# THE DEVELOPMENT OF AN ASSESSMENT TODETERMINEMOTIVATIONFACTORS FOR PARTICIPATION IN INTRAMURAL ACTIVITIES 

By<br>\section*{TIMOTHY MATTHEW PRASIFKA}

Bachelor of Arts

Southwestern University
Georgetown, Texas

1993

Submitted to the Faculty of the Graduate College of the Oklahoma State University in partial fulfillment of the requirements for the Degree of
MASTER OF SCIENCE July, 1999

# THE DEVELOPMENT OF AN ASSESSMENT TODETERMINEMOTIVATIONFACTORS FOR PARTICIPATION IN INTRAMURAL ACTIVITIES 

Thesis Approved:


## ACKNOWLEDGEMENTS

I would like to thank my advisor, Dr. Christine Cashel for her patience, supervision, and support throughout this process. I would also like to thank my other committee members Dr. Lowell Caneday, Dr. Susie Lane, and Kent Bunker for their assistance and guidance. Dr. Steven Edwards deserves recognition for his assistance on the statistical portions of this report.

In addition, I would like to thank my parents, Tim and Dorothy Prasifka for their support, both financial and moral, during this time. I would also like to recognize my future wife, Jennifer for motivating me to restart this project, for there were times, when I did not think that I would. I can not fail to mention the countless friends and family members who kept asking, "Have you finished yet or how much more do you have to do?"

Finally, I would like thank my brother Phillip and Dr. Mary Nole for their assistance at the very end, which allowed me to complete this task.

## TABLE OF CONTENTS

Chapter ..... Page
I. INTRODUCTION ..... 1
Statement of the Problem ..... 3
Research Objective ..... 4
Operational Definitions ..... 4
Assumptions ..... 4
Limitations ..... 5
Significance of the Study ..... 5
II. REVIEW OF LITERATURE ..... 6
Motivation Theories ..... 6
Hertzberg's Motivation Hygiene Theory ..... 7
Alderfer's ERG Theory ..... 8
McClelland's Achievement Motivation Theory ..... 9
Student Affairs Perspective ..... 10
Motivation Factors for Other Recreational Activities ..... 13
Historical Perspective of Intramural Participation ..... 17
Survey Construction and Valid Surveys ..... 23
Summary and Conclusions ..... 28
III. METHODOLOGY ..... 30
Subjects ..... 30
Instruments ..... 30
Procedures ..... 30
Design and Analysis ..... 31
IV. DATA ANALYSIS ..... 32
Internal Reliability of the Instrument. ..... 50
V. SUMMARY ..... 57
REFERENCES ..... 62
APPENDICES ..... 66
APPENDIX ACORRELATION COEFFICIENT MATRIX67
APPENDIX B
DEMOGRAPHIC FORM \& SURVEY ..... 83
APPENDIX C
INSTITUTIONAL REVIEW BOARD FORM ..... 88

## LIST OF TABLES

Table Page
I. Age of Respondents ..... 32
II. Year in School ..... 33
III. Ethnicity of Respondents ..... 33
IV. Gender ..... 34
V. Housing Location ..... 34
VI. Question 1 ..... 35
VII. Question 2 ..... 36
VIII. Question 3 ..... 36
IX. Question 4 ..... 37
X. Question 5 ..... 37
XI. Question 6 ..... 38
XII. Question 7 ..... 38
XIII. Question 8 ..... 39
XIV. Question 9 ..... 39
XV. Question 10 ..... 40
XVI. Question 11 ..... 40
XVII. Question 12 ..... 41
XVIII. Question 13 ..... 41
XIX. Question 14 ..... 42
XX. Question 15 ..... 42
XXI. Question 16 ..... 43
XXII. Question 17 ..... 43
XXIII. Question 18 ..... 44
XXIV. Question 19 ..... 44
XXV. Question 20 ..... 45
XXVI. Question 21 ..... 45
XXVII. Question 22 ..... 46
XXVIII. Question 23 ..... 46
XXXIX. Question 24 ..... 47
XXX. Question 25 ..... 47
XXXI. Question 26 ..... 48
XXXII. Question 27 ..... 48
XXXIII. Question 28 ..... 49
XXXIV. Question 29 ..... 49
XXXV. Question 30 ..... 50
XXXVI. Factor Analysis of the Instrument ..... 51
XXXVII. Correlation Matrix for Questions 13, 21, and 27 ..... 52
XXXVIII. Correlation Matrix for Questions $14,3,4$, and 6 ..... 52
XXXXIX. Correlation Matrix for Questions 20 and 2 ..... 53


HAPTER
XXXX. Correlation Matrix for Questions 23 and 29 ..... 53
XXXXI. Correlation Matrix for Questions 22 and 5 ..... 54
XXXXII. Correlation Matrix for Questions 10 and 19 ..... 54

# THE DEVELOPMENT OF AN ASSESSMENT TO DETERMINE MOTIVATION FACTORS FOR PARTICIPATION IN INTRAMURAL ACTIVITIES 

## CHAPTER I

## Introduction

Even before intercollegiate and required physical education programs, intramural sports have existed in colleges and universities. While these intramural programs have remained a part of university life, the motivating factors for intramural participation continue to be a mystery. Professionals in the recreational sports realm are continuously searching to discover the motivating factors that drive students to take part in intramural activities. In addition, professionals would like to discover if motivating factors are consistent among various demographic groups such as gender, ethnicity, age, and year classification. The purpose of this study is to create an instrument that will measure motivating factors for participation in intramural sports. This instrument would not only provide professionals in the recreational sports field with knowledge of how to increase participation in their individual programs, but would also provide an assessment of the current participation status of programs as a whole.

Earnest Boyer (1987) stresses the vital contribution of student involvement in extracurricular activities, especially intramurals, wellness activities, and self-directed activities. Boyer (1987) stated that at one university, sixty-five percent of the students participated in some recreation program, with thirty percent of the undergraduates participating in intramural sports. Boyer went on to say that any institution which is seriously committed to offering a quality undergraduate experience will have programs and departments such as intramural sports available for students. He proclaimed that
participation in any type of extracurricular activity directly affects the students' persistence in college, and that the students who become involved in these activities tend to stay involved.

The students who participate in intramural sporting events come from different backgrounds, interests, and beliefs. According to Bourgeois, et al (1995), students engage in leisure activities for a variety of reasons, including personal health and fitness, social interaction, leadership skills, self-actualization, self-esteem, and stress relief. Bourgeois, et al. (1995) also cited certain psychological factors, such as competition, that motivate students to pursue involvement. Milton (1992) believed that the traditional team sport activities, such as football, basketball, and softball, attracted mostly male participants due to the competitive nature of those sports. However, Bialeschki (1998) stated that women enjoy team sports, but do not feel the need to act as competitive as their male counterparts. In addition, Smith and Missler (1993) concluded that women value the cooperative model of sport focusing on sociability and wellness. Both O'Dell (1990) and Kovac and Beck (1997) found that minority students participate for the social and community building aspects, as well. Watson (1998) studied the nontraditional age student and found that while participation was minimal, reasons for participation centered on interpersonal relations and stress relief.

In determining motivational factors, it is necessary to discuss some of the basic premises of human motivation theories. Abraham Maslow's theory of human motivation is a needs based theory, which can explain why individuals participate in activities. Maslow (1970) explained that the five needs, which are physiological, security, affiliation, esteem, and self-actualization, build upon one another. Frederick Herzberg's motivation-hygiene
theory (1993) is a two-factor theory that built on Maslow's hierarchy theory Herzberg's theory consisted of motivators (job satisfiers) and hygiene factors (job dissatisfiers). He investigated the environment to identify which factors produced positive and negative attitudes toward work. Clay Alderfer's ERG theory (1972) stated that individuals have a hierarchy of needs divided into three sets of basic needs: existence, relatedness, and growth. These needs move from acquiring material necessities to the search for unique personal development. McClelland's achievement motivation theory (1971) explained that people have three important needs: achievement, affiliation, and power. The theory stated that a person would engage in behaviors to satisfy the need if the need is strong enough.

Intramural activities are provided in most institutions with varying degrees of participation levels. In order to increase participation levels, the motivating factors behind those who are participating must be investigated. There are a number of motivators that entice students to participate in intramural activities. These motivators are both intrinsic and extrinsic. Parsons (1976) states that all intramural personnel must be attuned to the factors or motivators affecting a student's decision to participate and should use these motivators as participation incentives. Although benefits such as exercise and socialization are obvious motivators, it is important to uncover all of the factors for intramural participation so that students can engage in a complete college experience.

## Statement of the Problem

The purpose of this study is to formulate a survey to determine motivation factors leading to participation in intramural activities. The survey will then be used in a pilot study. Upon completion of the pilot study, validity tests will determine if the instrument
should be administered in intramural programs. When completed, the instrument will be used to show what motivates students to participate in intramural activities.

Iimitatinas

## Research Objective

The objective of this research is to develop a valid and reliable questionnaire, which can then be used to determine intrinsic and extrinsic motivators relating to participation in intramural activities.

## Operational Definitions

1. Intrinsic Motivation refers to engaging in an activity for the satisfaction and pleasure derived from doing the activity (Deci, 1975).
2. Extrinsic Motivation pertains to a wide variety of behaviors that are engaged in as means to an end and not for their own sake (Deci, 1975).
3. Amotivation is when individuals do not perceive contingencies between their actions and the outcomes of their actions. Individuals experience feelings of incompetence and lack of control (Deci \& Ryan, 1985).
4. Intramural Sports are defined as those sports events that are planned and organized on a recreational basis for members confined within the walls or jurisdiction of a setting (Mull, Bayless, \& Ross, 1987).

## Assumptions

1. The respondents who are going to complete the survey will do so honestly.
2. The respondents will understand the survey.
3. The questions will have the same meaning to every respondent.

Revkew of i itersture

## Limitations

1. A limited number of subjects of the Oklahoma State University summer intramural program instead of every intramural summer participant and a limited number of subjects from Washington State University instead of every intramural participant at Washington State University will be used as subjects.
2. Unknown motivators affecting participation may be left off the survey.

## Significance of the Study

This study will be significant to the recreational sports profession for a number of reasons. The research instrument created will be used to measure intrinsic and extrinsic motivators for participation. From these potential findings professionals could then use these motivating factors to increase the participation levels in their own programs. The instrument, when used, could also indicate to professionals the reasons why individuals are not motivated to participate in intramural programs. In addition, the instrument could also be used to measure the level of amotivation exhibited by the participants.

Results, obtained from using this instrument, will allow recreational sports professionals to find new motivators or utilize those already working in other institutions to attract those who are currently not participating. Some motivating factors, such as exercise and socialization are obvious, while other motivating factors are not. Hopefully, this study will bring to the forefront those motivators that are not as obvious and will, therefore, lead to an increase in participation.

## CHAPTER II

## Review of Literature

The review of literature developed into five distinct categories. The first of these categories is the discussion of motivation theory. The second category covers how student affairs professionals view intramural sports and its impact on students. The third category involves motivation factors that are used for activities other than intramurals and how they can be transferred to the intramural field. The fourth category gives a historical perspective of intramural sports and its participation levels. Also in the fourth section, motivating factors exhibited by current participating students are discussed. The fifth category includes a discussion on survey construction and looks at previous surveys and questionnaires and how they relate to the questionnaire being developed.

## Motivation Theories

Abraham Maslow's theory of human motivation is a needs hierarchy theory that was developed in 1943. Maslow (1970) suggested that individuals have a complex set of strong needs, which can be arranged in a hierarchy. Maslow (1970) believed there are a number of basic assumptions about human motivation. These are as follows:

- A satisfied need does not motivate. However, when one need is satisfied, another need emerges to take its place, so people are always striving to satisfy some need.
- The needs network for most people is very complex, with several needs affecting the behavior of each person at any one time.
- Lower level needs must be satisfied, in general, before higher level needs are
activated sufficiently to drive behavior.
factors thut are in place to mainain a
- There are more ways to satisfy higher-level needs than lower level needs. Maslow (1970) stated that needs are insatiable. Webster's (1992) defined insatiable as not satiable, not to be sated or satisfied; unappeasable.

Maslow's (1970) theory stated that a person has five needs: physiological, security, affiliation, esteem, and self-actualization. Physiological needs are the lowest level in Maslow's hierarchy. These are the needs for food, water, air, and shelter. Security needs are the needs for safety, stability, and absence of pain, threat, or illness. Affiliation needs are the needs for friendship, love, and a feeling of belonging. Esteem needs are personal feelings of achievement and self-worth and recognition or respect from others. A selfactualization need is the meeting of self-fulfillment.

Maslow (1970) stated that when affiliation needs are the primary source of motivation, individuals value an opportunity for finding friendly interpersonal relationships. He also stated that these individuals act in supportive and permissive ways and emphasize group acceptance. Maslow continues by saying that when esteem needs are the source of motivation individuals want others to accept them for what they are and want others to perceive them as competent and able. Public rewards and recognition for what they have completed motivate these individuals.

## Herzberg's Motivation Hygiene Theory

Frederick Herzberg's motivation hygiene theory built on the work of Maslow and was developed in 1959. Herzberg (1993) developed a two-factor theory that distinguished between factors that cause or prevent job dissatisfaction and factors that
cause job satisfaction. Hygiene factors are those factors that are in place to maintain a baseline work capacity. These factors can cause job dissatisfaction as well as job satisfaction. Examples of hygiene factors are company policy, supervision, interpersonal relations, working conditions, and salary. Examples of motivators are achievement, recognition, the work itself, responsibility, advancement, and growth. Herzberg (1993) stated that only motivation factors lead to motivation. His hygiene factors relate closely to Maslow's lower level needs that are physiological, safety, and social. His motivation factors relate to the needs at the top of Maslow's hierarchy, which are esteem and selfactualization. In this theory, Herzberg focused on the environment, rather than the individual, to determine factors that produced positive or negative attitudes. According to Herzberg, hygiene factors may result in the worker performing at only minimal levels, whereas, motivation factors will contribute to superior performance.


#### Abstract

Alderfer's ERG Theory Clay Alderfer's ERG theory also stated that individuals have a hierarchy of needs. Alderfer's (1972) theory identified three sets of basic needs that individuals have: existence, relatedness, and growth.

Such things as food. air, water, pay, fringe benefits, and working conditions satisfy existence needs, also called material needs. Relatedness needs are met by establishing and maintaining interpersonal relationships with co-workers, superiors, subordinates, friends, and family. Growth needs are expressed by an individual's attempt to find opportunities for unique personal development by making creative or productive contributions at work.


ERG theory stated that a person would return to satisfying a lower-level need.
instead of attempting to satisfy a higher need, if they are frustrated in achieving the higher need. According to Alderfer (1972), this is called a frustration-regression process. The frustration-regression process assumes that existence, relatedness, and growth needs vary along a continuum of concreteness, with existence being the most concrete and growth being the least concrete. Alderfer (1972) also assumes that when lesser concrete needs are not met, more concrete need fulfillment is sought.

## McClelland's Achievement Motivation Theory

David McClelland developed a theory of motivation, which he believed is rooted in culture. McClelland (1971) stated that everyone has three important needs: achievement, affiliation, and power. He believed that when a need is strong in a person, its effect would be to motivate the person to engage in behaviors to satisfy the need.

According to McClelland (1971), achievement motivation theory stated that people are motivated according to the strength of their desire either to perform in terms of a standard of excellence or to succeed in competitive situations. McClelland (1971) believed that the amount of achievement motivation that people have depended upon their childhood, personal and occupational experiences, and the type of organization to which they belong.

McClelland also listed characteristics of high achievers. McClelland and Boyatzis (1982) stated that self-motivated high achievers have three major characteristics. The first characteristic is that they like to set their own goals. These individuals are very selective about the goals to which they commit themselves. McClelland and Boyatzis (1982) stated that high achievers prefer to be fully responsible for attaining their goals.

The second characteristic is that high achievers avoid selecting extremely difficult goals. These individuals prefer moderate goals that are neither so easy that attaining them provides no satisfaction nor so difficult that attaining them is more a matter of luck than ability.

The third characteristic of high achievers is that they prefer tasks that provide immediate feedback. They place so much importance on the goal and therefore like to know how well they are doing.

In this section, four human motivation theories were reviewed. All of the theories studied were needs based. Maslow determined that there are five needs that can motivate an individual. Alderfer identified only three sets of basic needs while McClellend believed only in three needs. In addition, Herzberg developed a two-factor theory distinguishing between factors that cause or prevent job dissatisfaction and factors that cause job satisfaction.

## Student Affairs Perspective

The second category of the literature review is the view of intramural participation by student affairs professionals. Members of this group heavily target student retention and believe intramural and recreational activities are a major part of this retention effort.

Snodgrass \& Tinsley (1990) stated that campus recreation programs have established themselves as significant elements of student life. They believe there are many benefits associated with participation, including those related to personal health and fitness, social interaction, leadership skills, self-actualization, self-esteem, stress release, and often recruitment and retention of university students. Snodgrass and Tinsley (1990)
concluded that participation in recreational sports contributes not only to physical wellness, but also to overall wellness and satisfaction with life and college.
for cla Bradley, Phillipi, and Bryant (1992) also believed that out-of-class involvement has a positive effect on student persistence and satisfaction. They believed that involvement with the institutional environment is a key factor in the retention of students. Additionally, they concluded that student services personnel and programs have had a positive effect on graduation rates.

In 1975, Astin presented evidence suggesting that student involvement and identification with an activity or program at an institution were related to an increased probability that a student would remain in school. Although Astin (1997) concluded that participating in intramural sports had a weak negative correlation with growth in knowledge of a field or discipline, he believed participating in intramural sports had a positive effect on students remaining in school. The use of facilities and the participation of students in activities and programs are seen as an important element in Astin's concept of involvement and identification. One of the areas to which Astin was referring was recreational programs.

Astin (1997) also spoke of involvement variables that show positive associations with satisfaction with campus life. These variables, which include being in clubs or organizations, socializing with friends and participating in intramural sports leaned heavily on student interaction and social life. He believed that the student to student interaction in these activities lead to a growth in interpersonal skills. He further concluded that individuals who are part of certain clubs or organizations have increased leadership skills. He also stated that there were larger than average increases in leadership scores when
individuals are members of a social fraternity or sorority, playing intramural sports, ese out spending time in volunteer work, tutoring other students, participating in a group project for class, and making presentations to class.

