their preferred leisure activity and descriptive use of kinesthetic and auditory terms was found to be significant. No significant difference was found for those using primarily visual terms.

The greatest difference was in the kinesthetic realm where 82% shared their special leisure experience with a few friends, as contrasted with 68% whose memorable experience was in the midst of a

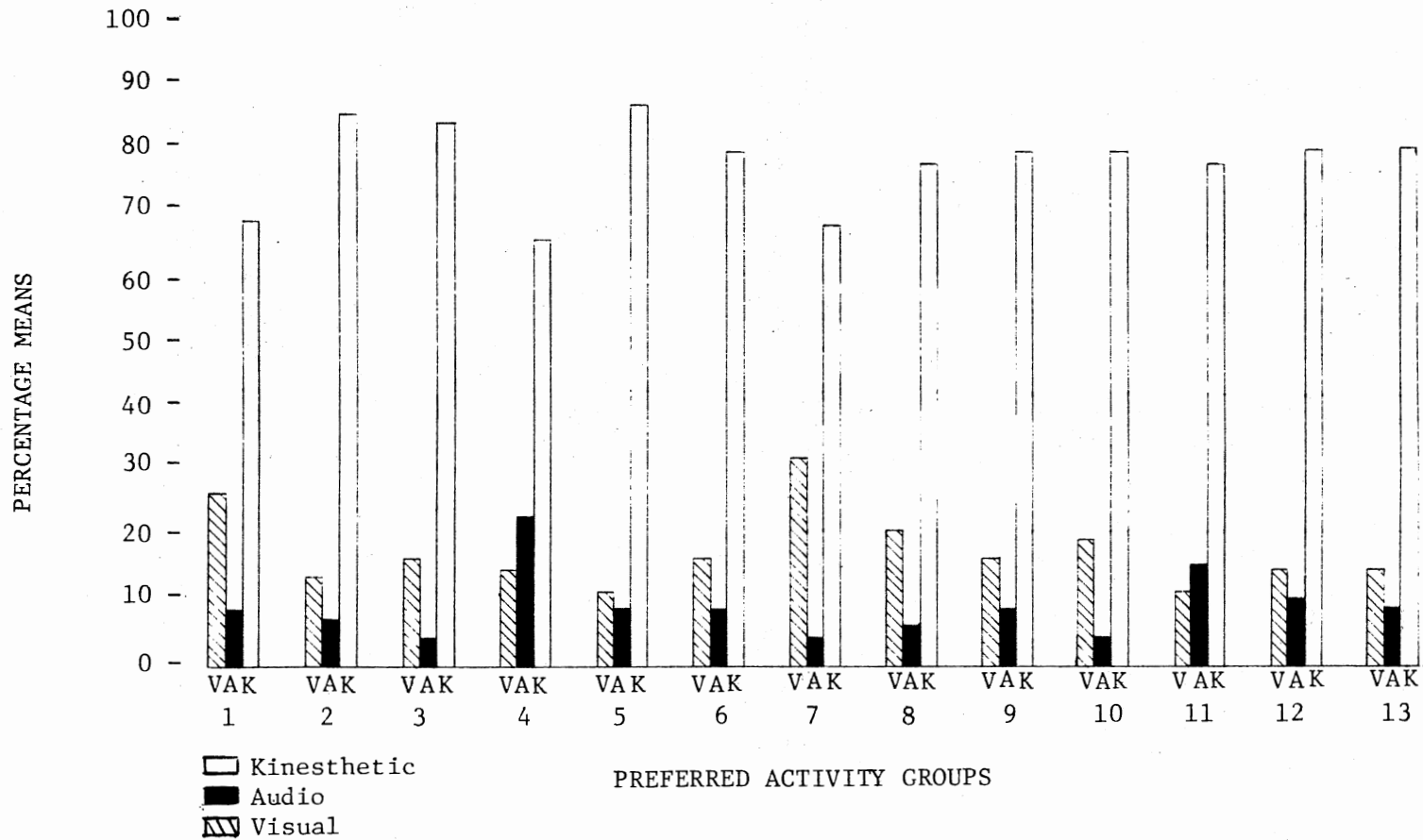


Figure 3. Representational Systems by Preferred Activity Groups

TABLE IX
ANOVA: REPRESENTATIONAL SYSTEMS BY
PARTICIPATION GROUPS

| Variable | Representational Systems | | | |
|---------------------|--------------------------|--------------------|-----------------|---------------|
| | | <u>Kinesthetic</u> | <u>Auditory</u> | <u>Visual</u> |
| | n | %Means | % | % |
| 4 - Several friends | 106 | 82 | 4.74 | 13.65 |
| 3 - Crowd (many) | 46 | 68 | 14.15 | 18.00 |
| 2 - Relatives | 27 | 74 | 9.4 | 16.23 |
| 1 - One friend | 47 | 78 | 5.5 | 16.24 |
| 0 - Alone | <u>71</u> | 73 | 8.5 | 18.47 |
| | 296 | | | |
| ----- | | | | |
| | MSE | = 2.63 | 1.12 | 2.00 |
| | F | = 6.96 | 7.15 | 1.50 |
| | P | = .0001* | .0001* | .1998** |