Mallincrodt and Sedlacek (1987) also investigated factors in student retention. They found that a policy that allows the maximum number of hours for students to use campus gyms and athletic facilities helped to retain students. They believed this was especially true of minority students. Mallincrodt and Sedlacek (1987) suggested that the designing or remodeling of facilities to meet the needs of the students would motivate more students to utilize the facility. This outcome would be positive on two levels. For one, a possible increase in intramural participation, and two, student retention.

Facility remodeling and improvement was also a focus for DeWitt (1991). He believed that more improvements, like the remodeling and designing of facilities, need to be made by student affairs professionals. In order for this to be done, DeWitt suggested that student affairs divisions should become more proactive and produce innovative research, clearly documenting the importance of the services that are provided. Professionals must also learn to effectively market the programs to the university communities and find creative means of developing cooperative programs with our academic counterparts. He believed student affairs professionals must be perceived as equal partners in the education process and must stress the importance of a complete education for the students enrolled in the university.

Bricketto (1989) also believed strongly in the idea of student affairs playing a major role in the complete education of the student. He stated that faculty members should be involved in getting students to participate in extracurricular activities. Getting
the faculty to help motivate the students into active participation could maximize these out of the classroom experiences. This motivation of the students will prompt an increase in participation in a number of student affairs programs including intramural activities.

## Motivation Factors for Other Recreational Activities

The third category of the literature review covers what motivates individuals to participate in other recreational activities. Ebbeck, Gibbons, and Loken-Dahle (1995) conducted a study, which explored the reasons why adults engage in physical activity, and the interaction of personal and situational factors that affect participation. They concluded that adults were found to engage in physical activity for interdependence, personal satisfaction, and self-image. Interdependence includes the areas of competition, winning, teamwork, and social interaction. The study indicated that the participation reasons of males and females differed according to the type of activity, especially when examining the interdependence reason. They also stated that adults have different reasons for participating in different activities.

Fortier, Vallerand, Briere, and Provencher (1995) conducted a survey which examined the relationship between competitive and recreational sport structures, gender, and athletes' sport motivation. They concluded that competitive athletes demonstrated less intrinsic motivation to experience stimulation and less intrinsic motivation to accomplish things than did recreational athletes. Stated in the study was that competitive athletes exhibit more identified regulation and more amotivation than do recreational athletes. Here it was found that female athletes are intrinsically motivated to accomplish things and exhibited more identified regulation than male athletes, while dispiaying less
external regulation and less amotivation than male athletes.
White and Duda's (1994) study focused on task orientation as the focus on learning, improvement, and meeting the demands of the activity. They defined ego orientation as wanting superiority over others when comparing one's ability with others. They found that athletes who were involved in the highest competitive level, such as intercollegiate sport, were significantly higher in ego orientation than their adult counterparts, who participated in recreational activities or athletes at a lower level of sport involvement, such as interscholastic or youth sport. They also concluded that male athletes were significantly higher in ego orientation than females regardless of their competitive level. Furthermore, they concluded that athletes who were high in task orientation perceived the opportunities for learning, practice, and regular physical exercise as important dimensions of the sport experience. Additionaliy, White and Duda (1994) found that athletes that are high in ego orientation were engaged in sport so that they could compete with others and be socially rewarded for their accomplishments in that setting.

White (1995) found that female recreation participants, more than male recreation participants, perceived the purposes of sport as developing personal mastery and cooperation, a means of forming healthy lifestyle habits, and cultivating positive attitudes toward society. White's study indicated more gender differences with the study as males viewed the purposes of sport as an arena for competition and materialistic and individualistic gains. She stated that recreational participants, both male and female, thought sport should decrease health risk behaviors and advance societal values and morals while intercollegiate athletes, both male and female, believed that sport should
make them competitive and provide more career opportunities. $\quad$ ams desired and
Clough, Shepard and Maughan (1990) did a study on motives for participation in recreational running. They found that many factors will influence a person's desire and opportunity to take part in physical activities and these are well being, social, challenges, superiority, self-esteem and health and fitness. Stated, was that recreational runners share many of the motives which underline leisure activities in general, although their relative influence, no doubt, varies from one activity to another. Recreational sports should view these motivators and use them to increase participation in the many activities that are offered.

D'Andrade and Strauss (1992) agree that different things motivate people. They suggested that people are motivated to act a certain way depending upon what culture they represent. This information could also be very helpful to the recreation sports professional who is programming for a wide variety of cultural backgrounds.

Kelly and Schreyer (1986) discussed reasons why individuals participate in outdoor activities. They found that there are many reasons why people seek to pursue recreation. An individual's lifestyle, background, and personality determine these. They also concluded that everyone would not be satisfied with programs that are offered, so the majority should be attended to.

Kelly and Schreyer (1986) discussed other reasons for participation. These included social interaction, sense of competence, self-esteem, and the achievement of selfworth. They stated that the most important of these is social interaction. Kelly and Schreyer (1986) also discussed things, which serve as barriers to participation. They include a lack of time, money, and access to programming. Also included is the
overcrowding of recreational areas and the match between programs desired and lent and programs offered

Ellis and Rademacher (1986) defined a barrier to participation as any factor, which precludes or limits an individual's frequency, intensity, duration, or quality of participation in recreation activities. Ellis and Rademacher (1986) cited the three main barriers as money, environmental barriers and personal barriers. Environmental barriers include the quality of physical resources, the quality of the interpersonal environment, and the availability of resources. Personal barriers include arousal, physical adaption, biological rhythms, personality, perceived freedom, and competence.

Another segment of the population, which needs motivation to perform, is the military. Motivational factors that are present in military recreation, according to Kinsman (1991) are the enhancement of physical fitness, leadership, cohesiveness and morale. Kinsman (1991) also believed that a strong recreation program assists in the recruiting of soldiers and also in their retention. The motivational factors inherent in those participating in military recreation could most likely be found in campus recreation as well. Intramural programs should use these motivators to attract more students to participate.

It was stated earlier that individuals are motivated to participate for different reasons. Trope and Neter (1994) gave a reason for non-participation. They stated that the self-evaluated motives are usually incompatible when the anticipated feedback is negative. Trope and Neter (1994) said that when failure is likely there is very little that could provide motivation. It is the job of the recreational sports professional to provide little possibility of negative feedback. This can be done, as suggested earlier, through skill classifications in leagues. People are motivated to participate in various activities for a
number of reasons. It is important to find those motivators, which are most prevalent and are motivators for a wide range of activities. $\qquad$


## Historical Perspective of Intramural Participation

Stewart (1992) stated that intramural sports in colleges and universities began with student initiated and sponsored athletic contests in which students participated in their leisure time. He described these contests and games preceded both the intercollegiate and the required physical education program and are as old as the collegiate institution themselves. Except in a few rare cases, the intramural form of athletics was the only form of sports competition for boys and men for almost the entire nineteenth century.

Stewart (1992) stated that a new emphasis on the intramural approach began in the late nineteenth century when class organizations and fraternities assumed leadership in conducting games for those students who were not on varsity teams. He stated that educators were becoming aware that all students should be given recreational opportunities and that organized competitive activities should not be limited to a skillful few. He stated that the first reported intramural sports were football, basketball, baseball, track, and tennis. It is not surprising that these were the same sports that were offered as varsity programs.

The growth of intramural sports in the colleges and universities suffered a temporary set back during World War I, but the development of the intramural movement rapidly increased after the war. Results of medical examinations for the draft of men for military service indicated that the program of physical education and athletics in the high schools and colleges of the country were not satisfactory for preparing men for military
service. This resulted in an "athletics for all" movement across the nation. Stewart stated that this movement resulted in the development of recreation programs on the national, state, and local levels. This played an important part in the development of intramural athletics.

Stewart explained that the period immediately following World War II had the greatest expansion of intramurals, from the standpoint of participation, as colleges and universities experienced tremendous growth in enrollment. This expansion occurred because of a number of factors. He stated that activities of a recreational nature were more in demand and were considered to be a responsibility of the intramural department.

A second factor was that intramural activities were gradually being accepted by educators as an important part of the education process. A third factor was the addition of coeducational activities.

Milton (1992), like Stewart, stated that traditional programs of recreational sports have stressed events which are highly organized and highly competitive. These events are the traditional team sports such as football, basketball, and softball, where success and reward comes from defeating opponents. He believed these type of events attract mostly male participants since they appeal to individualism, separation, and a highly structured system of justice. As programs expanded, they did so to accommodate more participation in these team sports and to provide the addition of other competitive team activities. Milton stated that in order for women to participate, they had to play like men.

Much of the research on intramural participation actually relates reasons for nonparticipation. It seems that certain segments of the student population feel the intramural program slights them. The groups which are most affected are women and ethnic
minorities. Smith and Carron (1992) felt that women are oppressed in intramural sport programming and believed this oppression can be found in all aspects of the intramural program. Smith and Carron (1992) gave one example of this oppression of women participants. If the intramural basketball co-recreational league allows three points for every basket made by a woman rather than the standard two for men, the women feel oppressed. Smith and Carron (1992) believed a motivating factor for women would be to not alter the rules in co-recreational and women's activities.

Bialeschki (1988) was also concerned with reasons for women's non-participation in intramural sports and concluded that ignorance of programs offered was the major reason given by the whole sample for not participating. She also stated, in this study, that women enjoy individual activities, such as tennis, more than team activities. These individual activities seem more like exercise to them. The results indicated that women do enjoy team sports to a certain degree but do not feel the need to act as competitive as their male counterparts.

Smith and Missler (1993) echoed Bialeschki's findings. They concluded that women and less skilled players value the cooperative model of sport, while men and advanced players embrace the competitive model. Smith and Missler suggested that if programs want to attract more women and lesser skilled players, the advertising of intramural programs should address things such as sociability and wellness.

Kovac and Beck (1997) reinforced the idea that females chose not to participate in activities they considered too competitive. They found that females would rather participate in activities that focused on participation within social groups instead of the more traditional sporting events and tournaments, which focused on individual
accomplishment and competitive skill. They did state also that women participants were generally more satisfied with their overall recreational experiences than the males. that. Bohlig (1991) capitalized on wellness and a new facility and used them as motivators for increased women's participation. At her institution a new facility was constructed and women actively participated in Wellness and Fitness programs. After becoming involved, the women wanted more leisure activities and were drawn to intramurals.

Bourgeois, et al. (1995) agreed with Bohlig stating while men participated more in team sports, sports clubs and informal recreation, women participated significantly more in leisure and fitness classes and the motivation to compete was twice as important to men as to women.

Proescher (1996) found the number of women participating in aerobics or other areas in the fitness realm is increasing, while the number participating in intramural sports is not. In this study, he stated that juniors and seniors are more likely to participate in intramural basketball as compared to freshman and sophomores. He believed that the reasons for this were that the upperclassmen had been around longer and were more exposed to the program while the underclassmen were looking at the experience more as a way to meet and socialize with people.

Reznik and Gaskins (1988) believed that the motivating factors for lesser skilled participants should include the breakdown of individuals or teams into different skill classifications among leagues. They concluded this would motivate more students to play and, therefore, increase participation. The breakdown of skill classifications was used, tested and proven successful at Louisiana State University by Reznik and Gaskins (1988).

Another segment of the student population, which may lack motivation to participate in intramural activities, is the older students. Gilkision and Hall (1979) suggest that, like many of the women, the older students do not enjoy the traditional team sports as much but could be motivated to participate in more fitness type activities. Watson (1998) also studied the older or non-traditional age students and compared them to the traditional age students. He studied the students' leisure attitudes and leisure motivations. From his study, Watson concluded that the traditional age male students participate in recreational activities for the purposes of competing against someone, building friendships, and competing in a variety of recreational activities. The traditional age female students participate in recreational activities for a variety of reasons, which includes competition with others from a social orientation, the opportunity to relieve daily stress, and the opportunity to keep in good physical condition. Watson further concluded that the nontraditional age male students saw little benefit from participating in recreational activities. Those, who did participate, did so to gain respect or favor with a co-employee, a supervisor, someone of the opposite sex, a family member or dependent. The nontraditional age female students rarely participated in recreational activities. When they did, it was for the relief of daily stress. Watson found that traditional age students, both male and female, spend significantly more time in recreational activities than do non-traditional age students.

The minority students, on college campuses, are another segment of the student population, which may lack motivation to participate in intramural activities. This is disappointing for a number of reasons. One of these reasons is that the National Intramural Recreational Sports Association (NIRSA) was founded, in 1950, by Wiliam N.

## Wasson from Dillard University in New Orleans, Louisiana, a predominately black college.

Stewart (1992) stated that Wasson, with ten other representatives, also from black colleges, founded the organization on the following principles. The group wanted to study noteworthy plans for the administration of intramural programs and to make recommendations concerning the organization and administration of intramural programs, and to use the interview-observation technique to reveal important facts and gain insight into the intramural programs being offered.

O'Dell (1990) does not feel that minorities gain personal rewards from participating in intramural activities. She believes they are only motivated to play for social interaction within their own groups.

Kovac and Beck (1997) also studied minority students. They found that minority students tend to participate for similar reasons as women, which is for the social and community building aspects. Minority students tend to be less satisfied with recreational sport offerings. They also concluded that minority students placed a greater value on their recreational sport experiences when deciding where to attend a university as well as when deciding to stay at a university.

The results of Kanters and Forrester (1997 a) study differed from the results of many other studies. They concluded that men and women have similar motives for participation. That stated that all students, regardless of sex, participate in sports programs for the opportunity to challenge themselves, master skills, meet new people, and be recognized for their skills and abilities. They suggested that recreation programs do not need to be greatly diverse in order to cater to the different needs of female and male participants.
sind al In a similar study Kanters and Forrester (1997 b) also discussed why individuals do not participate in recreational activities. They stated that some students have a greater need for leisure activities, which provide more mental stimulation. From the results, a number of recommendations were offered to campus recreation administrators. These recommendations are:

- To continue to offer a variety of sport opportunities, possibly with an increased emphasis on co-educational sport programs to facilitate the social aspect of sport participation.
- Alternative recreation opportunities should be offered to attract typical non-athletic students. The activities should include opportunities for mental stimulation such as learning, exploring, and creating.

Ferguson (1983) completed a two-fold study on awards that were given by intramural offices and what were motivating students to participate. T-shirts were regarded as the highest motivator followed by trophies and certificates.

Each of these studies provided us with motivators for participation or reasons for non-participation. The one common theme throughout was program evaluation. Hupp and Rinaldi (1991) preached of an evaluation system, saying that if you know what motivates students to play you keep doing it and if you know why others are not participating, you find ways to motivate them to do so.

## Survey Construction \& Valid Surveys

The fifth category of the literature review discusses how surveys are constructed
and also examines past questionnaires and surveys. The area of survey construction is critical in determining what questions should be included on the survey and in determining how the questions should be asked. The examination of past questionnaires and surveys is also helpful, because it indicates what questions have been used in other surveys and views how successful or unsuccessful they were.

When creating survey questions, the author is striving for questions, which are reliable and valid. Thomas and Nelson (1990) defined reliability as the consistency and dependability of a measure. Fowler (1993) stated that respondents should be asked the same questions on a survey and, when respondents are in the same situation, they should answer the questions in like ways.

Fowler (1993) believed that in order to provide consistent data collection experience for all respondents, a question should have the following properties:

- Researchers side of the question and answer process is entirely scripted, so that the questions as written fully prepare a respondent to answer questions.
- The question means the same thing to every respondent.
- The kinds of answers that constitute an appropriate response to the question are communicated consistently to all respondents.

Fowler (1993) went on to explain why those criteria are necessary. He stated that if two respondents understand the question to mean different things, their answers might be different for that reason alone. He believed that the simplest way to give respondents the same perceptions of what constitutes an adequate answer was to use closed questions.

Closed questions provide the responder with a list of acceptable answers. He prefers
closed questions to "why" questions because "why" questions pose problems. He believes that one's sense of causality or frame of reference can influence how one answers a question.

Thomas and Nelson (1990) defined validity as a degree to which a test or instrument measures what it is suppose to measure. Validity can be categorized as logical, content, criterion and construct. For the purposes of this research, construct validity was studied. They defined construct validity as a degree to which a test measures a hypothetical construct, usually established by relating the test results to some behavior.

Some questions are designed to measure facts while others are designed to measure subjective states such as attitudes, opinions, and feelings. Fowler (1993) believed that validity is somewhat different for subjective and objective measures. Fowler (1993) believed that the validity of reports of subjective states can be assessed only by their correlation with other answers that a person gives or with other facts about the person's life that one thinks should be related to what is being measured. Thomas and Nelson (1990) stated that there are four types of data that are used for measurements. They are nominal, ordinal, interval, and ratio.

Fowler (1993) stated that if a researcher wants nominal data, the categories must be provided to the respondent. He went on to explain that there is a spectrum assumed by the researcher that goes from the most negative feelings to the most positive feelings possible. Fowler (1993) explained that the way survey researchers get respondents into ordered categories is to put designations or labels on such a continuum.

Fowler (1993) stated that an ordinal scale measurement is relative. He stated that the distribution of people choosing a particular label or category depends on the particular
scale that is presented. He stated that if there are more categories in a scale, the sense of the scale changes. He also stated that people respond to the ordinal position of categories and to the descriptors that are used. He stated that only comparative statements, or statements about relationships, are justifiable when one is using ordinal measures.

Fowler (1993) viewed the often-used "Agree-Disagree Items" as a special case when dealing with survey research. He believed there are many disadvantages to using the "Agree-Disagree" format as opposed to the straightforward rating format. He concludes the disadvantages are as follows:

- The rating scale sorts respondents into five categories: the "AgreeDisagree" question is almost always analyzed by putting respondents into two groups. Hence, more information is gained from the rating.
- "Agree-Disagree" questions, in order to be interpretable, can only be asked about extremes of a continuum. This feature limits the ability to order people in the middle of a continuum.
- Respondents often find it confusing.

Fowler (1993) stated many think the "Agree-Disagree" format is a simple way to construct questionnaires. In fact, to use this form to provide reliable, useful measures are not easy and require a great deal of care and attention. He believed that researchers would have more reliable and interpretable data, if they used a more direct question form.