*significant at the .01 level

**not significant

throng or a crowd as can be seen in Figure 4 and Table X. It might have been logical to assume that the greatest difference would be between the "loners" or the single friend category and the crowd-oriented individuals. This proved not to be the case in this study. More feelings were involved where the subjects participated with several friends than in the other categories. In the auditory realm, the same two categories showed the greatest difference with several friends having a 4.74 mean percentage and the crowd category a 14.15 mean percentage. Among the activities this latter group described were listening to concerts or bands and responding to the cheers of a crowd.

Leisure Interests and Home Town Size

As indicated in Table XI, the only significant difference at the .05 level of confidence between the size of home town and leisure interest categories is in the ego recognition area (.0459). The other seven categories showed no significant differences.

Only one significant difference was found, so it can be assumed from these results that the size of the home town has little effect on the development of leisure interests for this group of individuals. The only significant difference was reflected in the means of the under 5,000 category (17.91) contrasted with the 5,000 to 20,000 category (20.02). Many individuals assume that the youth in large cities have more opportunities to develop a wider range of leisure interests. For this university group, this was not found to be true. The students' indicated interest in leisure activities were independent of home town background in relation to population.

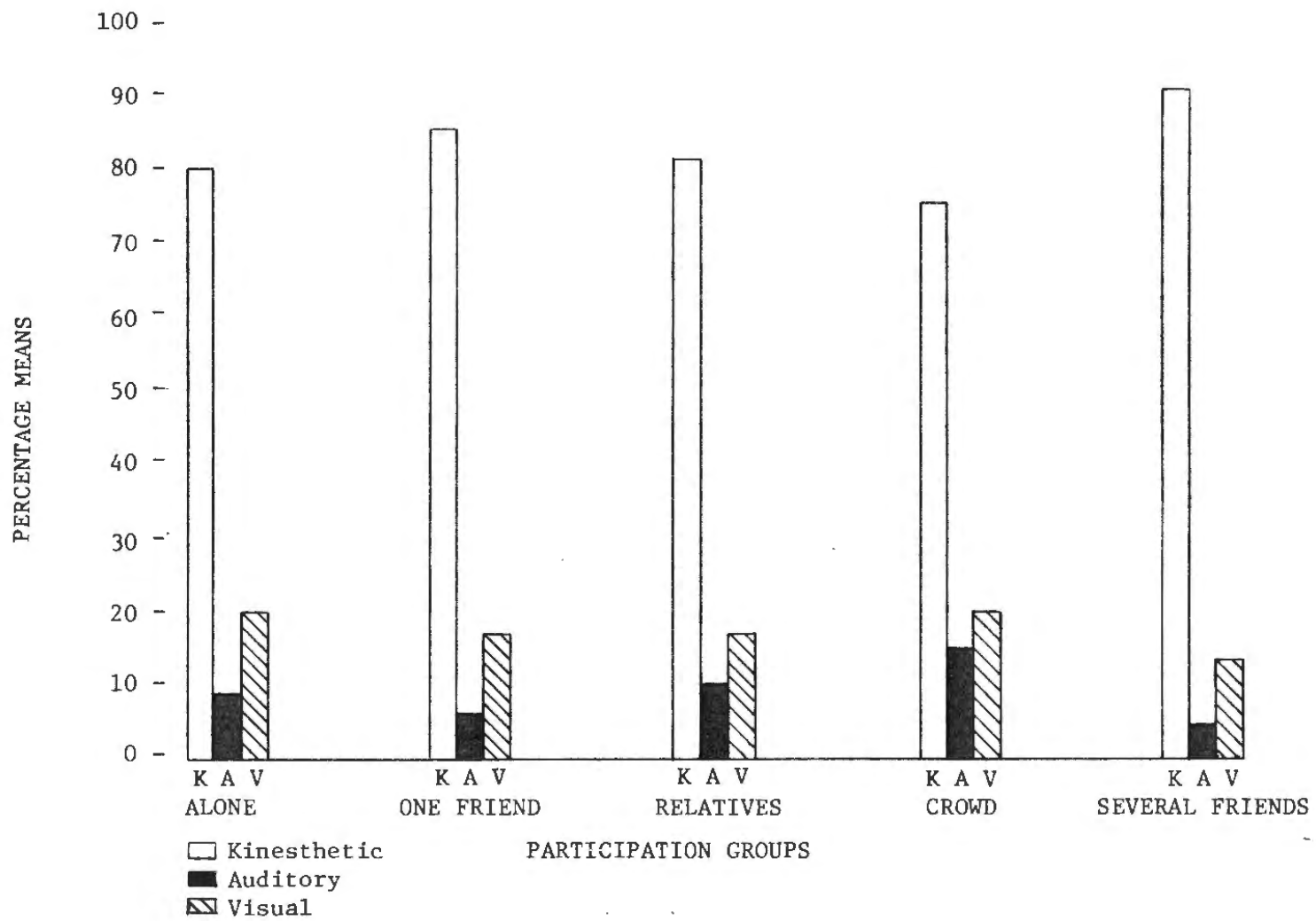


Figure 4. Representational Systems by Participation Groups

TABLE X
 REPRESENTATIONAL SYSTEMS BY PARTICIPATION GROUPS
 SIGNIFICANTLY DIFFERENT MEANS FROM TABLE IX

| | | | | | | |
|---------------------|----------|----------|----------|----------|----------|----------|
| <u>Kinesthetic</u> | | | | | | |
| Mean % | 68 | 73 | 74 | 74 | 78 | 82 |
| Participation Group | 3 | <u>0</u> | <u>2</u> | <u>4</u> | 1 | 5 |
| <u>Auditory</u> | | | | | | |
| Mean % | 4.7 | 5.4 | 8.4 | 9.4 | 12.9 | 14 |
| Participation Group | <u>5</u> | <u>1</u> | <u>0</u> | <u>2</u> | <u>4</u> | <u>3</u> |
| <u>Visual</u> | | | | | | |
| Mean % | 18.47 | 18 | 16.24 | 16.23 | 13.65 | |