One instrument that provided insight was the Quality and Importance of Recreational Services Survey prepared for the National Intramural-Recreational Sports Association (NIRSA) by the Center for Assessment Research and Development(1991). This survey provided a demographics sheet and a base of questions used in the self-
developed questionnaire. Another instrument that was reviewed was the Sport Motivation Scale (SMS). Pelletier, Fortier, Vallerand, Tuson, and Briere (1995) created the SMS that consists of seven subscales that measure three types of intrinsic motivation. They are the motivation to know, to accomplish things, and to experience stimulation. The SMS also gives three forms of regulation for extrinsic motivation. They are identified, introjected, and external. Additionally, the SMS measures amotivation.

The SMS gathers responses by using a seven point Likert Scale. Pelletier, Fortier, Vallerand, Tuson, and Briere (1995) concluded, from the SMS, that controlling events such as competition, deadlines and imposed goals led to poorer performance and less creativity than informational events. They also believed that when people are intrinsically motivated and self- determined they are more fully involved in the activity itself and display better performance.

Another instrument that was reviewed was the Survey of Student Interest in Intramural Programs at Harper College by Ryan \& Lucas (1992). This survey was designed for students at an institution that did not have any intramural activities so it was not very helpful. However, it did provide suggestions for a few of the questions included on the questionnaire. The remaining instruments that were reviewed were part of a book entitled The Citizen Survey Process in Parks and Recreation by Kelsey \& Howard (1986). These included the Salt Lake County Recreation Opinion Questionnaire, the Northridge Community Survey, the LaSalle County Study and the Halifax, Nova Scotia Adult Questionnaire. These surveys provided little help with the content of questions asked but did give a large amount of insight into the set-up of the questionnaire being developed.

The instruments reviewed were helpful with the set-up of the questionnaire and
with a few of the questions being asked on the questionnaire. However, none of the instruments measured exactly what this researcher wanted to study, so the creation of a questionnaire was needed.

## Summary and Conclusions

In the review of literature five distinct areas were developed. The first of these areas was a discussion of motivation theory. The theories of Maslow, Herzberg, Alderfer, and McClelland were researched. Each of these theories is needs based, meaning that the levels build upon one another. From these human motivation theories, an understanding of why individuals participate in intramural activities can be achieved. The second area of the literature review involved student affairs research. Student affairs professionals believe that intramural sports enable students to engage in activities that are beneficial to them, but are not academic. Research has shown that students who participate in intramural sports have a higher retention rate than students who do not participate. The third area of the literature review included research on motivation factors for other recreational activities. Individuals participate in these activities for a number of reasons including an individual's lifestyle, cultural background, and personality. The fourth area was a historical perspective of intramural participation. There are many factors that prompt students to participate in intramural activities including the need for competition, exercise, to socialize, and to build community with others. The motivational factors are greatly affected by a student's gender, ethnicity, age, and year classification. The fifth and final area of the literature review investigated survey construction and currently valid surveys. An instrument should be reliable and valid and the questions of the instrument
should mean the same thing to every respondent. Also, closed questions, providing the responder with a list of acceptable answers, are preferred to open questions that require the responder to answer why questions. A quality demographics sheet is also needed as part of the instrument.

## CHAPTER III panel also agreed that the

## Methodology

## Subjects

The subjects used in this study were 45 students participating in the summer intramural program at Oklahoma State University and 19 intramural participants at Washington State University, along with experts from recreational sports programs and faculty in leisure studies. This was a pilot study. A response rate of 100 percent was achieved because the surveys were distributed prior to the start of the activities in which the students were participating.

## Instruments

There were two instruments used in this study. Both instruments were selfdeveloped and analyzed by a panel of experts for construct validity. The first was a demographics sheet and the second was a self-developed survey. The demographics sheet was completed first. The survey provided data for factor analysis and, if necessary, for rewriting or discarding any questions currently included in the survey.

## Procedures

The first step involved the creation of the survey. The development of this survey was aided by the review of other valid surveys. A panel of experts, which included Dr. Christine Cashel, Dr. Mary Nole, and Kent Bunker, Director of Recreational Sports at Oklahoma State University, then analyzed the survey. This panel agreed that the instrument included an appropriate number of questions. A number of questions were
either removed or reworded during this process. The panel also agreed that the instrument had a sufficient number of questions concerning intrinsic motivators, extrinsic motivators and general or background information. It was also agreed that there were no inherent groupings of questions that would have compromised the outcome of the instrument. The Institutional Review Board (IRB) then subsequently approved the survey at Oklahoma State University. The survey was distributed to summer intramural participants at Oklahoma State University and to participants at Washington State University. The surveys have been completed. A factor analysis has been conducted and tests for validity of the survey and questions was completed. A factor analysis is a datareduction method that helps determine whether relationships among a number of variables can be reduced to smaller combinations of factors or common components (Thomas \& Nelson, 1990). The alpha level for determination of statistical significance was established at 01 .

## Design and Analysis

The sample that was used included individuals participating in summer intramural activities at Oklahoma State University and participants at Washington State University. The sample size was 64. The construction of survey questions used a Likert Scale because varying levels of agreement or disagreement were being measured. After the surveys were returned the responses were analyzed by a factor analysis using the SPSS statistics package for Microsoft Windows. The factor analysis determined the internal consistency reliability of the survey as a whole as well as the reliability of each question.

## CHAPTER IV

## Data Analysis Percentage Breakdown

The purpose of this study was to determine what motivates individuals to participate in intramural sports. A research instrument was created, which was used to measure intrinsic and extrinsic motivators.

In this study, data were collected from a group of respondents at Oklahoma State University and Washington State University. These individuals completed a demographics sheet and then completed the survey.

The following tables illustrate the demographics breakdown of the 64 respondents.
Table 1

| Age of Respondents | Percentage Breakdown |
| :---: | :---: |
| $18-22$ Years Old | $59.4 \%$ |
| $23-26$ Years Old | $39.1 \%$ |
| $27+$ Years Old | $1.6 \%$ |

A majority of the respondents were in the 18-22 year old range, which are the ages of "traditional" college students.

## Table 2

| Year in School | Percentage Breakdown |
| :---: | :---: |
| Freshman | $\mathbf{3 . 1 \%}$ |
| Sophomore | $\mathbf{7 . 8} \%$ |
| Junior | $\mathbf{3 2 . 8} \%$ |
| Senior | $\mathbf{4 2 . 2} \%$ |
| Other | $\mathbf{1 4 . 1} \%$ |

The sample is predominately juniors and seniors.

Table 3

| Ethnicity of Respondents | Percentage Breakdown |
| :---: | :---: |
| African/Asian American | 15.6 \% |
| Native American | $1.6 \%$ |
| Hispanic | $1.6 \%$ |
| Caucasian | $81.3 \%$ |

A majority of the respondents identified themselves as Caucasian.

## Table 4

pondents answered the 30 questions of

| Gender | Percentage Breakdown |
| :---: | :---: |
| Females | $\mathbf{3 5 . 9} \%$ |
| Males |  |

These percentages for males and females are consistent with intramural participation numbers on most campuses.

## Table 5

| Housing Location | Percentage Breakdown |
| :---: | :---: |
| Family | $1.6 \%$ |
| Off Campus | $71.9 \%$ |
| On Campus | $26.6 \%$ |

Almost seventy two percent of the respondents lived off campus.
The demographics showed that the majority of respondents in this study were between the ages of 18 and 22 . While respondents in the age group of 23 to 26 showed a sizable percentage, those in the 27 and over age group contributed less than 2 percent of the sample. Seventy-five percent of the respondents were classified as juniors and seniors with freshman being the least represented. While all of the major ethnic groups listed were represented in the study, an overwhelming majority of the respondents identified themselves as Caucasian. Nearly two-thirds of the respondents were male. Seventy percent of the respondents lived off campus, nearly 27 percent lived on campus, and fewer than 2 percent resided with their families.

The following tables illustrate how the respondents answered the 30 questions of the survey.
activaties.

## Table 6

The intramural sports program was a factor in the selection of my attending this institution.

| Question 1 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | $39.1 \%$ |
| Disagree | $29.7 \%$ |
| Undecided | $20.3 \%$ |
| Agree | $9.4 \%$ |
| Strongly Agree | $1.6 \%$ |

Only 11 percent agree or strongly agree that the intramural program was a major factor in choosing their current institution.

## Table 7

There must be quality indoor facilities in order for me to participate in intramural activities.

| Question 2 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | $\mathbf{9 . 4} \%$ |
| Disagree | $\mathbf{2 5 . 0} \%$ |
| Undecided | $\mathbf{1 0 . 9} \%$ |
| Agree | $\mathbf{4 6 . 9} \%$ |
| Strongly Agree | $\mathbf{7 . 8} \%$ |

For this sample, quality indoor facilities are an important factor for those who are participating.

## Table 8

I participate in intramural sports $\mathbf{1}$ to $\mathbf{3}$ hours a week.

| Question 3 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | $\mathbf{3 . 1} \%$ |
| Disagree | $9.4 \%$ |
| Undecided | $4.7 \%$ |
| Agree | $\mathbf{3 4 . 4} \%$ |
| Strongly Agree | $\mathbf{4 8 . 4} \%$ |

A majority of the respondents ( $82.8 \%$ ) participated in this 1 to 3 hour a week interval.

## Table 9

I participate in intramural team sport activities such as flag football, softball and basketball.

| Question 4 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | $4.7 \%$ |
| Disagree | $4.7 \%$ |
| Undecided | $\mathbf{1 . 6} \%$ |
| Agree | $\mathbf{2 8 . 1} \%$ |
| Strongly Agree | $\mathbf{6 0 . 9} \%$ |

Almost ninety percent of the respondents participated in the traditional team sport activities such as flag football, softball, and basketball.

Table 10
I play intramural sports in order to win a championship t-shirt.

| Question 5 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | $\mathbf{7 . 8} \%$ |
| Disagree | $\mathbf{2 0 . 3}$ \% |
| Undecided | $\mathbf{2 0 . 3} \%$ |
| Agree | $\mathbf{2 8 . 1} \%$ |
| Strongly Agree | $\mathbf{2 3 . 4} \%$ |

Over half of the respondents participated in intramural sports in order to win a championship T-shirt.

Table 11
I participate in intramural events that are held on campus.

| Question 6 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | $1.6 \%$ |
| Disagree | $0.0 \%$ |
| Undecided | $1.6 \%$ |
| Agree | $42.2 \%$ |
| Strongly Agree | $54.7 \%$ |

Nearly the entire sample ( $96.9 \%$ ) participated in intramural events that were held on campus.

## Table 12

I play intramural sports because my organization requires me to.

| Question 7 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | $\mathbf{5 3 . 1} \%$ |
| Disagree | $\mathbf{3 7 . 5} \%$ |
| Undecided | $\mathbf{3 . 1} \%$ |
| Agree | $\mathbf{6 . 3} \%$ |
| Strongly Agree | $\mathbf{0 . 0} \%$ |

Over ninety percent of the respondents disagreed with this statement.

## Table 13

The intramural sports program is a factor in my staying at this institution.

| Question 8 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | 29.7 \% |
| Disagree | 35.9 \% |
| Undecided | $15.6 \%$ |
| Agree | $17.2 \%$ |
| Strongly Agree | $1.6 \%$ |

For these respondents, the intramural sports program is not a retention factor. This is in contrast to much of the student affairs research, which states that intramural sports is a factor for student retention.

Table 14
I play intramural sports so that I can stay healthy.

| Question 9 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | $0.0 \%$ |
| Disagree | $9.4 \%$ |
| Undecided | $10.9 \%$ |
| Agree | $53.1 \%$ |
| Strongly Agree | $26.6 \%$ |

Nearly eighty percent of the respondents believe that playing intramural sports will help them stay healthy.

## Table 15

I have had at least one positive experience while playing intramural sports.

| Question 10 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | $0.0 \%$ |
| Disagree | $1.6 \%$ |
| Undecided | $1.6 \%$ |
| Agree | $15.6 \%$ |
| Strongly Agree | $\mathbf{8 1 . 3} \%$ |

Most respondents (96.9 \%) have had at least one positive experience while participating in intramural sports.

Table 16

I participate in intramural individual and dual sport activities such as tennis, racquetball and badminton.

| Question 11 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | 29.7 \% |
| Disagree | $25.0 \%$ |
| Undecided | $4.7 \%$ |
| Agree | $\mathbf{2 5 . 0} \%$ |
| Strongly Agree | $15.6 \%$ |

More than half of the respondents did not participate in individual and dual sport activities such as tennis, racquetball, and badminton.

## Table 17

I play intramural sports in order to be social with my friends.

| Question 12 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | $\mathbf{3 . 1} \%$ |
| Disagree | $\mathbf{3 . 1} \%$ |
| Undecided | $\mathbf{1 0 . 9} \%$ |
| Agree | $\mathbf{5 0 . 0} \%$ |
| Strongly Agree | $\mathbf{3 2 . 8} \%$ |

Almost eighty three percent of the respondents use intramural sports as an opportunity to be social with their friends.

Table 18
I participate in intramural sports $\mathbf{4}$ to $\mathbf{6}$ hours a week.

| Question 13 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | $\mathbf{7 . 8} \%$ |
| Disagree | 32.8 \% |
| Undecided | 9.4 \% |
| Agree | $15.6 \%$ |
| Strongly Agree | $34.4 \%$ |

Exactly one half of the respondents participate in intramural sports 4 to 6 hours per week.

## Table 19

I play intramural sports because I enjoy them. ny hizb school

| Question 14 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | $\mathbf{0 . 0} \%$ |
| Disagree | $\mathbf{1 . 0} \%$ |
| Undecided | $\mathbf{3 . 1} \%$ |
| Agree | $\mathbf{2 3 . 4} \%$ |
| Strongly Agree | $\mathbf{7 3 . 4} \%$ |

The enjoyment of participating in intramural sports is a dominant factor (96.8 \%) for these respondents.

Table 20
I participate in intramural events that are held off-campus.

| Question 15 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | $15.6 \%$ |
| Disagree | $21.9 \%$ |
| Undecided | $20.3 \%$ |
| Agree | $28.1 \%$ |
| Strongly Agree | $14.1 \%$ |

Twenty percent of the respondents were undecided on this question. That is a high percentage to be undecided. There is a possibility that the respondents did not understand this question.

Table 21
I play intramural sports in order to re-live past experiences from my high school athletic days.

Petcentage Rreakdown

| Question 16 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | $15.6 \%$ |
| Disagree | 31.3 \% |
| Undecided | $15.6 \%$ |
| Agree | $\mathbf{2 8 . 1} \%$ |
| Strongly Agree | $9.4 \%$ |

Almost half of the respondents did not feel that high school athletic experiences factor into intramural participation.

Table 22

I participate in intramural special events such as road races and late night events.

| Question 17 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | 17.2 \% |
| Disagree | $32.8 \%$ |
| Undecided | $17.2 \%$ |
| Agree | $26.6 \%$ |
| Strongly Agree | $6.3 \%$ |

For half of the respondents, special events were not a priority.

Table 23
I participate in intramural sports because it costs little or no money-amural

| Question 18 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | Percen 4.7 \% |
| Disagree | $\mathbf{6 . 3} \%$ |
| Undecided | $\mathbf{1 2 . 5} \%$ |
| Agree | $\mathbf{3 9 . 1} \%$ |
| Strongly Agree | $\mathbf{3 7 . 5} \%$ |

Most respondents consider the low cost or no cost as a reason for participating in intramural sports.

Table 24
I have had more than one positive experience while participating in intramural sports.

| Question 19 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | $0.0 \%$ |
| Disagree | $0.0 \%$ |
| Undecided | $3.1 \%$ |
| Agree | $28.1 \%$ |
| Strongly Agree | $68.8 \%$ |

Nearly ninety seven percent of the respondents have had more than one positive experience while participating in intramural sports.

## Table 25

There must be quality outdoor facilities in order for me to participate in intramural sports.

Perceatage Brenkdown

| Question 20 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | $\mathbf{7 . 8} \%$ |
| Disagree | $\mathbf{2 5 . 0} \%$ |
| Undecided | $\mathbf{1 4 . 1} \%$ |
| Agree | $\mathbf{3 9 . 1} \%$ |
| Strongly Agree | $14.1 \%$ |

Quality outdoor facilities are a motivator for more than half of this group of respondents.

Table 26
I participate in intramural sports $\mathbf{7}$ to 9 hours a week.

| Question 21 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | $21.9 \%$ |
| Disagree | $43.8 \%$ |
| Undecided | $12.5 \%$ |
| Agree | $10.9 \%$ |
| Strongly Agree | $10.9 \%$ |

Over sixty-five percent of this sample does not participate 7 to 9 hours per week.

## Table 27

I play intramural sports in order to win awards such as water bottles or certificates.

| Question 22 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | $12.5 \%$ |
| Disagree | $39.1 \%$ |
| Undecided | $26.6 \%$ |
| Agree | $\mathbf{7 . 8} \%$ |
| Strongly Agree | $14.1 \%$ |

These respondents do not consider water bottles or certificates as participation motivators.

Table 28
I have had at least one negative experience while participating in intramural sports.

| Question 23 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | 6.3 \% |
| Disagree | 20.3 \% |
| Undecided | $6.3 \%$ |
| Agree | $43.8 \%$ |
| Strongly Agree | $\mathbf{2 3 . 4} \%$ |

Two thirds of the respondents agree that they have had at least one negative experience while participating in intramural sports.

Table 29
I play intramural sports because of a point system.

| Question 24 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | 26.6 \% |
| Disagree | $\mathbf{3 1 . 3} \%$ |
| Undecided | $20.3 \%$ |
| Agree | $\mathbf{1 8 . 8} \%$ |
| Strongly Agree | $\mathbf{3 . 1} \%$ |

Almost sixty percent of the sample disagreed with this statement.

Table 30
The intramural program is well publicized on and around campus.

| Question 25 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | $3.1 \%$ |
| Disagree | $14.1 \%$ |
| Undecided | $4.7 \%$ |
| Agree | $56.3 \%$ |
| Strongly Agree | $21.9 \%$ |

The publicity of the intramural program is working on these campuses.

## Table 31

I play intramural sports in order to get some exercise.

| Question 26 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | $\mathbf{0 . 0} \%$ |
| Disagree | $\mathbf{3 . 1} \%$ |
| Undecided | $\mathbf{4 . 7} \%$ |
| Agree | $\mathbf{5 1 . 6} \%$ |
| Strongly Agree | $\mathbf{4 0 . 6} \%$ |

A major motivating factor for this sample is to get some exercise.