| Participation Group | <u>0</u> | <u>3</u> | <u>1</u> | <u>2</u> | 4 | |

Any two means not underscored by the same line are significantly different. Any two means underscored by the same line are not significantly different.³

TABLE XI

ANOVA: HOME TOWN SIZE BY LEISURE INTEREST GROUPS

| Home Town Size | n | Percentage Means | | | | | | | |
|----------------|------------|------------------|-------|-------|-------|-------|---------|-------|-------|
| | | AD* | ME | CR | EL | IN | ER | SL | CL |
| < 5,000 | 65 | 52.09 | 34.26 | 23.31 | 25.42 | 22.14 | 17.91 | 39.58 | 23.98 |
| 5,000-20,000 | 52 | 54.44 | 36.04 | 24.04 | 26.42 | 23.85 | 20.02 | 39.46 | 24.79 |
| 20,000-50,000 | 64 | 53.97 | 33.50 | 23.78 | 26.13 | 23.25 | 19.11 | 40.17 | 24.89 |
| > 50,000 | <u>113</u> | 54.93 | 35.13 | 23.53 | 27.23 | 23.21 | 19.64 | 30.60 | 25.66 |
| | 294 | | | | | | | | |
| ----- | | | | | | | | | |
| | MSE | = 85.97 | 72.01 | 49.33 | 24.09 | 19.04 | 16.94 | 30.59 | 25.66 |
| | F | = 1.06 | 1.35 | 1.12 | 1.60 | 1.35 | 2.45 | .28 | .37 |
| | P | = .3796 | .2523 | .3476 | .1739 | .2494 | .0459** | .8919 | .8295 |

*AD = adventure IN = intellectual
 ME = mechanical ER = ego recognition
 CR = crafts SL = slow living
 EL = easy living CL = clean living

**significant at the .05 level

Representational Systems and Home Town Size

As can be seen in Table XII, no significant differences were found in home town size between the three representational systems.

It was found that a definite dominance did exist among the representational systems in describing leisure experiences. The kinesthetic system with a mean of 76.34% was dominant over auditory with a mean of 7.64% and visual with a mean of 16.12%. This indicates that the sample of 297 freshman students displayed a preference for or valued the kinesthetic feeling realm above the auditory and visual in describing a leisure activity.

-Even though significant differences were not found, it is interesting to note that differences of 3% were found between the less than 5,000 category and the 5,000 to 20,000 category in both kinesthetic and visual realms. Although this is not a great difference, one might have predicted a greater contrast between those from very small towns and those from large cities. It was found that representational systems are independent of home town size.