Table 32
I participate in intramural sports $\mathbf{1 0}$ or more hours a week.

| Question 27 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | $34.4 \%$ |
| Disagree | $39.1 \%$ |
| Undecided | $15.6 \%$ |
| Agree | $6.3 \%$ |
| Strongly Agree | $4.7 \%$ |

A small percentage of respondents participate in intramural sports for more than 10 hours per week.

## Table 33

I play intramural sports in order to meet new people.

| Question 28 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | 1.6 \% |
| Disagree | 17.2 \% |
| Undecided | $21.9 \%$ |
| Agree | $39.1 \%$ |
| Strongly Agree | $\mathbf{2 0 . 3} \%$ |

Almost sixty percent of this sample hopes to meet new people while participating in intramural sports.

## Table 34

I have had more than one negative experience while participating in intramural sports.

| Question 29 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | $9.4 \%$ |
| Disagree | $26.6 \%$ |
| Undecided | $14.1 \%$ |
| Agree | $34.4 \%$ |
| Strongly Agree | $15.6 \%$ |

Half of the respondents have had more than one negative experience while participating in intramural sports.

## Table 35

I play intramural sports in order to re-live past experiences from my collegiate athletic days.

| Question 30 | Percentage Breakdown |
| :---: | :---: |
| Strongly Disagree | $42.4 \%$ |
| Disagree | $31.3 \%$ |
| Undecided | $9.4 \%$ |
| Agree | $12.5 \%$ |
| Strongly Agree | $4.7 \%$ |

Collegiate athletic experiences did not factor into these respondents' intramural participation

## Internal Reliability of the Instrument

The degree of reliability is expressed by a correlation coefficient ranging from 0.00 to 1.00 . The closer the coefficient is to 1.00 , the less error variance it reflects and the more the true score is assessed. A reliability analysis of the instrument was conducted and the alpha of the total group was 8271 . The alpha of the males was 8033 and the alpha of the females was 8568 . Therefore, the instrument demonstrates reliability.

Table 36
Factor Analysis of the Instrument

|  | Factor 1 | Factor 2 | Factor 3 | Factor 4 | Factor 5 | Factor 6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 021 | 9268 |  |  |  |  |  |
| 027 | 9221 |  |  |  |  |  |
| 013 | 7308 |  |  |  |  |  |
|  | $\mathrm{~A}=86$ |  |  |  |  |  |
| 06 |  | 7482 |  |  |  |  |
| 014 |  | 7384 |  |  |  |  |
| 03 |  | 7264 |  |  |  |  |
| 04 |  | .7257 |  |  |  |  |
| 020 |  | $\mathrm{~A}=71$ |  |  |  |  |
| 02 |  |  | 9201 |  |  |  |
| 023 |  |  | $\mathrm{~A}=87$ |  |  |  |
| 029 |  |  |  | 9447 |  |  |
| 05 |  |  |  | $\mathrm{~A}=86$ |  |  |
| 022 |  |  |  |  |  | 8809 |
|  |  |  |  |  | $\mathrm{~A}=80$ |  |
| 010 |  |  |  |  |  |  |
| 019 |  |  |  |  | 8856 |  |
|  |  |  |  |  |  | $\mathrm{~A}=.77$ |

After determining the reliability of the instrument as a whole, the reliability of factors that were grouped together needed to be inspected. When examining the correlation matrix, important interrelationships among questions were reviewed. A complete correlation matrix can be found in Appendix A. There were six factors that showed correlation. The first correlation was between questions 21, 27, and 13. These questions focused on participating in intramural sports for 3-5 hours per week, 5-7 hours per week, and 8-10 hours per week. The reliability of this correlation was 86 . The question that focused on participating in intramural sports for 1-3 hours per week was not part of this correlation.

The correlation matrix for the questions in Factor 1 is shown in Table 37.

## Table 37

## Correlation Matrix for Questions 13, 21, and 27 ntramal

| $\mathrm{N}=64$ | O 13 | O 21 | O 27 |
| :--- | :--- | :--- | :--- |
| 013 |  | 6877 | 5691 |
| 021 |  | $\mathrm{P}<.001$ | $\mathrm{P}<.001$ |
|  | 6877 |  | 8195 |
| 027 | $\mathrm{P}<.001$ | $\mathrm{P}<.001$ |  |
|  | $\mathrm{P}<.001$ | $\mathrm{P}<.001$ |  |

The second correlation was between questions $14,3,4$, and 6 . These questions did not focus on a specific area. Question 14 states that individuals participate in sports because they enjoy them. Question 3 states that individuals participate 1-3 hours per week. Question 4 states that individuals participate in team sport activities. Question 6 states that individuals participate in events that are held on campus. The reliability of this correlation was .71 . The correlation could be that individuals who participate in team sport activities generally enjoy them, the games are usually held on campus, and during the league season, teams play once or twice a week or 1-3 hours per week. The correlation matrix for the questions in Factor 2 is shown in Table 38.

Table 38
Correlation Matrix for Questions 14, 3, 4, and 6

| $\mathrm{N}=64$ | O 14 | O 3 | O 4 | $\mathrm{O6}$ |
| :--- | :--- | :--- | :--- | :--- |
| O 14 |  | 4720 | .3946 | .4910 |
|  |  | $\mathrm{P}<.002$ | $\mathrm{P}<.002$ | $\mathrm{P}<.002$ |
| 03 | .4720 |  | .4190 | .3843 |
|  | $\mathrm{P}<.002$ | $\mathrm{P}<.002$ | $\mathrm{P}<.002$ |  |
| 04 | .3946 | .4190 |  | .3878 |
|  | $\mathrm{P}<.002$ | $\mathrm{P}<.002$ | $\mathrm{P}<.002$ |  |
| 06 | .4910 | .3843 | .3878 |  |
|  | $\mathrm{P}<.002$ | $\mathrm{P}<.002$ | $\mathrm{P}<.002$ |  |

The third correlation was between questions 20 and 2. These questions focused on the quality of facilities needed by the respondents in order to participate in intramural activities. One question asked about indoor facilities and the other asked about outdoor facilities. The reliability of this correlation was $\mathbf{8 7}$. The correlation matrix for the questions in Factor 3 is shown in Table 39.

Table 39

## Correlation Matrix for Questions 20 and 2

| $\mathrm{N}=64$ | O 20 | O 2 |
| :--- | :--- | :--- |
| O 20 |  | 7639 |
| 02 | 7639 | $\mathrm{P}<.001$ |
|  | $\mathrm{P}<.001$ |  |

The fourth correlation was between questions 23 and 29. These questions focused on the number of negative experiences encountered by the respondents while participating in intramural sports. The reliability of the correlation was .86 . The correlation matrix for the questions in Factor 4 is shown in Table 40.

Table 40

## Correlation Matrix for Questions 23 and 29

| $N=64$ | O 23 | O 29 |
| :--- | :--- | :--- |
| O 23 |  | 7604 |
|  |  | $\mathrm{P}<.001$ |
| O 29 | .7604 |  |
|  | $\mathrm{P}<.001$ |  |

The fifth correlation was between questions 5 and 22. These questions focused on
awards. The reliability of the correlation was .80 . The correlation matrix for the questions in Factor 5 is shown in Table 41.

Table 41
Correlation Matrix for Questions 22 and 5

| $N=64$ | 022 | $\mathrm{O5}$ |
| :--- | :--- | :--- |
| 022 |  | 6704 |
| 05 | 6704 | $\mathrm{P}<.001$ |
|  | $\mathrm{P}<.001$ |  |

The sixth and final correlation was between questions 10 and 19. These questions focused on the number of positive experiences encountered by the respondents while participating in intramural sports. The reliability of this correlation was .77. The correlation matrix for the questions in Factor 6 is shown in Table 42.

Table 42

## Correlation Matrix for Questions 10 and 19

| $N=64$ | O 10 | O 19 |
| :--- | :--- | :--- |
| O 10 |  | 6249 |
| O 19 |  | $\mathrm{P}<.001$ |
|  | $\mathrm{P}<.001$ |  |

The six correlation groupings are showing that these statements, in most cases, are asking similar things. In improving the instrument, I would recommend that these groupings be reduced to a single statement. The first grouping of statements asks how many hours per week the respondents participate in intramural activities. Question 21 states, 7 to 9 hours per week. Question 27 states, 10 or more hours per week. Question 13 states, 4 to 6 hours per week. I would recommend that these statements be reduced to
one statement, that says: I participate in intramural sports 4 or more hours per week sports
The second grouping of statements, although correlated, do not really ask the same thing. Question 6 states that the respondent participates in on campus events.

Question 14 states that the respondent participates because they enjoy the events. Question 3 states that the respondent participates 1 to 3 hours per week. Question 4 states that the respondent participates in team sport activities such as flag football, softball, and basketball. Therefore, it would not be advantageous to remove any of these statements.

The third grouping of statements discusses the quality of facilities and its effect on participation. Question 20 states that the respondent participates because of quality outdoor facilities. Question 2 states that the respondent participates because of quality indoor facilities. I would recommend that these statements be reduced to one statement, that says: There must be quality facilities in order for me to participate in intramural activities.

The fourth grouping of statements discusses the number of negative experiences while participating in intramural sports. Question 23 states that the respondent has had at least one negative experience while participating. Question 29 states that the respondent has had more than one negative experience while participating. The results show that two thirds of the respondents had at least one negative experience while only half of the participants had more than one negative experience. I would recommend that both of these statements remain in the instrument.

The fifth grouping of statements discusses awards given for winning intramural events. Question 5 states that the respondents participate in intramural sports to win a
championship T-shirt. Question 22 states that respondents participate in intramural sports to win awards such as water bottles or certificates. Half of the respondents agreed that championship T-shirts are a motivator while only about twenty two percent agreed that other awards are motivators. I would recommend that both of these questions remain in the survey.

The sixth grouping of statements discusses the number of positive experiences while participating in intramural sports. Question 10 states that the respondent has had at least one positive experience while participating. Question 19 states that the respondent has had more than one positive experience while participating. I would recommend that these statements be reduced to one statement, Question 10.

The questions in this instrument are measuring three different things. The questions can be grouped into areas of intrinsic motivators, extrinsic motivators, and general or background information. Questions $9,12,14,16,26,28$, and 30 are measuring intrinsic motivators. Questions 2, 5, 7, 18,20,22, and 24 are gauging extrinsic motivators. The remaining questions of the instrument are expressing general or background information.

The respondents of this survey seem to be more intrinsically motivated than extrinsically motivated. Of the seven questions that measured intrinsic motivators, five had an agree/strongly agree percentage of $59 \%$ or greater with four of those at or above a percentage of $79 \%$. Of the seven questions that measured extrinsic motivators, four had an agree/strongly agree percentage of greater than $51 \%$. However, orly one of those questions had a percentage greater than $54 \%$ and in the remaining three questions the strongly disagree/disagree percentages were $57 \%$ or greater with a high of $90 \%$.

## CHAPTER V

## Summary

Although all four of the motivation theories contain similar characteristics and describe reasons for intramural participation, Maslow's original hierarchy theory, as a whole, bests illustrates why individuals participate in intramural activities. By superimposing Maslow's hierarchy with participation in intramural activities, one can see that individuals participate because of two hierarchical needs. The first would be the need for affiliation, and the greater opportunity for friendships and feelings of belonging. The second would be the need for esteem and the personal feelings of achievement combined with the recognition from others. It should be noted that individuals might find themselves in either of these two described levels or in both. However, these needs are insatiable and regardless of where a person might find himself, he/she keeps coming back to participate. This is done in an attempt to satisfy a need that cannot be satisfied, that is, they keep returning, seeking more friendships, more feelings of belonging, and more recognition from others. The responses to questions 12 and 28 indicate that, social interaction and relationships motivate the respondents of this survey. The responses to question 5 , where a majority of respondents disclosed that winning a championship T-shirt was a motivating factor for participation, suggests that the needs of achievement and recognition are important to these participants.

It seems obvious that student affairs professionals should recognize the impact of intramural participation on student life and student development. It is commonly believed by many, including Snodgrass and Tinsley (1990) and Astin (1997), that student retention and intramural and other recreational activities have a strong correlation. Astin even
concluded that individuals who participate in extracurricular activities have increased leadership abilities. At many institutions, intramural participation rates exceed fifty percent of the total population. Most of these individuals participate in multiple activities. This is evidenced in the responses of this survey, referring to questions about the amount of time spent per week, participating in intramural activities. Student affairs professionals should evaluate the findings of this survey and future surveys to ensure that intramural activities remains a priority. Universities need to understand that the education process is not complete unless there is a cooperative effort among the entire university, meaning faculty, administration, and staff. There are too many students in intramural sports for student affairs professionals to ignore their needs. As has been stated previously, these needs are insatiable and thus, must be considered by student affairs professionals.

Individuals participate in recreational activities, other than intramural sports, for many of the same reasons that they participate in intramural sports. Ebbeck, et al (1995) concluded that people engage in physical activity for social interaction. Kelly and Schreyer (1986) found that individuals participate in order to interact, for the achievement of self-worth, and for social interaction. The responses to questions 12 and 28 of this survey, support the research that states participants are motivated by social interaction.

The responses, to many of the questions on this survey, support the findings of many in the historical perspective of intramural participation section of this paper. Almost two-thirds of the respondents to the survey were male participants. This number is consistent with most campuses in the country. Nearly ninety percent of the respondents participate in the traditional team sport activities. Milton (1992) stated that team sports are heavily participated in and when programs are expanded, usually more team sport
activities are added. Over half of these respondents agreed that winning a championship T-shirt was a motivating factor for them. Ferguson (1991) had found that winning a Tshirt was the highest motivator among students. It can once again be seen that the need for recognition is being met when one is allowed to wear the T-shirt that he/she has earned.

From the survey construction part of the literature review, it was learned what ingredients were needed in order to have a quality instrument. This instrument has closed questions and contains content validity and internal reliability. It contains those elements that make it a usable instrument.

The intent of this study was to develop a valid and reliable instrument that determined motivating factors for participation in intramural activities. Results indicated that the survey does indeed have internal reliability. The instrument has construct validity but will not be considered a valid survey until the instrument is used with other participants. The factor analysis identified groups of questions in which respondents answered in similar ways. From this, a number of questions could be removed from the instrument or combined with other questions.

The small number of respondents to the survey hindered the ability to compare the intrinsic and extrinsic motivators across demographic areas. The "average" respondent was a white male, between the ages of 18 and 22 , who was a junior or senior, and lived off campus.

In the future, this instrument could be used to research and identify why individuals at certain universities participate in intramural activities. As more data are collected with
this instrument, the demographic groups may be more thoroughly examined and future researchers can target specific demographic groups. As nontraditional students are growing in population, a more in depth look as to what motivates them to participate would benefit professionals in the intramural field. Other areas, that could be researched more heavily to determine the effect on intramural participation, are year in school and housing location.

It is recommended that the instrument be used at different times of the year to see if motivating factors change during the fall, spring, or summer. It could be given to first year students early in the year and then again at the end of the year to see if their motivating factors change. It would be advantageous to use the survey at different types of universities, meaning both public and private institutions, institutions with varying enrollment numbers, and rural and urban campuses to name a few. The results of the surveys might then be compared and contrasted to determine which motivating factors are uniform from campus to campus and which are unique.

If a program were to be created for the respondents of the survey, used in this paper, it would need to include the following elements. The intramural calendar would be dominated by team sport activities that do not occupy more than three hours per week of the participants' time. Since this group is health conscience and wants to exercise, it would need to be team sports which require an above average amount of running, such as basketball, flag football, ultimate frisbee, and soccer. The events should be held on campus and should be of little or no cost to the participants. This group of students would prefer to have quality facilities, both indoors and outdoors, and would be motivated by the ultimate reward of winning a championship T-shirt. The programmer could not
forget to include an element that would allow the participants to not only be social with their current friends but also would give them the ability to meet new ones. This could be accomplished by having one practice game that does not count in the league standings, having self-officiated leagues, and by having an end of the year picnic for all of those who participated. This may not be the best program for all universities, but it would serve those who completed the surveys well.

The instrument entitled Motivation Factors for Intramural Sports at Small Liberal Arts Colleges will now be known as Prasifka's Intramural Participation Survey (PIPS).

## References

-Alderfer, C. P. (1972). Existence, Relatedness and Growth: Human Needs in Organizational Settings. New York: The Free Press.

- Astin, A.W. (1975). Preventing Students from Dropping Out. San Francisco: JosseyBass.
-Astin, A.W. (1997). What Matters In College? Four Critical Years Revisited. San Francisco: Jossey-Bass.
-Bialeschki, D. (1988). Why Don't Students Play In Intramurals? NIRSA Journal, 12(3), 46-51.
- Bohlig, M. (1991). Recreational Programming for Women. NIRSA Journal, 16(1), 8-10
-Boyer, E. (1987). College: The Undergraduate Experience in America. New York: Harper and Row.
- Bourgeois, A., LeUnes. A., Burkett, S., Dragges-Bourgeois, T., Friend, J. and Meyers, M. (1995). Factors Influencing Intramural Sport Participation. NIRSA Journal, 19(3), 44-48.
- Bradley, J., Phillipi, R. and Bryant, J. (1992). Minorities Benefit From Their Association With Campus Recreation Programs. NIRSA Journal, 16(3), 46-50.
- Bricketto, M. (1989). Using change strategies to involve faculty in student affairs. NASPA Journal, 27(2), 95-100.

Center for Assessment, Research, and Development (1991). Quality and Importance of Recreational Services: Technical Manual and Survey. Corvallis, Oregon: National Intramural-Recreational Sports Association.

- Clough, P., Shepherd J. and Maughan, R. (1989). Motives for participation in recreational running. Journal of Leisure Research, (21(4), 297-309.

D'Andrade, R. and Strauss C. (1992). Human Motives and Cultural Models. New York: Cambridge University Press.

Deci, E.L. (1975). Intrinsic Motivation. New York: Plenum Press.