Representational Systems Combinations

Additional information is given in Table XIII which reveals the assignment of combinations of representational systems based on divisions of less than 25%, not included; 25-50%, secondary system; greater than 50%, primary system. In 71% of the cases, the three evaluators identified 211 individuals who used more than 50% kinesthetic predicates and less than 25% in the auditory and visual sensory modes. Another fifty students used primarily kinesthetic terms along with 25% or more auditory or visual terms. Only one individual used

TABLE XII

ANOVA: HOME TOWN SIZE BY REPRESENTATIONAL SYSTEM

| Home Town Size | n | K | A | V | |
|-------------------|------------|-------|-------|-------|-------|
| < 5,000 | 65 | 79% | 7% | 14% | |
| 5,000-20,000 | 52 | 76% | 7% | 17% | |
| 20,000-50,000 | 64 | 75.7% | 8.6% | 15.7% | |
| 50,000 | <u>113</u> | 75.7% | 7.6% | 16.6% | |
| | 294 | | | | |
| ----- | | | | | |
| | MSE | = | 2.87% | 1.22% | 2.02 |
| | F | = | .41% | .26 | .76 |
| | p* | | .8055 | .9003 | .5522 |

*not significant

TABLE XIII
 ASSIGNMENT OF REPRESENTATIONAL SYSTEMS

| Representational System | n | % |
|-------------------------|----------|------------|
| K | 211 | 71.04 |
| Kv | 47 | 15.82 |
| Ka | 11 | 3.70 |
| A | 1 | .34 |
| av | 2 | .67 |
| kv | 8 | 2.69 |
| kV | 10 | 3.37 |
| ka | 3 | 1.01 |
| kav | 3 | 1.01 |
| kAv | <u>1</u> | <u>.34</u> |
| | 297 | 100.00 |

K = kinesthetic
 A = auditory
 V = visual

Lower case letter = 25-50%
 Upper case letter = greater than 50%

over 50% auditory descriptors. Ten individuals were primarily visual using over 50% visual terms and at least 25% kinesthetic terms. These data support the supposition of many leisure counselors that the kinesthetic sensory mode is dominant for the majority of people, but until now, they have not had statistical evidence to support this premise.

Implications for Leisure Counseling

The results of this study emphasize that at least for this sample of university students, the kinesthetic representational system was dominant and that individuals with whom they shared their meaningful leisure experiences were important to them. These same findings might be found with other groups in society or very different results might be obtained.

If the majority of people are motivated to leisure experiences by something they feel, then presentation of promotional materials for leisure opportunities should capitalize on this knowledge by showing pictures of people engaged in various experiences having fun, relaxing with friends, and overcoming challenges rather than merely indicating a location of leisure events. Descriptions of an experience by one who has been there, overcome the fear of defeat, felt the ecstasy of accomplishment and was willing to encourage others to use a jigsaw, hook a rug, or shoot the rapids would be worth more than cold words in print.

If in leisure counseling it can be determined what feelings are paramount to an individual's feeling of satisfaction and with whom he/she feels most comfortable, whether it is alone, in a crowd, or

with several friends, then more positive assistance can be given that individual in pursuing expanded leisure experiences.

If, through analogical cues, or predicates used, leisure counselors can become adept at understanding what is of value to the individual, more effective communication can take place and more satisfactory resolution of problems can be realized.

FOOTNOTES

¹Robert Steel and James H. Torrie, Principles and Procedures of Statistics (N.Y., 1960), p. 109.

²Ibid.

³Ibid.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

This study attempted to answer some of the questions raised and to supply additional information for counselors, educators and recreation specialists on what aspects of the leisure experience are consciously most meaningful to the participant, effects on leisure interests and representational systems of sex, college within the university, groups with whom an individual participates and home town size.

Three hundred university freshman students enrolled in English composition classes at Oklahoma State University were asked to complete the McKechnie Leisure Activity Blank, describe in detail a special leisure activity and provide demographic information regarding sex, college and size of home town.

The information was analyzed statistically by use of a correlation co-efficient, analysis of variance and t test to determine significant relationships and differences at the .05 level of confidence for either acceptance or rejection of the previously stated hypotheses.

Conclusions

Among the conclusions arrived at from the results of this research study are the following:

- 1) There is no significant relationship between the most valued representational system and the leisure interest categories.

The hypothesis was accepted since no significant relationship was found between leisure interest categories and representational systems.

- 2) There is no significant difference between male and female students in their leisure activity interests.