- Deci, E.L. and Ryan, R.M. (1985). Intrinsic Motivation and Self-Determination In Human Behavior. New York: Plenum Press.
-DeWitt, R. (1991). Managing a student affairs team: It's a new ball game. NASPA Journal, 28(2), 185-188.
-Ebbeck, V., Gibbons, S.L. and Loken-Dahle, L. J. (1995). Reasons for adult participation in physical activity: an interactional approach. International Journal of Sport Psychology, 26, 262-275.
- Ellis, G. and Rademacher, C. (1986). A Literature Review/The President's Commission On American Outdoors. Washington, D.C.: The Commission.
-Ferguson, J. (1983). Current Trends in Intramural Awards. NIRSA Journal, 7(3), 31-34.
- Fortier, M., Vallerand, R., Briere, N. and Provencher, P. (1995). Competitive and recreational sport structures and gender: A test of their relationship with sport motivation. International Journal of Sport Psychology, 26, 24-39.

Fowler, F. (1993). Survey Research Methods. Newbury Park, California: SAGE Publications, Inc.
-Gilkison, B. and Hall, L. (1979). Include Us In. NIRSA Journal, 4(1), 50-53.
-Herzberg, F. (1993), The Motivation to Work. New Brunswick, New Jersey, Transaction Press.
-Hupp, S. and Rinaldi, N. (1991). Evaluate Intramural Programs by Student Satisfaction. NIRSA Journal, 15(2), 50-55.
-Kanters, M.A. and Forrester, S. (1997). Leisure motivation and self-concept: a comparison of campus recreation participants and non-participants. NIRSA Journal, 22(1), 29-33.
-Kanters, M.A. and Forrester, S. (1997). The Motivators and Self-Esteem of Intramural Sports Participants. NIRSA Journal, 21(3), 3-7.
-Kelly, J.R. and Schreyer, R. (1986). A Literature Review/The President's Commission On American Outdoors. Washington, D.C.: The Commission.

- Kelsey, C. and Howard, G. (1986). The Citizen Process in Parks and Recreation. Reston, Virginia: The American Alliance for Health, Physical Education, Recreation and Dance.
- Kinsman, F. (1991). Military recreation and mission accomplishment. Parks and Recreation, 42-45.
- Kovac, D.C. and Beck, J.E. (1997). A comparison of student perceptions, satisfaction and patterns of participation in recreational sports. NIRSA Journal, 22(1), 10-12.
-Mallincrodt, B. and Sedlacek W. (1987). Student retention and the use of campus facilities by race. NASPA Journal, 24(3), 28-32.
-Maslow, A.H. (1970). Motivation and Personality. New York; Harper and Row.
-McClelland, D.C. (1971). Motivational Trends in Society. Morristown, New Jersey: General Learning Press.
-McClelland, D.C. \& Boyatzis, R.E. (1982). Leadership Motive Pattern and Long-term Success in Management. Journal of Applied Psychology, 67, 744-751.
-Milton, P. (1992). Relating Student Development Theory to Women's Recreational Sports Participation. NIRSA Journal, 17(1), 3-7.
-Mull, R., Bayless, K., \& Ross, C. (1987). Recreational Sports Programming: Sports for All ( $2^{\text {nd }}$ edition). North Palm Beach, Florida: The Athletic Institute.

New Illustrated Webster's Dictionary of The English Language (1992). New York: PAMCO Publishing Company.
${ }^{-}$O'Dell, I. (1990). Intramural Sports: A Minority Perspective. NIRSA Journal, 14(2), 3637.

Parsons, N. (1976). Intramural Administration Theory and Practice. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

- Pelletier, L.G., Fortier, M.S., Vallerand, R.J., Tuson, K.M. and Briere, N.M. (1995). Toward a new measure of intrinsic motivation, extrinsic motivation, and amotivation in Sports: The sport motivation scale (SMS). Journal of Sport and Exercise Psychology, 17, 35-53.
- Proescher, L. (1996). Participant satisfaction in intramurals. NIRSA Journal, 20(3), 2024.
-Reznik, J. and Gaskins, D. (1988). Intramural Sports Competition Structuring: Are Varying Levels Important in Meeting the Needs and Interests of all Participants? Selected Readings in Recreational Sports. Corvallis, Oregon: Oregon State University.

Ryan, J. and Lucas, J. (1992). Report of interest in an intramural program. William Rainey Harper College, Office of Planning and Research, Palatine, Illinois.
-Smith, S. and Carron M. (1992). Applying motivational theories to intramural participation. NIRSA Journal, 16(2), 50-53.
${ }^{-}$Smith, S. and Missler, S. (1993). An investigation into the personal meaning of intramural softball participation. Balancing and Tradition Diversity in Recreational Sports. Oregon: Oregon State University.
-Snodgrass, M. and Tinsley, C. (1990). Recreation and Wellness: Identifying Motivations for Participation in Recreational Sports. NIRSA Journal, 15(1), 34-38.
${ }^{-}$Stewart, R. (1992). A Brief History of the Intramural Movement. NIRSA Journal, 17(1), 12-14.
-Thomas, J.R. and Nelson, J.K. (1990). Research Methods in Physical Activity. Champaign, Illinois: Human Kinetics Books.

- Trope, Y. and Neter, E. (1994). Reconciling competing motives in self-evaluation: The role of self-control in feedback seeking. Journal of Personality and Social Psychology, 66(4), 646-657.
~Watson, J.F. (1998). A comparison of traditional and non-traditional students' leisure attitudes and leisure motivations. NIRSA Journal, 22, 22-30.
-White, S.A. (1995). The perceived purposes of sport among male and female intercollegiate and recreational sport participants. International Journal of Sport Psychology, 26, 490-502.
-White. S.A. and Duda, J.L. (1994). The relationship of gender, level of sport involvement and participation motivation to task and ego orientation. International Journal of Sport Psychology, 25, 4-18.


## APPENDICIES

## APPENDIX A

## CORRELATION COEFFICIENTS MATRIX

|  | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q1 | $\begin{aligned} & 1.0000 \\ & (\quad 64) \\ & \mathrm{P}=. \end{aligned}$ | $\begin{array}{r} .2592 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} .039\right. \end{array}$ | $\begin{array}{r} -.0202 \\ \left(\begin{array}{r} \text { r } \end{array}\right. \\ \mathrm{P}=.874 \end{array}$ |  | $\begin{array}{r} .2695 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \hline \end{array} .031\right. \end{array}$ |  |
| Q2 | $\begin{array}{r} .2592 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}=.039 \end{array}$ | $\begin{aligned} & 1.0000 \\ & \left(\begin{array}{r} 1 \\ \mathrm{P}=. \end{array}\right. \end{aligned}$ | $\begin{array}{r} -.2830 \\ \left(\begin{array}{r} - \\ \mathrm{P}=.023 \end{array}\right. \end{array}$ | $\begin{array}{r} -.1436 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ P=.258 \end{array}$ | $\begin{array}{r} .0882 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}=.488 \end{array}, ~\right. \end{array}$ | $\begin{array}{r} .0816 \\ \left(\begin{array}{r} 164) \\ \mathrm{P}= \\ \hline \end{array} .521\right. \end{array}$ |
| $Q 3$ | $\begin{array}{r} -.0202 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ \mathrm{P}=.874 \end{array}$ | $\begin{array}{r} -.2830 \\ \left(\begin{array}{r} \text { r } \end{array}\right. \\ \mathrm{P}=.023 \end{array}$ | $\begin{aligned} & 1.0000 \\ & \left(\begin{array}{r} 1 \\ \mathrm{P}=. \end{array}\right. \end{aligned}$ | $\begin{array}{r} .4190 \\ \left(\begin{array}{r} 44) \\ \mathrm{P}= \\ .001 \end{array}, ~\right. \end{array}$ | $\begin{array}{r} .1163 \\ \left(\begin{array}{r}  \\ \hline \end{array}\right) \\ \mathrm{P}=.360 \end{array}$ |  |
| Q4 | $\begin{array}{r} .1543 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.224 \end{array}$ | $\begin{array}{r} -.1436 \\ \left(\begin{array}{r} 144 \end{array}\right. \\ P=.258 \end{array}$ | $\begin{array}{r} .4190 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} .001\right. \end{array}$ | $\begin{aligned} & 1.0000 \\ & \left(\begin{array}{r} 1 \end{array}\right) \\ & \mathrm{P}=. \end{aligned}$ |  | $\begin{array}{r} .3878 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .002 \end{array}$ |
| Q5 | $\begin{array}{r} .2695 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .031 \end{array}, ~\right. \end{array}$ | $\begin{array}{r} .0882 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}=.488 \end{array}\right. \\ \hline \end{array}$ | $\begin{array}{r} .1163 \\ \left(\begin{array}{r} \text { r } \end{array}\right. \\ \mathrm{P}=.360 \end{array}$ | $\begin{array}{r} .0002 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} .999\right. \end{array}$ | $\begin{aligned} & 1.0000 \\ & \left(\begin{array}{r} 1 \end{array}\right) \\ & P=. \end{aligned}$ | $\begin{array}{r} .4155 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ \mathrm{P}=.001 \end{array}$ |
| Q6 | $\begin{array}{r} .0986 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.438 \end{array}$ | $\begin{array}{r} .0816 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .521 \end{array}$ | $\begin{array}{r} .3843 \\ \left(\begin{array}{r} 34) \\ P= \\ \hline \end{array}\right) .002 \end{array}$ | $\begin{array}{r} .3878 \\ \left(\begin{array}{r}  \\ \mathrm{P}= \\ \hline \end{array}\right) \\ \hline 002 \end{array}$ |  | $\begin{aligned} & 1.0000 \\ & \left(\begin{array}{r} 1 . \\ \mathrm{P}=. \end{array}\right. \end{aligned}$ |
| Q7 | $\begin{array}{r} .1834 \\ (64) \\ P=\quad .147 \end{array}$ | $\begin{array}{r} .1547 \\ \left(\begin{array}{r} 14 \end{array}\right) \\ \mathrm{P}=.222 \end{array}$ | $\begin{array}{r} -.1281 \\ \left(\begin{array}{r} \text { } \end{array}\right. \\ \mathrm{P}=.313 \end{array}$ | $\begin{array}{r} -.0793 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \mathrm{p} \end{array} \mathrm{~F} 53\right. \end{array}$ | $\begin{array}{r} .1421 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ .263 \end{array}\right. \end{array}$ | $\begin{array}{r} -.0383 \\ \left(\begin{array}{r} \text { ( } \end{array}\right) \\ \mathrm{P}=.764 \end{array}$ |
| Q8 | $\begin{array}{r} .5818 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .000 \end{array}, ~\right. \end{array}$ | $\begin{array}{r} .2780 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}=.026 \end{array}\right. \text { } \end{array}$ | $\begin{array}{r} -.0197 \\ \binom{1}{\hline} \\ \mathrm{P}=.877 \end{array}$ | $\begin{array}{r} .1515 \\ \left(\begin{array}{r} 15 \end{array}\right. \\ \mathrm{P}=.232 \end{array}$ | $\begin{array}{r} .2560 \\ \left(\begin{array}{r} 64 \end{array}\right. \\ \mathrm{P}=.041 \end{array}$ | $\begin{array}{r} -.0155 \\ \left(\begin{array}{r} - \\ \mathrm{P}=.903 \end{array}\right. \end{array}$ |
| Q9 | $\begin{array}{r} .2761 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \mathrm{P} \end{array} \mathrm{.027}\right. \end{array}$ | $\begin{array}{r} .1600 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}= \\ .207 \end{array}$ | $\begin{array}{r} .0555 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \mathrm{P} \end{array}\right) .663 \end{array}$ | $\begin{array}{r} .1841 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \mathrm{P}=145 \end{array}\right. \end{array}$ | $\begin{array}{r} .2122 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ \mathrm{P}=.092 \end{array}$ |  |
| Q10 | $\begin{array}{r} -.1426 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}=.261 \end{array}$ | $\begin{array}{r} -.2222 \\ \left(\begin{array}{r} \text { ( } \end{array}\right. \\ \mathrm{P}=.078 \end{array}$ | $\begin{array}{r} .0353 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} \mathbf{. 7 8 2}\right. \end{array}$ | $\begin{array}{r} .1183 \\ \left(\begin{array}{r} 64 \end{array}\right. \\ \mathrm{P}=\begin{array}{r} 352 \end{array} \end{array}$ | $\begin{array}{r} .1544 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ \mathrm{P}=\begin{array}{r} 223 \end{array} \end{array}$ | $\begin{array}{r} -.0304 \\ \binom{-.}{( } \\ P=.812 \end{array}$ |
| Q11 |  | $\begin{array}{r} .1105 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} \mathbf{3 8 5}\right. \end{array}$ | $\begin{array}{r} -.2248 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}=.074 \end{array}\right. \end{array}$ | $\begin{array}{r} -.0351 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}=.783 \end{array}\right. \end{array}$ |  | $\begin{array}{r} -.0654 \\ \left(\begin{array}{r} -. \\ \mathrm{P}= \\ \mathrm{P} \end{array}\right) \end{array}$ |

(Coefficient / (Cases) / 2-tailed Significance)

* . . is printed if a coefficient cannot be computed

|  | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q12 | $\begin{array}{r} .1428 \\ \left(\begin{array}{r}  \\ \hline \end{array}=.260\right. \end{array}$ | $\begin{array}{r} .0473 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} \mathbf{7 1 0}\right. \end{array}$ | $\begin{array}{r} .1482 \\ \left(\begin{array}{r} 14) \\ P= \\ \hline \end{array} 242\right. \end{array}$ | $\begin{array}{r} .0253 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \mathrm{P} \end{array} \mathbf{8 4 2}\right. \end{array}$ | $\begin{array}{r} .1686 \\ \left(\begin{array}{r} 164) \\ P= \\ \hline \end{array}\right) .183 \end{array}$ | $\begin{array}{r} .2257 \\ \left(\begin{array}{r} 64) \\ P= \\ = \end{array} .073\right. \end{array}$ |
| Q13 | $\begin{array}{r} .2174 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} .084\right. \end{array}$ | $\begin{array}{r} .0064 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} .960\right. \end{array}$ | $\begin{array}{r} .3285 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} .008\right. \end{array}$ | $\begin{array}{r} .2780 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \mathrm{P} \end{array}\right) .026 \end{array}$ | $\begin{array}{r} .1044 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .411 \end{array}$ | $\begin{array}{r} .2533 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} .043\right. \end{array}$ |
| Q14 | $\begin{array}{r} .3675 \\ \left(\begin{array}{r} 64 \end{array}\right. \\ \mathrm{P}=.003 \end{array}$ | $\begin{array}{r} .0144 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}=.910 \end{array}\right. \text { } \end{array}$ | $\begin{array}{r} .4720 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ =.000 \end{array}\right. \end{array}$ | $\begin{array}{r} .3946 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.001 \end{array}$ | $\begin{array}{r} .2725 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \hline .029 \end{array}\right. \text { ) } \end{array}$ | $\begin{array}{r} .4910 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \mathrm{P} \end{array} \mathrm{O} 1\right. \end{array}$ |
| Q15 | $\begin{array}{r} .2962 \\ \left(\begin{array}{r} 1 \\ P= \\ P \end{array}\right) .017 \end{array}$ | $\begin{array}{r} .0475 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .709 \end{array}\right. \end{array}$ | $\begin{array}{r} .1415 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.265 \end{array}$ | $\begin{array}{r} .1177 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \mathrm{P}= \\ .354 \end{array}\right. \end{array}$ |  | $\begin{array}{r} .0357 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=\quad .779 \end{array}$ |
| Q16 |  | $\begin{array}{r} .0093 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \mathrm{P} \end{array} \mathrm{.942}\right. \end{array}$ | $\begin{array}{r} -.0166 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}=.896 \end{array}$ | $\begin{array}{r} .1969 \\ \left(\begin{array}{r} 194 \end{array}\right. \\ \mathrm{P}=.119 \end{array}$ | $\begin{array}{r} .3263 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}=.008 \end{array}$ | $\begin{array}{r} .0518 \\ \left(\begin{array}{r} 18 \end{array}\right. \\ \mathrm{P}=.684 \end{array}$ |
| Q17 | $\begin{array}{r} .0350 \\ \left(\begin{array}{r} 1 \\ \mathrm{P} \end{array} \quad .783\right. \end{array}$ | $\begin{array}{r} .2699 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.031 \end{array}$ | $\begin{array}{r} -.1586 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}=.211 \end{array}\right. \end{array}$ | $\begin{array}{r} -.0066 \\ \binom{( }{\hline} \\ \mathrm{P}=.959 \end{array}$ | $\begin{array}{r} .0106 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \mathrm{P} \end{array} \mathrm{.934}\right. \end{array}$ | $\begin{array}{r} .0704 \\ \left(\begin{array}{r} \text { r } \end{array}\right. \\ \mathrm{P}=.580 \end{array}$ |
| Q18 | $\begin{array}{r} .1790 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.157 \end{array}$ | $\begin{array}{r} .2982 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .017 \end{array}$ | $\begin{array}{r} .0289 \\ \binom{( }{\hline} \\ \mathrm{P}=.821 \end{array}$ | $\begin{array}{r} .0461 \\ \left(\begin{array}{r} 1 \\ P= \\ P \end{array}\right) .717 \end{array}$ | $\begin{array}{r} .0733 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.565 \end{array}$ | $\begin{array}{r} .2211 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .079 \end{array}{ }^{2} 8\right. \end{array}$ |
| Q19 | $\begin{array}{r} -.0268 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ P=.833 \end{array}$ | $\begin{array}{r} -.2704 \\ \left(\begin{array}{r} ( \\ P= \\ P=.031 \end{array}\right. \end{array}$ | $\begin{array}{r} .0658 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .605 \end{array}\right. \end{array}$ |  | $\begin{array}{r} .0369 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline .772 \end{array}, ~\right. \end{array}$ | $\begin{array}{r} .0704 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} .580\right. \end{array}$ |
| Q20 | $\begin{array}{r} .2866 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \hline .022 \end{array}, ~\right. \end{array}$ | $\begin{array}{r} .7639 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .000 \end{array}$ | $\begin{array}{r} -.1525 \\ \binom{-}{P} \\ P=.229 \end{array}$ | $\begin{array}{r} -.1003 \\ \binom{( }{P} \\ P=.431 \end{array}$ | $\begin{array}{r} .1484 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ P=.242 \end{array}$ | $\begin{array}{r} .1854 \\ \left(\begin{array}{r} 184 \end{array}\right. \\ \mathrm{P}=.142 \end{array}$ |
| Q21 | $\begin{array}{r} .1622 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}=.200 \end{array}$ | $\begin{array}{r} .1235 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ \mathrm{P}=.331 \end{array}$ | $\begin{array}{r} .1794 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \mathrm{P} \end{array} \mathbf{. 1 5 6}\right. \end{array}$ | $\begin{array}{r} .1735 \\ \left(\begin{array}{r} 17 \end{array}\right. \\ \mathrm{P}=.170 \end{array}$ | $\begin{array}{r} .1957 \\ \left(\begin{array}{r} 194) \\ \mathrm{P}= \\ .121 \end{array}, ~\right. \end{array}$ | $\begin{array}{r} .1636 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}= \\ .196 \end{array}$ |
| Q22 | $\begin{array}{r} .2199 \\ \left(\begin{array}{r} 194) \\ \mathrm{P}= \\ .081 \end{array}\right. \end{array}$ | $\begin{array}{r} .1813 \\ \left(\begin{array}{r} 18 \end{array}\right. \\ \mathrm{P}=.152 \end{array}$ | $\begin{array}{r} -.0023 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}=.986 \end{array}$ | $\begin{array}{r} -.0929 \\ \binom{( }{( } \\ P=.465 \end{array}$ | $\begin{array}{r} .6704 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ P=.000 \end{array}$ |  |