The hypothesis was rejected when the categories of leisure interests were considered as a whole since significant differences were found between sex of the student and leisure interests. This rejection would apply when the categories of mechanical, crafts, slow living and clean living were considered since significant differences were found in these four categories. However, the hypothesis could be accepted for the categories of adventure, easy living, intellectual and ego-recognition since no significant difference was found between male and female students in each of these categories.

- 3) There is no significant difference between males and females in their most valued representational systems.

The hypothesis was accepted since no significant difference was found between the sex of the students in the representational systems.

- 4) There is no significant difference between freshman students in the six colleges in each leisure interest category.

The hypothesis was rejected when all six colleges as a whole were considered since significant differences were found overall between the colleges in the leisure interests. In the categories of mechanical, crafts and easy living, the hypothesis would be rejected since significant differences were found. However, in the categories of adventure, intellectual, ego-recognition, slow living and clean living, the hypothesis would be accepted since no significant differences were found.

- 5) There is no significant difference between the students in the various colleges in each of the three representational systems.

The hypothesis was accepted since no significant difference was found between the chosen college in the three representational systems.

- 6) There is no significant difference between students in preferred activity groups in the three most valued representational systems.

The hypothesis was accepted since no significant difference was found between preferred activity groups in the representational systems.

- 7) There is no significant difference between participation groups in their representation systems.

The hypothesis was rejected when the three representational systems were considered overall since significant differences were found between participation groups and their representational systems. This rejection would apply when kinesthetic and auditory representational systems were considered since significant differences were found. However, the hypothesis would be accepted when the visual representational system was considered since no significant difference was found for those using primarily visual terms.

- 8) There is no significant difference between the size of the home town and leisure interest groups.

The hypothesis was rejected when all eight categories were considered since a slight significant difference was found between the size of the home town in leisure interest groups. This rejection would apply to the ego recognition category considered by itself since a significant difference was found. However, when each of the other seven

categories was considered individually, the hypothesis would be accepted since no significant difference was found.

- 9) There is no significant difference between size of home town and representational systems.

The hypothesis was accepted since no significant difference was found between the size of the home town in the representational systems.

Research Questions

Among the most significant findings of this study are the answers to the following research questions:

- 1) Is there a dominance of one representational system used in describing leisure experiences?

The kinesthetic representational system was found to be dominant for 76% of the students when describing a preferred leisure experience.

- 2) Are there combinations of representational systems in describing preferred leisure experiences?

In 28% of the cases, a combination of representational systems was used in the students' descriptions of preferred leisure experiences.

Recommendations for Future Studies

The investigator's recommendations for future studies are:

- 1) Future research should be conducted in the area of representational systems using older and younger age groups.

Since this study was confined to a university segment of society, it dealt with a fairly homogeneous group. The limitation of the study to freshman students also keeps us from generalizing to other age

groups. If older people are studied, many results might be quite different. Questions which could be raised are: Do older people prefer solitary leisure involvements? Are they basically kinesthetically oriented as the university freshmen are or is another of their representational systems more dominant? Similar questions could be raised in studying youngsters. A similar study of professors on a university campus might reveal great differences between them and their students or it could reveal many similarities. This would be a fascinating study with many ramifications for future use.

- 2) Future research studies should include the comparative use of oral and written communication in delineating representational systems.

Many people are rather limited in their ability to express themselves in writing but are more at ease in talking about a subject. It is also possible that individuals express more internal response verbally than after they have processed feelings, thoughts, reactions to experiences, organized them and prepared them to be expressed in written form. Documented research in this area has also been lacking and is greatly needed in the leisure counseling field.

- 3) Development of a more precise method of judging or determining representational systems/sensory modes to minimize the possibility of judges' errors is needed.

Even though lists of words which should be categorized in each of the representational systems is available, they could be expanded or refined. The judges themselves may be analyzing the material with emphasis on their dominant representational systems or from their subconscious, left-brain, lead system. It is recommended that a pilot

study of the relationship of the judges' representational systems and their judgment of others' material should be conducted and this factor analyzed before proceeding with studies of this type.

- 4) An empirical study of individuals' representational systems at the subconscious level would be of value in reinforcing or refuting the beliefs and practices of counselors.

Many individuals are congruent in their conscious representational system and their subconscious lead system. Others are not congruent. They may be visually oriented leading into a kinesthetic representational system. This is being determined but those working in the field need interested researchers to spend the time to ferret out the statistical support for their relatively new theories. If these theories are not substantiated there will continue to be many skeptics who may succeed in preventing their general acceptance.

- 5) A compilation of the research studies that have been conducted using the various leisure activity inventories would be of value in continuing the verification of their reliability, validity and usefulness in practice.