(Coefficient / (Cases) / 2-tailed Significance)

* . . is printed if a coefficient cannot be computed

|  | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q23 | . 0640 | -. 0757 | . 1804 | . 1423 | . 0361 | -. 0172 |
|  | 64) | ( 64) | ( 64) | ( 64) | ( 64) | ( 64) |
|  | $\mathrm{P}=.616$ | $\mathrm{P}=.552$ | $\mathrm{P}=.154$ | $\mathrm{P}=.262$ | $\mathrm{P}=.777$ | $\mathrm{P}=.893$ |
| Q24 | . 2414 | . 1400 | -. 0509 | . 0599 | . 1274 | -. 0117 |
|  | ( 64) | ( 64) | ( 64) | ( 64) | ( 64) | ( 64) |
|  | $\mathrm{P}=.055$ | $\mathrm{P}=.270$ | $\mathrm{P}=.689$ | $\mathrm{P}=.638$ | $\mathrm{P}=.316$ | $\mathrm{P}=.927$ |
| Q25 | . 0231 | -. 1106 | . 0425 | . 1103 | . 1452 | . 0507 |
|  | 64) | ( 64) | ( 64) | ( 64) | ( 64) | ( 64) |
|  | $\mathrm{P}=.856$ | $\mathrm{P}=.384$ | $\mathrm{P}=.739$ | $\mathrm{P}=.385$ | $\mathrm{P}=.252$ | $\mathrm{P}=.691$ |
| Q26 | . 2145 | . 0655 | . 2490 | . 2584 | . 1522 | . 2869 |
|  | ( 64) | ( 64) | ( 64) | ( 64) | ( 64) | ( 64) |
|  | $\mathrm{P}=.089$ | $\mathrm{P}=.607$ | $\mathrm{P}=.047$ | $\mathrm{P}=.039$ | $\mathrm{P}=.230$ | $\mathrm{P}=.022$ |
| Q27 | . 1206 | . 1738 | . 0164 | . 1267 | . 0811 | . 0968 |
|  | ( 64) | ( 64) | ( 64) | ( 64) | ( 64) | ( 64) |
|  | $\mathrm{P}=.343$ | $\mathrm{P}=.170$ | $\mathrm{P}=.898$ | $\mathrm{P}=.319$ | $\mathrm{P}=.524$ | $\mathrm{P}=.447$ |
| Q28 | . 1742 | . 1393 | . 1121 | . 0905 | . 1927 | . 0788 |
|  | ( 64) | ( 64) | ( 64) | ( 64) | ( 64) | ( 64) |
|  | $\mathrm{P}=.169$ | $\mathrm{P}=.272$ | $\mathrm{P}=.378$ | $\mathrm{P}=.477$ | $\mathrm{P}=.127$ | $\mathrm{P}=.536$ |
| Q29 | . 1351 | -. 1006 | . 3467 | . 3362 | . 0687 | . 1951 |
|  | ( 64) | ( 64) | ( 64) | ( 64) | ( 64) | ( 64) |
|  | $\mathrm{P}=.287$ | $\mathrm{P}=.429$ | $\mathrm{P}=.005$ | $\mathrm{P}=.007$ | $\mathrm{P}=.590$ | $\mathrm{P}=.122$ |
| Q30 | . 1961 | . 1922 | -. 1528 | -. 0675 | . 0357 | -. 1323 |
|  | ( 64) | ( 64) | ( 64) | ( 64) | ( 64) | ( 64) |
|  | $\mathrm{P}=.120$ | $\mathrm{P}=.128$ | $\mathrm{P}=.228$ | $\mathrm{P}=.596$ | $\mathrm{P}=.780$ | $\mathrm{P}=.297$ |


|  | Q7 | Q8 | Q9 | Q10 | Q11 | 812 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q1 | $\begin{array}{r} .1834 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array} \frac{147}{}\right. \end{array}$ | $\begin{array}{r} .5818 \\ \left(\begin{array}{r} 64) \\ P= \\ .000 \end{array}\right. \end{array}$ |  | $\begin{array}{r} -.1426 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ P=.261 \end{array}$ | $\begin{array}{r} .1475 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ P=.245 \end{array}$ | $\begin{array}{r} .1428 \\ \left(\begin{array}{r} 1 \\ P= \\ P \end{array}\right) .260 \end{array}$ |
| Q2 | $\begin{array}{r} .1547 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .222 \end{array}, ~\right. \end{array}$ | $\begin{array}{r} .2780 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .026 \end{array}\right. \end{array}$ | $\begin{array}{r} .1600 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .207 \end{array}$ | $\begin{array}{r} -.2222 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ P=.078 \end{array}$ | $\begin{array}{r} .1105 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \mathrm{P}=.385 \end{array}\right) \end{array}$ | $\begin{array}{r} .0473 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .710 \end{array}$ |
| Q3 | $\begin{array}{r} -.1281 \\ \left(\begin{array}{r} 14 \end{array}\right. \\ \mathrm{P}=.313 \end{array}$ | $\begin{array}{r} -.0197 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) 877 \end{array}$ | $\begin{array}{r} .0555 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}=.663 \end{array}$ | $\begin{array}{r} .0353 \\ \left(\begin{array}{r} 14 \end{array}\right) \\ P=.782 \end{array}$ | $\begin{array}{r} -.2248 \\ \left(\begin{array}{r} 1 \\ P \end{array} \quad .074\right. \\ P \end{array}$ | $\begin{array}{r} .1482 \\ \left(\begin{array}{r}  \\ P \end{array} \quad .242\right. \\ P= \end{array}$ |
| Q4 | $\begin{array}{r} -.0793 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}=.533 \end{array}$ | $\begin{array}{r} .1515 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline .232 \end{array}, ~\right. \end{array}$ | $\begin{array}{r} .1841 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .145 \end{array}$ | $\begin{array}{r} .1183 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.352 \end{array}$ | $\begin{array}{r} -.0351 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array} .783\right. \end{array}$ | $\begin{array}{r} .0253 \\ \left(\begin{array}{r} 64) \\ P= \\ P \end{array}\right) .842 \end{array}$ |
| Q5 | $\begin{array}{r} .1421 \\ \left(\begin{array}{r} 14 \end{array}\right. \\ \mathrm{P}= \\ \hline .263 \end{array}$ | $\begin{array}{r} .2560 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline .041 \end{array}\right. \end{array}$ | $\begin{array}{r} .2122 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .092 \end{array}, ~\right. \end{array}$ | $\begin{array}{r} .1544 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array} .223\right. \end{array}$ | $\begin{array}{r} .0751 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} .555\right. \end{array}$ | $\begin{array}{r} .1686 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) 183 \end{array}$ |
| Q6 | $\begin{array}{r} -.0383 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ P=.764 \end{array}$ | $\begin{array}{r} -.0155 \\ \left(\begin{array}{r} 154) \\ P=.903 \end{array}\right. \end{array}$ | $\begin{array}{r} .3157 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline .011 \end{array}, ~\right. \end{array}$ | $\begin{array}{r} -.0304 \\ \left(\begin{array}{r} \text { r } \end{array}\right. \\ \mathrm{P}=.812 \end{array}$ | $\begin{array}{r} -.0654 \\ \left(\begin{array}{r} 1 \\ P= \\ P=.608 \end{array}\right. \end{array}$ | $\begin{array}{r} .2257 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} .073\right. \end{array}$ |
| Q7 | $\begin{aligned} & 1.0000 \\ & \left(\begin{array}{r} 1 \end{array}\right) \\ & \mathrm{P}=. \end{aligned}$ | $\begin{array}{r} .1381 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .276 \end{array}$ | $\begin{array}{r} -.0606 \\ \left(\begin{array}{r} 64) \\ P= \end{array} .634\right. \end{array}$ | $\begin{array}{r} -.2289 \\ \left(\begin{array}{r} \text { r } \end{array}\right. \\ P=.069 \end{array}$ | $\begin{array}{r} .2966 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .017 \end{array}$ | $\begin{array}{r} .0312 \\ \left(\begin{array}{r}  \\ ( \end{array}\right) \\ \mathrm{P}= \\ \hline 807 \end{array}$ |
| Q8 |  | $\begin{aligned} & 1.0000 \\ & \left(\begin{array}{r} 1 \\ \mathrm{P}=. \end{array}\right. \end{aligned}$ | $\begin{array}{r} .0245 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.847 \end{array}$ |  | $\begin{array}{r} .1468 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .247 \end{array}$ | $\begin{array}{r} .1544 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .223 \end{array}$ |
| Q9 | $\begin{array}{r} -.0606 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \hline \end{array}\right) \end{array}$ | $\begin{array}{r} .0245 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .847 \end{array}$ | $\begin{aligned} & 1.0000 \\ & i \quad 64) \\ & p=. \end{aligned}$ | $\begin{array}{r} .1810 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .152 \end{array}$ | $\begin{array}{r} .0778 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .541 \end{array}$ |  |
| Q10 | $\begin{array}{r} -.2289 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ \mathrm{P}=.069 \end{array}$ | $\begin{array}{r} .0449 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .725 \end{array}$ | $\begin{array}{r} .1810 \\ \left(\begin{array}{r} 18 \end{array}\right. \\ \mathrm{P}=.152 \end{array}$ | $\begin{aligned} & 1.0000 \\ & \binom{1}{P=} \end{aligned}$ |  | $\begin{array}{r} .2762 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .027 \end{array}$ |
| Q11 |  | $\begin{array}{r} .1468 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.247 \end{array}$ | $\begin{array}{r} .0778 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} \mathrm{F41}\right. \end{array}$ | $\begin{array}{r} .0338 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .791 \end{array}$ | $\begin{aligned} & 1.0000 \\ & \left(\begin{array}{l} 1 \\ P=. \end{array}\right. \\ & \text { ( } \end{aligned}$ | $\begin{array}{r} .2296 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}=.068 \end{array}$ |

(Coefficient / (Cases) / 2-tailed Significance)

* . . is printed if a coefficient cannot be computed

|  | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q12 | $\begin{array}{r} .0312 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.807 \end{array}$ | $\begin{array}{r} .1544 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array} .223\right. \end{array}$ | $\begin{array}{r} .3965 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ P=.001 \end{array}$ | $\begin{array}{r} .2762 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .027 \end{array}$ | $\begin{array}{r} .2296 \\ \left(\begin{array}{r} 64) \\ P= \\ = \end{array} .068\right. \end{array}$ | $\begin{gathered} 1.0000 \\ (\quad 64) \\ P=. \end{gathered}$ |
| Q13 | $\begin{array}{r} .0750 \\ (\quad 64) \\ \mathrm{P}=.556 \end{array}$ | $\begin{array}{r} .5075 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .000 \end{array}\right) \end{array}$ | $\begin{array}{r} .0596 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array} \quad .640\right. \end{array}$ | $\begin{array}{r} -.0715 \\ \binom{-64)}{P=} .574 \end{array}$ | $\begin{array}{r} .1058 \\ \left(\begin{array}{r} 64) \\ P= \end{array} .405\right. \end{array}$ | $\begin{array}{r} .3049 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ P=\quad .014 \end{array}$ |
| Q14 | $\begin{array}{r} -.1510 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}=.234 \end{array}$ | $\begin{array}{r} .2921 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .019 \end{array}$ | $\begin{array}{r} .2914 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline .019 \end{array}, ~\right. \end{array}$ |  | $\begin{array}{r} .0734 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} .564\right. \end{array}$ | $\begin{array}{r} .1698 \\ \left(\begin{array}{r} 184 \end{array}\right. \\ P=.180 \end{array}$ |
| Q15 | $\begin{array}{r} .1871 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .139 \end{array}$ | $\begin{array}{r} .3651 \\ \left(\begin{array}{r} 14 \end{array}\right. \\ \mathrm{P}=.003 \end{array}$ |  | $\begin{array}{r} -.0334 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array} .793\right. \end{array}$ | $\begin{array}{r} .2622 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .036 \end{array}$ | $\begin{array}{r} .3791 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ P=.002 \end{array}$ |
| Q16 |  |  | $\begin{array}{r} -.0045 \\ \binom{( }{\hline} \\ \mathrm{P}=.972 \end{array}$ | $\begin{array}{r} -.1886 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ \mathrm{P}=.136 \end{array}$ |  | $\begin{array}{r} .2263 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} .072\right. \end{array}$ |
| Q17 | $\begin{array}{r} -.0910 \\ \binom{1}{\hline} \\ P=.475 \end{array}$ | $\begin{array}{r} .3465 \\ \left(\begin{array}{r} 34 \end{array}\right. \\ \mathrm{P}=.005 \end{array}$ | $\begin{array}{r} .0815 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=\begin{array}{r} .522 \end{array} \end{array}$ | $\begin{array}{r} .0654 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} .608\right. \end{array}$ |  | $\begin{array}{r} .1998 \\ \left(\begin{array}{r} 194) \\ P= \\ \hline \end{array}\right) .113 \end{array}$ |
| Q18 | $\begin{array}{r} -.1299 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ P=.306 \end{array}$ |  | $\begin{array}{r} .1329 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.295 \end{array}$ | $\begin{array}{r} -.0585 \\ \binom{( }{( } \\ P=.646 \end{array}$ | $\begin{array}{r} .2581 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} .039\right. \end{array}$ |  |
| Q19 | $\begin{array}{r} -.2930 \\ \left(\begin{array}{r} ( \\ P= \\ P \end{array}\right) \end{array}$ | $\begin{array}{r} .1450 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.253 \end{array}$ | $\begin{array}{r} .2123 \\ \left(\begin{array}{r} 64 \end{array}\right. \\ P=.092 \end{array}$ | $\begin{array}{r} .6249 \\ \left(\begin{array}{r} 64 \end{array}\right. \\ \mathrm{P}=.000 \end{array}$ | $\begin{array}{r} -.0426 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.738 \end{array}$ | $\begin{array}{r} .2660 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.034 \end{array}$ |
| Q20 | $\begin{array}{r} .1328 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.295 \end{array}$ | $\begin{array}{r} .3150 \\ \left(\begin{array}{r} 64 \end{array}\right. \\ \mathrm{P}=.011 \end{array}$ | $\begin{array}{r} .1882 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ \mathrm{P}=\begin{array}{r} 136 \end{array} \end{array}$ | $\begin{array}{r} -.1182 \\ \binom{( }{\hline} \\ \mathrm{P}=.352 \end{array}$ | $\begin{array}{r} .1373 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .279 \end{array}\right. \text { } \end{array}$ |  |
| Q21 | $\begin{array}{r} .1049 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \mathrm{P} \end{array} \mathrm{.409}\right. \end{array}$ | $\begin{array}{r} .3937 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .001 \end{array}\right. \end{array}$ | $\begin{array}{r} .1287 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ .311 \end{array}\right. \end{array}$ | $\begin{array}{r} -.0046 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline .971 \end{array}, ~\right. \end{array}$ | $\begin{array}{r} .0683 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline .592 \end{array}, ~\right. \end{array}$ | $\begin{array}{r} .2483 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \mathrm{F} \end{array} \mathbf{. 0 4 8}\right. \end{array}$ |
| Q22 | $\begin{array}{r} .0356 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .780 \end{array}\right. \end{array}$ | $\begin{array}{r} .2760 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \mathrm{P} \end{array} \mathbf{. 0 2 7}\right. \end{array}$ | $\begin{array}{r} .2463 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ .050 \end{array}\right. \end{array}$ | $\begin{array}{r} .0654 \\ \left(\begin{array}{r} \text { ( } \end{array}\right. \\ \mathrm{P}=.608 \end{array}$ | $\begin{array}{r} .0949 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.456 \end{array}$ | $\begin{array}{r} .3272 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.008 \end{array}$ |

(Coefficient / (Cases) / 2-tailed Significance)
. . . is printed if a coefficient cannot be computed

|  | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q23 | $\begin{array}{r} -.0643 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ \mathrm{P}=.614 \end{array}$ | $\begin{array}{r} .2055 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .103 \end{array}\right. \end{array}$ | $\begin{array}{r} .0909 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array} .475\right. \end{array}$ | $\begin{array}{r} -.0076 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ P=.952 \end{array}$ | $\begin{array}{r} .0890 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ \mathrm{P}=.484 \end{array}$ | $\begin{array}{r} .0933 \\ \binom{64)}{\mathrm{P}=.463} . \begin{array}{l} \end{array}{ }^{2} \end{array}$ |
| Q24 | $\begin{array}{r} .4083 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .001 \end{array}\right. \end{array}$ | $\begin{array}{r} .1164 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \hline \end{array}\right) .360 \end{array}$ | $\begin{array}{r} .1690 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ \mathrm{P}= \\ .182 \end{array}$ | $\begin{array}{r} -.1202 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}=.344 \end{array}, ~\right. \end{array}$ | $\begin{array}{r} .3738 \\ \left(\begin{array}{r} \text { ( } \end{array}\right) \\ \mathrm{P}=.002 \end{array}$ | $\begin{array}{r} -.0092 \\ \binom{1}{\mathrm{P}=.942} \end{array}$ |
| Q25 | $\begin{array}{r} -.1268 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}=.318 \end{array}$ | $\begin{array}{r} .1541 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array} 224\right. \end{array}$ | $\begin{array}{r} .1501 \\ \left(\begin{array}{r} 154) \\ \mathrm{P}= \\ \hline \end{array} .236\right. \end{array}$ |  | $\begin{array}{r} -.1483 \\ \left(\begin{array}{r} ( \end{array}\right) \\ P=.242 \end{array}$ | $\begin{array}{r} -.0196 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}=.848 \end{array}\right. \end{array}$ |
| Q26 | $\begin{array}{r} -.2145 \\ \left(\begin{array}{r} 14 \end{array}\right) \\ \mathrm{P}=.089 \end{array}$ | $\begin{array}{r} -.0556 \\ \left(\begin{array}{r} - \\ P= \\ P=.663 \end{array}\right. \end{array}$ | $\begin{array}{r} .6601 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ =.000 \end{array}\right. \end{array}$ | $\begin{array}{r} .0992 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ P=.435 \end{array}$ | $\begin{array}{r} -.1144 \\ \binom{-}{p=} \\ p=.368 \end{array}$ | $\begin{array}{r} .1416 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}= \\ .264 \end{array}$ |
| Q27 | $\begin{array}{r} .1037 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \mathrm{P} \end{array} \mathrm{415}\right. \end{array}$ | $\begin{array}{r} .3769 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=\quad .002 \end{array}$ | $\begin{array}{r} .0695 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ \mathrm{P}=.585 \end{array}$ | $\begin{array}{r} -.0479 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ P=.707 \end{array}$ | $\begin{array}{r} -.0348 \\ \left(\begin{array}{r} \text { ( } \end{array}\right. \\ \mathrm{P}=.785 \end{array}$ | $\begin{array}{r} .1372 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ .280 \end{array}\right. \end{array}$ |
| Q28 | $\begin{array}{r} -.1418 \\ \left(\begin{array}{r} 18 \end{array}\right. \\ \mathrm{P}=.264 \end{array}$ | $\begin{array}{r} .2514 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline .045 \end{array}, ~\right. \end{array}$ | $\begin{array}{r} .2632 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}=.036 \end{array}$ | $\begin{array}{r} .1062 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \mathrm{P} \end{array} \mathrm{.404}\right. \end{array}$ | $\begin{array}{r} .0169 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \mathrm{P}= \\ \hline \end{array} 894\right. \end{array}$ | $\begin{array}{r} .3049 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .014 \end{array}$ |
| Q29 | $\begin{array}{r} -.1389 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ \mathrm{P}=.274 \end{array}$ |  | $\begin{array}{r} .1356 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .285 \end{array}$ |  | $\begin{array}{r} -.0279 \\ \left(\begin{array}{r} \text { ( } \end{array}\right. \\ \mathrm{P}=.827 \end{array}$ | $\begin{array}{r} .0162 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \mathrm{P} \\ \hline \end{array} 899\right. \end{array}$ |
| Q30 | $\begin{array}{r} .1672 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.187 \end{array}$ | $\begin{array}{r} .2482 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .048 \end{array}\right. \end{array}$ | $\begin{array}{r} -.1791 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}=.157 \end{array}$ | $\begin{array}{r} -.2616 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.037 \end{array}$ | $\begin{array}{r} .2281 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}=\quad .070 \end{array}$ | $\begin{array}{r} .0392 \\ 1 \\ \mathrm{P}=.751 \\ \mathrm{P} \end{array}$ |

(Coefficient / (Cases) / 2-talled'Significance)
. . . is printed if a coefficient cannot be computed

|  | Q13 | Q14 | Q15 | Q16 | Q17 | Q18 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q1 | $\begin{array}{r} .2174 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ P=.084 \end{array}$ |  |  | $\begin{array}{r} .3493 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} \mathbf{. 0 0 5}\right. \end{array}$ | $\begin{array}{r} .0350 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} .783\right. \end{array}$ | $\begin{array}{r} .1790 \\ \left(\begin{array}{r} 17 \end{array}\right. \\ \mathrm{P}=.157 \end{array}$ |
| Q2 | $\begin{array}{r} .0064 \\ \left(\begin{array}{r}  \\ \mathrm{P} \end{array} \begin{array}{r}  \\ \mathrm{P}= \\ .960 \end{array}\right. \end{array}$ | $\begin{array}{r} .0144 \\ \left(\begin{array}{r} \text { ( } \end{array}\right. \\ \mathrm{P}=.910 \end{array}$ |  | $\begin{array}{r} .0093 \\ \binom{( }{\hline} \\ \mathrm{P}=.942 \end{array}$ | $\begin{array}{r} .2699 \\ \left(\begin{array}{r} \text { ( } \end{array}\right. \\ \mathrm{P}=.031 \end{array}$ | $\begin{array}{r} .2982 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline .017 \end{array}, ~\right. \end{array}$ |
| Q3 | $\begin{array}{r} .3285 \\ \left(\begin{array}{r} 64) \\ P= \\ .008 \end{array}\right. \end{array}$ |  |  | $\begin{array}{r} -.0166 \\ \left(\begin{array}{r} \text { ( } \end{array}\right. \\ \mathrm{P}=.896 \end{array}$ | $\begin{array}{r} -.1586 \\ \left(\begin{array}{r} 64) \\ P=.211 \end{array}\right. \end{array}$ | $\begin{array}{r} .0289 \\ \left(\begin{array}{r} 1 \\ P= \\ P \end{array}\right) .821 \end{array}$ |
| Q4 | $\begin{array}{r} .2780 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}=.026 \end{array}$ | $\begin{array}{r} .3946 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .001 \end{array}, ~\right. \end{array}$ | $\begin{array}{r} .1177 \\ \left(\begin{array}{r} 64 \end{array}\right. \\ \mathrm{P}=.354 \end{array}$ | $\begin{array}{r} .1969 \\ \left(\begin{array}{r} 194) \\ \mathrm{P}= \\ \hline \end{array} \mathbf{1 1 9}\right. \end{array}$ | $\begin{array}{r} -.0066 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ P=.959 \end{array}$ |  |
| Q5 | $\begin{array}{r} .1044 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.411 \end{array}$ | $\begin{array}{r} .2725 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.029 \end{array}$ | $\begin{array}{r} .0499 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.695 \end{array}$ | $\begin{array}{r} .3263 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}= \\ .008 \end{array}$ | $\begin{array}{r} .0106 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.934 \end{array}$ | $\begin{array}{r} .0733 \\ \binom{( }{\hline} \\ \mathrm{P}=.565 \end{array}$ |
| Q6 | $\begin{array}{r} .2533 \\ \left(\begin{array}{r} 64 \end{array}\right. \\ \mathrm{P}=.043 \end{array}$ |  | $\begin{array}{r} .0357 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.779 \end{array}$ | $\begin{array}{r} .0518 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} .684\right. \end{array}$ | $\begin{array}{r} .0704 \\ \left(\begin{array}{r}  \\ \mathrm{P}= \\ \mathrm{P} \end{array} \mathrm{~F}\right. \text { ) } \end{array}$ |  |
| Q7 | $\begin{array}{r} .0750 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=\begin{array}{r} .556 \end{array} \end{array}$ | $\begin{array}{r} -.1510 \\ \left(\begin{array}{r} \text { ( } \end{array}\right) \\ \mathrm{P}=.234 \end{array}$ | $\begin{array}{r} .1871 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.139 \end{array}$ |  |  | $\begin{array}{r} -.1299 \\ \left(\begin{array}{r} - \\ \mathrm{P}= \\ \mathrm{P}=.306 \end{array}\right. \end{array}$ |
| Q8 | $\begin{array}{r} .5075 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.000 \end{array}$ | $\begin{array}{r} .2921 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ .019 \end{array}\right. \end{array}$ | $\begin{array}{r} .3651 \\ \left(\begin{array}{r} 64 \end{array}\right. \\ \mathrm{P}=.003 \end{array}$ |  | $\begin{array}{r} .3465 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.005 \end{array}$ | $\begin{array}{r} .0686 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.590 \end{array}$ |
| Q9 |  | $\begin{array}{r} .2914 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .019 \end{array}$ | $\begin{array}{r} .1677 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.185 \end{array}$ | $\begin{array}{r} -.0045 \\ \left(\begin{array}{r} \text { ( } \end{array}\right. \\ P=.972 \end{array}$ | $\begin{array}{r} .0815 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.522 \end{array}$ |  |
| Q10 | $\begin{array}{r} -.0715 \\ \left(\begin{array}{r} 15 \end{array}\right. \\ P=.574 \end{array}$ | $\begin{array}{r} .1385 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.275 \end{array}$ | $\begin{array}{r} -.0334 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.793 \end{array}$ | $\begin{array}{r} -.1886 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .136 \end{array}$ | $\begin{array}{r} .0654 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \mathrm{P} \end{array}\right) \\ \hline \end{array}$ | $\begin{array}{r} -.0585 \\ \left(\begin{array}{r} \text { ( } \end{array} \quad 64\right) \\ \mathrm{P}=.646 \end{array}$ |
| Q11 | $\begin{array}{r} .1058 \\ \left(\begin{array}{r} 104 \end{array}\right. \\ \mathrm{P}=.405 \end{array}$ | $\begin{array}{r} .0734 \\ \left(\begin{array}{r} 64 \end{array}\right. \\ P=.564 \end{array}$ | $\begin{array}{r} .2622 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ P=.036 \end{array}$ | $\begin{array}{r} .3187 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right)=10 \end{array}$ | $\begin{array}{r} .4333 \\ \left(\begin{array}{r} 44 \end{array}\right) \\ \mathrm{P}=.000 \end{array}$ | $\begin{array}{r} .2581 \\ \left(\begin{array}{r} \text { r } \end{array}\right. \\ \mathrm{P}= \\ \hline .039 \end{array}$ |

(Coefficient / (Cases) / 2-tailed Significance)

* . . is printed if a coefficient cannot be computed


|  | Q13 | Q14 | Q15 | Q16 | 817 | Q18 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q23 | $\begin{array}{r} .4356 \\ \left(\begin{array}{r} \text { ( } \end{array}\right. \\ \mathrm{P}=.000 \end{array}$ | $\begin{array}{r} .1223 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ \mathrm{P}=.335 \end{array}$ | $\begin{array}{r} .2741 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ .028 \end{array}\right. \end{array}$ | $\begin{array}{r} .0590 \\ \left(\begin{array}{r} \text { ( } \end{array}\right. \\ \mathrm{P}=.643 \end{array}$ | $\begin{array}{r} .2271 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \mathrm{P} \end{array} \mathrm{.071}\right. \end{array}$ | $\begin{array}{r} .2548 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .042 \end{array}\right. \end{array}$ |
| Q24 |  | $\begin{array}{r} .0187 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ P=\quad .884 \end{array}$ | $\begin{array}{r} .1790 \\ \left(\begin{array}{r} 17 \end{array}\right) \\ P=.157 \end{array}$ | $\begin{array}{r} .2706 \\ \left(\begin{array}{r} 1 \\ P \end{array} \quad .031\right. \end{array}$ | $\begin{array}{r} .2392 \\ \left(\begin{array}{r} 64) \\ P=.057 \end{array}, ~\right. \end{array}$ | $\begin{array}{r} .0675 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.596 \end{array}$ |
| Q25 | $\begin{array}{r} .1235 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}= \\ .331 \end{array}$ | $\begin{array}{r} .2653 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array} 034\right. \end{array}$ | $\begin{array}{r} -.1350 \\ \left(\begin{array}{r}  \\ ( \end{array}\right) \\ \mathrm{P}=.288 \end{array}$ | $\begin{array}{r} -.0728 \\ \left(\begin{array}{r} \text { ( } \end{array}\right) \\ \mathrm{P}=.568 \end{array}$ | $\begin{array}{r} -.0584 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .647 \end{array}$ | $\begin{array}{r} -.0028 \\ \left(\begin{array}{r} \text { } \\ P= \\ P= \end{array}\right) \end{array}$ |
| Q26 | $\begin{array}{r} .1276 \\ \left(\begin{array}{r}  \\ \mathrm{P} \end{array}\right) \\ \mathrm{P}=.315 \end{array}$ | $\begin{array}{r} .3703 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \hline \end{array} \mathbf{. 0 0 3}\right. \end{array}$ | $\begin{array}{r} .1101 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ .386 \end{array}\right. \end{array}$ | $\begin{array}{r} -.0718 \\ \binom{( }{\hline} \\ \mathrm{P}=.573 \end{array}$ |  | $\begin{array}{r} .2742 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .028 \end{array}$ |
| Q27 |  | $\begin{array}{r} .2080 \\ \left(\begin{array}{r} \text { ( } \end{array}\right) \\ \mathrm{P}= \\ \hline .099 \end{array}$ | $\begin{array}{r} .2880 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}=.021 \end{array}$ | $\begin{array}{r} .1823 \\ \left(\begin{array}{r} 184 \end{array}\right. \\ \mathrm{P}=.149 \end{array}$ | $\begin{array}{r} .3651 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array} .003\right. \end{array}$ | $\begin{array}{r} .1347 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ P=.288 \end{array}$ |
| Q28 | $\begin{array}{r} .2555 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ .042 \end{array}\right. \end{array}$ | $\begin{array}{r} .0945 \\ \left(\begin{array}{r} 14 \end{array}\right. \\ \mathrm{P}=\quad .458 \end{array}$ |  | $\begin{array}{r} .2268 \\ \left(\begin{array}{r} \text { ( } \end{array}\right) \\ \mathrm{P}=.072 \end{array}$ | $\begin{array}{r} .2202 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}=.080 \end{array}$ |  |
| Q29 | $\begin{array}{r} .4219 \\ \left(\begin{array}{r}  \\ \mathrm{P}= \\ \mathrm{P} \end{array}\right) \\ .001 \end{array}$ | $\begin{array}{r} .1883 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .136 \end{array}$ | $\begin{array}{r} .2075 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right)=100 \end{array}$ | $\begin{array}{r} .1198 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .346 \end{array}$ | $\begin{array}{r} .1414 \\ \left(\begin{array}{r} 14 \end{array}\right. \\ \mathrm{P}=\begin{array}{r} 265 \end{array} \end{array}$ | $\begin{array}{r} .2098 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.096 \end{array}$ |
| Q30 | $\begin{array}{r} .1147 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .367 \end{array}$ | $\begin{array}{r} -.0454 \\ \binom{( }{\hline} \\ P=.722 \end{array}$ | $\begin{array}{r} .1294 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \mathrm{P} \end{array} \mathrm{.308}\right. \end{array}$ |  | $\begin{array}{r} .2071 \\ \left(\begin{array}{r} 64 \end{array}\right. \\ \mathrm{P}=\begin{array}{r} 101 \end{array} \end{array}$ | $\begin{array}{r} .1937 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.125 \end{array}$ |

(Coefficient / (Cases) / 2-talled Significance)

* . . is printed if a coefficient cannot be computed

|  | Q19 | Q20 | Q21 | Q22 | Q23 | Q24 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q1 | $\begin{array}{r} -.0268 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .833 \end{array}$ | $\begin{array}{r} .2866 \\ (\quad 64) \\ P=.022 \end{array}$ |  | $\begin{array}{r} .2199 \\ \left(\begin{array}{r} 194) \\ \mathrm{P}= \\ \hline \end{array} .081\right. \end{array}$ |  | $\begin{array}{r} .2414 \\ \left(\begin{array}{r} 4 \end{array}\right) \\ \mathrm{P}=.055 \end{array}$ |
| Q2 | $\begin{array}{r} -.2704 \\ \left(\begin{array}{r} \text { ( } \end{array}\right. \\ P=.031 \end{array}$ | $\begin{array}{r} .7639 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .000 \end{array}, ~\right. \end{array}$ | $\begin{array}{r} .1235 \\ \left(\begin{array}{r} 14) \\ P= \\ \hline \end{array}\right) .331 \end{array}$ | $\begin{array}{r} .1813 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) 152 \end{array}$ | $\begin{array}{r} -.0757 \\ \left(\begin{array}{r} \text { r } \end{array}\right. \\ \mathrm{P}=.552 \end{array}$ |  |
| Q3 | $\begin{array}{r} .0658 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} .605\right. \end{array}$ | $\begin{array}{r} -.1525 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}=.229 \end{array}$ | $\begin{array}{r} .1794 \\ \left(\begin{array}{r}  \\ \hline \end{array} \quad .156\right. \\ P=.156 \end{array}$ | $\begin{array}{r} -.0023 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ \mathrm{P}=.986 \end{array}$ | $\begin{array}{r} .1804 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}= \\ .154 \end{array}$ | $\begin{array}{r} -.0509 \\ \left(\begin{array}{r} -64) \\ P= \end{array} .689\right. \end{array}$ |
| Q4 |  | $\begin{array}{r} -.1003 \\ \left(\begin{array}{r} -44) \\ P= \end{array} .431\right. \end{array}$ |  | $\begin{array}{r} -.0929 \\ \left(\begin{array}{r} \text { ( } \end{array}\right) \\ \mathrm{P}=.465 \end{array}$ |  | $\begin{array}{r} .0599 \\ \mathrm{l} \\ \mathrm{P}=\begin{array}{r} 641 \\ .638 \end{array} \end{array}$ |
| Q5 |  |  |  | $\begin{array}{r} .6704 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .000 \end{array}$ | $\begin{array}{r} .0361 \\ \left(\begin{array}{r} 64 \end{array}\right. \\ \mathrm{P}=\begin{array}{r} .777 \end{array} \end{array}$ | $\begin{array}{r} .1274 \\ \left(\begin{array}{r} 64) \\ P= \\ .316 \end{array}, ~\right. \end{array}$ |
| Q6 | $\begin{array}{r} .0704 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .580 \end{array}\right. \text { } \end{array}$ | $\begin{array}{r} .1854 \\ \left(\begin{array}{r} 184 \end{array}\right. \\ \mathrm{P}=.142 \end{array}$ | $\begin{array}{r} .1636 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ \mathrm{P}=.196 \end{array}$ | $\begin{array}{r} .2599 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \mathrm{P} \end{array} \mathbf{. 0 3 8}\right. \end{array}$ | $\begin{array}{r} -.0172 \\ \binom{-}{P} \\ P=.893 \end{array}$ | $\begin{array}{r} -.0117 \\ \binom{( }{\hline} \\ P=.927 \end{array}$ |
| Q7 | $\begin{array}{r} -.2930 \\ \left(\begin{array}{r} - \\ \mathrm{P}=.019 \end{array}\right. \end{array}$ | $\begin{array}{r} .1328 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .295 \end{array}, ~\right. \end{array}$ | $\begin{array}{r} .1049 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.409 \end{array}$ | $\begin{array}{r} .0356 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.780 \end{array}$ | $\begin{array}{r} -.0643 \\ \left(\begin{array}{r} 1 \\ P \end{array} \quad .614\right. \end{array}$ |  |
| Q8 | $\begin{array}{r} .1450 \\ \left(\begin{array}{r}  \\ \hline \end{array}\right) \\ \mathrm{P}=.253 \end{array}$ | $\begin{array}{r} .3150 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .011 \end{array}\right. \end{array}$ | $\begin{array}{r} .3937 \\ \left(\begin{array}{r} 64 \end{array}\right. \\ \mathrm{P}=.001 \end{array}$ | $\begin{array}{r} .2760 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .027 \end{array}$ | $\begin{array}{r} .2055 \\ \binom{( }{\hline} \\ \mathrm{P}=\begin{array}{r} 103 \end{array} \end{array}$ |  |
| Q9 |  | $\begin{array}{r} .1882 \\ \left(\begin{array}{r} 184) \\ \mathrm{P}= \\ \hline \end{array} \mathrm{I} 36\right. \end{array}$ | $\begin{array}{r} .1287 \\ \left(\begin{array}{r}  \\ \mathrm{P}= \\ \mathrm{P} \end{array}\right) \\ .311 \end{array}$ | $\begin{array}{r} .2463 \\ \left(\begin{array}{r} 1 \\ P= \\ \hline \end{array}\right) .050 \end{array}$ | $\begin{array}{r} .0909 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}=.475 \end{array}\right. \\ \hline \end{array}$ | $\begin{array}{r} .1690 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}=\begin{array}{r} 182 \end{array} \end{array}$ |
| Q10 |  | $\begin{array}{r} -.1182 \\ \left(\begin{array}{r} 184 \end{array}\right. \\ \mathrm{P}=.352 \end{array}$ | $\begin{array}{r} -.0046 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ P=.971 \end{array}$ | $\begin{array}{r} .0654 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} .608\right. \end{array}$ | $\begin{array}{r} -.0076 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \mathrm{P} \end{array}\right) \end{array}$ | $\begin{array}{r} -.1202 \\ \left(\begin{array}{r} 1 \\ P= \\ P \end{array}\right) .344 \end{array}$ |
| Q11 | $\begin{array}{r} -.0426 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ \mathrm{P}=.738 \end{array}$ | $\begin{array}{r} .1373 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}=.279 \end{array}\right. \text { } \end{array}$ | $\begin{array}{r} .0683 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.592 \end{array}$ | $\begin{array}{r} .0949 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ \mathrm{P}=.456 \end{array}$ |  | $\begin{array}{r} .3738 \\ \left(\begin{array}{r} 34) \\ \mathrm{P}= \\ \hline \end{array} .002\right. \end{array}$ |