Although leisure activity inventories have been in use for a decade, the use made of them in statistical research is difficult to locate for comparisons. A compilation of this information would greatly enhance the ready availability of this data for researchers in the future.

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Instructions: Now indicate your future intentions for each activity, as follows:

- 1 = you do not expect to do it in the future
- 2 = you are uncertain or don't know
- 3 = you do expect to do it sometime in the future

Please place a number in each square. In addition, circle the activities in which you have participated regularly in the past.

Write in the number corresponding to your future intentions in the square next to each activity listed below.

| | | | |
|-------------------------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------|
| <input type="checkbox"/> 1 Acting/Dramatics | <input type="checkbox"/> 31 Dancing: Ballet/Modern | <input type="checkbox"/> 61 Ice skating | <input type="checkbox"/> 91 Sewing |
| <input type="checkbox"/> 2 Amateur radio | <input type="checkbox"/> 32 Dancing: Social/Disc | <input type="checkbox"/> 62 Jewelry making | <input type="checkbox"/> 92 Shuffleboard |
| <input type="checkbox"/> 3 Archery | <input type="checkbox"/> 33 Darkroom work | <input type="checkbox"/> 63 Jigsaw puzzles | <input type="checkbox"/> 93 Sightseeing |
| <input type="checkbox"/> 4 Attending auctions | <input type="checkbox"/> 34 Designing clothes | <input type="checkbox"/> 64 Jogging | <input type="checkbox"/> 94 Singing |
| <input type="checkbox"/> 5 Attending concerts | <input type="checkbox"/> 35 Dining out | <input type="checkbox"/> 65 Judo/Karate | <input type="checkbox"/> 95 Skiing |
| <input type="checkbox"/> 6 Auto racing | <input type="checkbox"/> 36 Driving/Motoring | <input type="checkbox"/> 66 Kite flying | <input type="checkbox"/> 96 Skindiving/SCUBA |
| <input type="checkbox"/> 7 Auto repairing | <input type="checkbox"/> 37 Electronics | <input type="checkbox"/> 67 Knitting/Crocheting | <input type="checkbox"/> 97 Social drinking |
| <input type="checkbox"/> 8 Backpacking | <input type="checkbox"/> 38 Encounter groups | <input type="checkbox"/> 68 Leatherworking | <input type="checkbox"/> 98 Squash/Handball/Rugby |
| <input type="checkbox"/> 9 Badminton | <input type="checkbox"/> 39 Exercising | <input type="checkbox"/> 69 Listening to radio | <input type="checkbox"/> 99 Sunbathing |
| <input type="checkbox"/> 10 Baseball/Softball | <input type="checkbox"/> 40 Fencing | <input type="checkbox"/> 70 Listening to records | <input type="checkbox"/> 100 Surfboarding |
| <input type="checkbox"/> 11 Basketball | <input type="checkbox"/> 41 Fishing: Fresh water | <input type="checkbox"/> 71 Marksmanship | <input type="checkbox"/> 101 Swimming |
| <input type="checkbox"/> 12 Bicycling | <input type="checkbox"/> 42 Fishing: Salt water | <input type="checkbox"/> 72 Mechanics | <input type="checkbox"/> 102 Table tennis/Ping-Pong |
| <input type="checkbox"/> 13 Billiards/Pool | <input type="checkbox"/> 43 Flower arranging | <input type="checkbox"/> 73 Metalwork | <input type="checkbox"/> 103 Taking snapshots |
| <input type="checkbox"/> 14 Bird watching | <input type="checkbox"/> 44 Flying/Gliding | <input type="checkbox"/> 74 Model building | <input type="checkbox"/> 104 Talking on telephone |
| <input type="checkbox"/> 15 Bookbinding | <input type="checkbox"/> 45 Folk dancing | <input type="checkbox"/> 75 Motorboating | <input type="checkbox"/> 105 Tennis |
| <input type="checkbox"/> 16 Bowling | <input type="checkbox"/> 46 Football | <input type="checkbox"/> 76 Motorcycling | <input type="checkbox"/> 106 Traveling abroad |
| <input type="checkbox"/> 17 Boxing | <input type="checkbox"/> 47 Fraternal organizations | <input type="checkbox"/> 77 Mountain climbing | <input type="checkbox"/> 107 Visiting friends |
| <input type="checkbox"/> 18 Camping | <input type="checkbox"/> 48 Gardening | <input type="checkbox"/> 78 Needlework | <input type="checkbox"/> 108 Visiting museums |
| <input type="checkbox"/> 19 Canoeing | <input type="checkbox"/> 49 Go to horse races | <input type="checkbox"/> 79 Painting/Drawing | <input type="checkbox"/> 109 Volleyball |
| <input type="checkbox"/> 20 Carpentry | <input type="checkbox"/> 50 Go to movies | <input type="checkbox"/> 80 Playing bridge | <input type="checkbox"/> 110 Volunteer fire fighting |
| <input type="checkbox"/> 21 Casino gambling | <input type="checkbox"/> 51 Go to nightclubs | <input type="checkbox"/> 81 Playing poker | <input type="checkbox"/> 111 Watching team sports |
| <input type="checkbox"/> 22 Ceramics/Pottery | <input type="checkbox"/> 52 Go to plays/lectures | <input type="checkbox"/> 82 Playing a musical instrument | <input type="checkbox"/> 112 Watching TV shows |
| <input type="checkbox"/> 23 Checkers | <input type="checkbox"/> 53 Golf | <input type="checkbox"/> 83 Political activities | <input type="checkbox"/> 113 Water skiing |
| <input type="checkbox"/> 24 Chess | <input type="checkbox"/> 54 Gymnastics | <input type="checkbox"/> 84 Reading: Books/Plays/Poetry | <input type="checkbox"/> 114 Weaving |
| <input type="checkbox"/> 25 Child-related activities: Scouts, PTA, etc. | <input type="checkbox"/> 55 Hiking/Walking | <input type="checkbox"/> 85 Reading: Newspapers/Magazines | <input type="checkbox"/> 115 Weight lifting |
| <input type="checkbox"/> 26 Civic organizations | <input type="checkbox"/> 56 Home decorating | <input type="checkbox"/> 86 Religious organizations | <input type="checkbox"/> 116 Window-shopping |
| <input type="checkbox"/> 27 Collecting: Coins, antiques, etc. | <input type="checkbox"/> 57 Homeowner organizations | <input type="checkbox"/> 87 Roller skating | <input type="checkbox"/> 117 Wrestling |
| <input type="checkbox"/> 28 Conservation/Ecology organizations | <input type="checkbox"/> 58 Horseback riding | <input type="checkbox"/> 88 Rowing/Boating | <input type="checkbox"/> 118 Writing: Poetry/Story |
| <input type="checkbox"/> 29 Cooking/Baking | <input type="checkbox"/> 59 Horseshoes | <input type="checkbox"/> 89 Sailing | <input type="checkbox"/> 119 Writing: Letters |
| <input type="checkbox"/> 30 Crossword puzzles | <input type="checkbox"/> 60 Hunting | <input type="checkbox"/> 90 Sculpture | <input type="checkbox"/> 120 Woodworking |

Other _____ Now fill in the information requested below

Name _____ Age _____ Sex _____ Date _____

University Major _____ College: Edc. _____ Etc. _____ Bus _____ ALS _____ HEc _____ Agric _____

Size of Home Town: Under 5,000 _____ 5,000-20,000 _____ 20,000-50,000 _____ over 50,000 _____

AD
 ME
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 EL
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 ER
 SL
 CL
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 FF
 + 28
 FF

From Leisure Activities Blank, George E. McKechnie, 1974.

TABLE 4: Leisure Activity Blank-Future Factors⁺

| Factor 1: <u>Adventure</u> | | | Factor 3: <u>Crafts</u> | | | Factor 6: <u>Ego Recognition</u> | | |
|----------------------------|----------|-------------------------|-------------------------------|----------|---------------------------------------|----------------------------------|----------|------------------------------------------------|
| <u>Loading*</u> | <u>#</u> | <u>Item</u> | <u>Loading*</u> | <u>#</u> | <u>Item</u> | <u>Loading*</u> | <u>#</u> | <u>Item</u> |
| .366 | 3 | Archery | .351 | 15 | Bookbinding | .346 | 1 | Acting/Dramatics |
| .443 | 8 | Backpacking | .531 | 22 | Ceramics/Pottery | .405 | 31 | Dancing: Ballet/Modern |
| .518 | 9 | Badminton | .541 | 29 | Cooking/Baking | .282 | 38 | Encounter Groups |
| .590 | 12 | Bicycling | .612 | 34 | Designing Clothes | .272 | 40 | Fencing |
| .561 | 18 | Camping | .658 | 43 | Flower Arranging | .482 | 46 | Football |
| .626 | 19 | Canoeing | .323 | 45 | Folk Dancing | .374 | 54 | Gymnastics |
| .390 | 44 | Flying/Gliding | .541 | 56 | Home Decorating | .502 | 65 | Judo/Karate |
| .471 | 55 | Hiking/Walking | .603 | 62 | Jewelry Making | .437 | 98 | Squash/Handball |
| .531 | 58 | Horseback Riding | .757 | 67 | Knitting/Crocheting | .523 | 115 | Weight Lifting |
| .486 | 61 | Ice Skating | .576 | 68 | Leatherworking | .512 | 117 | Wrestling |
| .445 | 64 | Jogging | .740 | 78 | Needlework | .352 | 118 | Writing: Poetry/Stories |
| .523 | 66 | Kite Flying | .433 | 79 | Painting/Drawing | | | |
| .526 | 77 | Mountain Climbing | .351 | 90 | Sculpture | | | |
| .490 | 88 | Rowing/Boating | .778 | 91 | Sewing | Factor 7: <u>Slow Living</u> | | |
| .634 | 89 | Sailing | .642 | 114 | Weaving | .436 | 35 | Dining Out |
| .627 | 95 | Skating | | | | .317 | 36 | Driving/Motoring |
| .606 | 96 | Skindiving | | | | .366 | 39 | Exercising |
| .310 | 99 | Sunbathing | Factor 4: <u>Easy Living</u> | | | .488 | 48 | Gardening |
| .563 | 100 | Surfboarding | .551 | 21 | Casino Gambling | .511 | 50 | Go to Movies |
| .502 | 101 | Swimming | .454 | 32 | Dancing: Social | .418 | 69 | Listening to Radio |
| .501 | 105 | Tennis | .229 | 47 | Fraternal Organizations | .351 | 70 | Listening to Records |
| .574 | 109 | Volleyball | .590 | 49 | Go to Horsesaces | .424 | 84 | Reading: Books/Plays/ Poetry |
| .650 | 113 | Waterskiing | .662 | 51 | Go to Nightclubs | .445 | 85 | Reading: Newspapers/ Magazines |
| | | | .426 | 53 | Golf | .378 | 93 | Sightseeing |
| | | | .460 | 75 | Motorboating | .354 | 104 | Talking on Telephone |
| | | | .474 | 81 | Playing Poker | .452 | 107 | Visiting Friends |
| Factor 2: <u>Mechanics</u> | | | .340 | 92 | Shuffleboard | .585 | 108 | Visiting Museums |
| .382 | 2 | Amateur Radio | .537 | 97 | Social Drinking | .444 | 116 | Window shopping |
| .326 | 6 | Auto Racing | .460 | 111 | Watching Team Sports | .497 | 119 | Writing: Letters |
| .752 | 7 | Auto Repairing | .325 | 112 | Watching TV Shows | | | |
| .337 | 13 | Billiards/Pool | | | | | | |
| .346 | 17 | Boxing | Factor 5: <u>Intellectual</u> | | | Factor 8: <u>Clean Living</u> | | |
| .642 | 20 | Carpentry | .339 | 4 | Attending Auctions | .496 | 10 | Baseball/Softball |
| .354 | 33 | Darkroom Work | .534 | 5 | Attending Concerts | .431 | 11 | Basketball |
| .565 | 37 | Electronics | .439 | 14 | Bird Watching | .408 | 16 | Bowling |
| .445 | 41 | Fishing: Fresh Water | .378 | 24 | Chess | .435 | 23 | Checkers |
| .420 | 42 | Fishing: Salt Water | .640 | 26 | Civic Organizations | .426 | 25 | Child-Related Activities: Scouts, PTA, etc. |
| .425 | 59 | Horseshoes | .254 | 27 | Collecting: Coins, Antiques, etc. | .336 | 30 | Crossword Puzzles |
| .455 | 60 | Hunting | .557 | 28 | Conservation/Ecology Organizations | .393 | 63 | Jigsaw Puzzles |
| .551 | 71 | Marksmanship | .605 | 52 | Go to Plays/Lectures | .309 | 86 | Religious Organizations |
| .806 | 72 | Mechanics | .384 | 57 | Homeowner Organizations | .388 | 87 | Rollerskating |
| .762 | 73 | Metalwork | .386 | 80 | Playing Bridge | .285 | 94 | Singing |
| .523 | 74 | Model Building | .586 | 83 | Political Activities | .427 | 102 | Table Tennis/Ping Pong |
| .425 | 76 | Motorcycling | .436 | 106 | Traveling Abroad | | | |
| .488 | 110 | Volunteer Fire Fighting | | | | | | |
| .520 | 120 | Woodworking | | | | | | |

From Manual for the McKechnie Leisure Activities Blank, George E. McKechnie, 1974, p. 18.

VITA²

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