(Coefficient / (Cases) / 2-tailed Significance)
. . . is printed if a coefficient cannot be computed

|  | Q19 | Q20 | Q21 | Q22 | 223 | Q24 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q12 | . 2660 | . 1126 | . 2483 | . 3272 | .0933 | -. 0092 |
|  | ( 64) | ( 64) | ( 64) | ( 64) | ( 64) | ( 64) |
|  | $\mathrm{P}=.034$ | $\mathrm{P}=.376$ | $\mathrm{P}=.048$ | $\mathrm{P}=.008$ | $\mathrm{P}=.463$ | $\mathrm{P}=.942$ |
| Q13 | $\begin{array}{r} .1407 \\ 64) \end{array}$ | $\begin{array}{r} .0354 \\ \left(\begin{array}{r} 64 \end{array}\right) \end{array}$ | .6877 $\left(\begin{array}{r}64\end{array}\right)$ |  | .4356 $\left(\begin{array}{r}\text { a }\end{array}\right.$ | 1387 $64)$ |
|  | $\mathrm{P}=.268$ | $\mathrm{P}=.781$ | $\mathrm{P}=.000$ | $\mathrm{P}=.546$ | $\mathrm{P}=.000$ | $\mathrm{P}=.274$ |
| Q14 | . 3057 | . 0760 | . 2548 | . 1159 | . 1223 | . 0187 |
|  | 64) | ( 64) | ( 64) | ( 64) | ( 64) | ( 64) |
|  | $\mathrm{P}=.014$ | $\mathrm{P}=.550$ | $\mathrm{P}=.042$ | $\mathrm{P}=.362$ | $\mathrm{P}=.335$ | $\mathrm{P}=.884$ |
| Q15 | . 1275 | . 0948 | . 4054 | . 1953 | . 2741 | .1790 |
|  | ( 64) | ( 64) | ( 64) | ( 64) | ( 64) | ( 64) |
|  | $\mathrm{P}=.315$ | $\mathrm{P}=.456$ | $\mathrm{P}=.001$ | $\mathrm{P}=.122$ | $\mathrm{P}=.028$ | $\mathrm{P}=.157$ |
| Q16 | -. 1264 | . 1624 | . 0752 | . 4160 | . 0590 | . 2706 |
|  | ( 64) | ( 64) | ( 64) | ( 64) | ( 64) | ( 64) |
|  | $\mathrm{P}=.320$ | $\mathrm{P}=.200$ | $\mathrm{P}=.555$ | $\mathrm{P}=.001$ | $\mathrm{P}=.643$ | $\mathrm{P}=.031$ |
| Q17 | . 1163 | . 2673 | . 3546 | . 1607 | . 2271 | . 2392 |
|  | ( 64) | $(64)$ | ( 64) | ( 64) | ( 64) | ( 64) |
|  | $\mathrm{P}=.360$ | $\mathrm{P}=.033$ | $\mathrm{P}=.004$ | $\mathrm{P}=.205$ | $\mathrm{P}=.071$ | $\mathrm{P}=.057$ |
| Q18 | . 0176 | . 3634 | . 0977 | . 1284 | . 2548 | . 0675 |
|  | 64) | ( 64) | ( 64) | ( 64) | ( 64) | ( 64) |
|  | $\mathrm{P}=.890$ | $\mathrm{P}=.003$ | $\mathrm{P}=.443$ | $\mathrm{P}=.312$ | $\mathrm{P}=.042$ | $\mathrm{P}=.596$ |
| Q19 | 1.0000 | -. 1491 | . 1391 | -. 0045 | . 0171 | -, 1527 |
|  | 64) | ( 64) | ( 64) | ( 64) | ( 64) | ( 64) |
|  | $\mathrm{P}=$. | $\mathrm{P}=.240$ | $\mathrm{P}=.273$ | $\mathrm{P}=.972$ | $\mathrm{P}=.893$ | $\mathrm{P}=.228$ |
| Q20 | -. 1491 | 1.0000 | . 0967 | . 3212 | . 0125 | . 1361 |
|  | ( 64) | ( 64) | ( 64) | ( 64) | ( 64) | ( 64) |
|  | $\mathrm{P}=.240$ | $\mathrm{P}=$ | $\mathrm{P}=.447$ | $\mathrm{P}=.010$ | $\mathrm{P}=.922$ | $\mathrm{P}=.284$ |
| Q21 | . 1391 | . 0967 | 1.0000 | . 2507 | . 2173 | . 0890 |
|  | ( 64) | ( 64) | ( 64) | ( 64) | ( 64) | ( 64) |
|  | $\mathrm{P}=.273$ | $\mathrm{F}=.447$ |  | $\mathrm{P}=.046$ | $\mathrm{P}=.085$ | $\mathrm{P}=.484$ |
| Q22 | -. 0045 | . 3212 | . 2507 | 1.0000 | . 0043 | . 0821 |
|  | ( 64) | ( 64) | ( 64) | ( 64) | ( 64) | ( 64) |
|  | $\mathrm{P}=.972$ | $\mathrm{P}=.010$ | $\mathrm{P}=.046$ | $\mathrm{P}=$ | $\mathrm{P}=.973$ | $\mathrm{P}=.519$ |

(Coefficient / (Cases) / 2-tailed Significance)

- . . is printed if a coefficient cannot be computed

|  | Q19 | Q20 | Q21 | Q22 | Q23 | Q24 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q23 | $\begin{array}{r} .0171 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.893 \end{array}$ |  | $\begin{array}{r} .2173 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} .085\right. \end{array}$ |  | $\begin{aligned} & 1.0000 \\ & \left(\begin{array}{r} 1 \\ \mathrm{P}=. \end{array}\right. \end{aligned}$ |  |
| Q24 | $\begin{array}{r} -.1527 \\ \binom{( }{( } \\ P=.228 \end{array}$ | $\begin{array}{r} .1361 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}= \\ .284 \end{array}$ | $\begin{array}{r} .0890 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .484 \end{array}, ~\right. \end{array}$ |  | $\begin{array}{r} .1877 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .137 \end{array}, ~\right. \end{array}$ | $\begin{aligned} & 1.0000 \\ & \left(\begin{array}{r} 1 \\ P=. \end{array}\right. \end{aligned}$ |
| Q25 | $\begin{array}{r} .3248 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \mathrm{P} \end{array} \mathbf{0 0 9}\right. \end{array}$ | $\begin{array}{r} -.0446 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ \mathrm{P}=.726 \end{array}$ | $\begin{array}{r} .1681 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ .184 \end{array}\right. \end{array}$ | $\begin{array}{r} -.0459 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}=.719 \end{array}$ | $\begin{array}{r} -.0060 \\ \left(\begin{array}{r} ( \\ \mathrm{P}= \\ \mathrm{P}=.963 \end{array}\right. \end{array}$ | $\begin{array}{r} -.1795 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}=.156 \end{array}$ |
| Q26 | $\begin{array}{r} .2716 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.030 \end{array}$ | $\begin{array}{r} .0734 \\ \left(\begin{array}{r}  \\ \mathrm{P}= \\ \hline .564 \end{array}\right) \end{array}$ | $\begin{array}{r} .2572 \\ \left(\begin{array}{r} 64) \\ P= \\ .040 \end{array}\right. \end{array}$ | $\begin{array}{r} .2286 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}= \\ .069 \end{array}$ | $\begin{array}{r} .1464 \\ \left(\begin{array}{r}  \\ \hline \end{array}\right) \\ \mathrm{P}=.248 \end{array}$ | $\begin{array}{r} -.0139 \\ \left(\begin{array}{r} \text { ( } \end{array}\right. \\ \mathrm{P}=.913 \end{array}$ |
| Q27 |  | $\begin{array}{r} .1044 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) \end{array}$ | $\begin{array}{r} .8195 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .000 \end{array}, ~\right. \end{array}$ | $\begin{array}{r} .1730 \\ \left(\begin{array}{r} 17 \end{array}\right. \\ \mathrm{P}=\quad .172 \end{array}$ | $\begin{array}{r} .1671 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ .187 \end{array}\right. \end{array}$ | $\begin{array}{r} .0998 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} \mathbf{4 3 3}\right. \end{array}$ |
| Q28 | $\begin{array}{r} .1135 \\ \left(\begin{array}{r} 14 \end{array}\right. \\ \mathrm{P}=.372 \end{array}$ | $\begin{array}{r} .1361 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}=.284 \end{array}$ | $\begin{array}{r} .3216 \\ \left(\begin{array}{r}  \\ \mathrm{P}= \\ \mathrm{P} \end{array}\right) \\ .010 \end{array}$ | $\begin{array}{r} .4318 \\ \left(\begin{array}{r}  \\ \hline \end{array} \quad 64\right) \\ \mathrm{P}= \\ .000 \end{array}$ | $\begin{array}{r} .1354 \\ \left(\begin{array}{r}  \\ \mathrm{P}= \\ .286 \end{array}\right. \end{array}$ | $\begin{array}{r} -.1095 \\ \left(\begin{array}{r}  \\ ( \end{array}\right) \\ P=.389 \end{array}$ |
| Q29 | $\begin{array}{r} .0109 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.932 \end{array}$ | $\begin{array}{r} -.0981 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}=.440 \end{array}\right. \end{array}$ | $\begin{array}{r} .2109 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.094 \end{array}$ | $\begin{array}{r} .0068 \\ \left(\begin{array}{r} 64 \end{array}\right. \\ \mathrm{P}=\quad .958 \end{array}$ | $\begin{array}{r} .7604 \\ \left(\begin{array}{r}  \\ \mathrm{P}= \\ .000 \end{array}\right. \end{array}$ | $\begin{array}{r} .2453 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}=.051 \end{array}$ |
| Q30 | $\begin{array}{r} -.2340 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}=.063 \end{array}$ | $\begin{array}{r} .1730 \\ \left(\begin{array}{r} 17 \end{array}\right) \\ \mathrm{P}=.172 \end{array}$ |  | $\begin{array}{r} .2288 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \mathrm{r} \end{array} \mathbf{. 0 6 9}\right. \end{array}$ | $\begin{array}{r} .0287 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \mathrm{F} \end{array} \mathrm{.822}\right. \end{array}$ |  |

(Coefficient / (Cases) / 2-tailed Significance)

* . . is printed if a coefficient cannot be computed

|  | Q25 | Q26 | Q27 | Q28 | Q29 | Q30 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q1 | $\begin{array}{r} .0231 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} .856\right. \end{array}$ | $\begin{array}{r} .2145 \\ \left(\begin{array}{r} 64) \\ P= \end{array} .089\right. \end{array}$ | $\begin{array}{r} .1206 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} .343\right. \end{array}$ | $\begin{array}{r} .1742 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \mathrm{P} \end{array}\right) \end{array}$ | $\begin{array}{r} .1351 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .287 \end{array}$ | $\begin{array}{r} .1961 \\ \left(\begin{array}{r} 194) \\ P= \\ \hline \end{array} .120\right. \end{array}$ |
| Q2 | $\begin{array}{r} -.1106 \\ \left(\begin{array}{r} \text { ( } \end{array}\right. \\ \mathrm{P}=.384 \end{array}$ | $\begin{array}{r} .0655 \\ \left(\begin{array}{r} 64 \end{array}\right. \\ \mathrm{P}=.607 \end{array}$ | $\begin{array}{r} .1738 \\ \left(\begin{array}{r} 17 \end{array}\right) \\ \mathrm{P}=.170 \end{array}$ | $\begin{array}{r} .1393 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ .272 \end{array}\right. \end{array}$ | $\begin{array}{r} -.1006 \\ \left(\begin{array}{r} - \\ P= \\ P=.429 \end{array}\right. \end{array}$ |  |
| Q3 | $\begin{array}{r} .0425 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} \mathbf{7 3 9}\right. \end{array}$ |  | $\begin{array}{r} .0164 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} 898\right. \end{array}$ | $\begin{array}{r} .1121 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=\begin{array}{r} 378 \end{array} \end{array}$ | $\begin{array}{r} .3467 \\ \binom{( }{\hline} \\ \mathrm{P}=.005 \end{array}$ | $\begin{array}{r} -.1528 \\ \binom{( }{\hline} \\ \mathrm{P}=.228 \end{array}$ |
| Q4 | $\begin{array}{r} .1103 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.385 \end{array}$ | $\begin{array}{r} .2584 \\ \left(\begin{array}{r} 64) \\ P= \\ P \end{array} .039\right. \end{array}$ | $\begin{array}{r} .1267 \\ \left(\begin{array}{r}  \\ P \end{array} \quad .319\right. \\ \hline \end{array}$ |  | $\begin{array}{r} .3362 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array} .007\right. \end{array}$ | $\begin{array}{r} -.0675 \\ \binom{-}{P} \\ P=.596 \end{array}$ |
| Q5 | $\begin{array}{r} .1452 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}=.252 \end{array}$ | $\begin{array}{r} .1522 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=\begin{array}{r} 230 \end{array} \end{array}$ | $\begin{array}{r} .0811 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.524 \end{array}$ | $\begin{array}{r} .1927 \\ \left(\begin{array}{r}  \\ \hline \end{array}\right) \\ \mathrm{P}=.127 \end{array}$ | $\begin{array}{r} .0687 \\ 1 \\ P=.54\} \\ P=.590 \end{array}$ | $\begin{array}{r} .0357 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} \mathbf{7 8 0}\right. \end{array}$ |
| Q6 | $\begin{array}{r} .0507 \\ \left(\begin{array}{r} \text { ( } \end{array}\right) \\ \mathrm{P}=.691 \end{array}$ | $\begin{array}{r} .2869 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline .022 \end{array}, \begin{array}{l} \end{array}{ }^{2} 8\right. \end{array}$ | $\begin{array}{r} .0968 \\ \left(\begin{array}{r}  \\ \mathrm{P} \end{array}\right) \\ \mathrm{P}=.447 \end{array}$ | $\begin{array}{r} .0788 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.536 \end{array}$ | $\begin{array}{r} .1951 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array} 122\right. \end{array}$ | $\begin{array}{r} -.1323 \\ \binom{-}{\mathrm{P}} \\ =.297 \end{array}$ |
| Q7 | $\begin{array}{r} -.1268 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .318 \end{array}$ | $\begin{array}{r} -.2145 \\ \left(\begin{array}{r} 64) \\ P= \end{array} .089\right. \end{array}$ | $\begin{array}{r} .1037 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .415 \end{array}$ | $\begin{array}{r} -.1418 \\ \left(\begin{array}{r} 18 \end{array}\right. \\ \mathrm{P}=.264 \end{array}$ | $\begin{array}{r} -.1389 \\ \left(\begin{array}{r} -24) \\ \mathrm{P}=.274 \end{array}, ~\right. \end{array}$ | $\begin{array}{r} .1672 \\ \left(\begin{array}{r} 64) \\ P= \\ .187 \end{array}\right) \end{array}$ |
| Q8 | $\begin{array}{r} .1541 \\ \left(\begin{array}{r} 14 \end{array}\right. \\ \mathrm{P}=.224 \end{array}$ | $\begin{array}{r} -.0556 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}=.663 \end{array}$ | $\begin{array}{r} .3769 \\ \binom{( }{\hline} \\ \mathrm{P}=.002 \end{array}$ | $\begin{array}{r} .2514 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=\begin{array}{r} \text { a } \end{array} \end{array}$ | $\begin{array}{r} .2119 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}= \\ .093 \end{array}$ | $\begin{array}{r} .2482 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ P=.048 \end{array}$ |
| Q9 |  | $\begin{array}{r} .6601 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}= \\ .000 \end{array}$ | $\begin{array}{r} .0695 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ P=.585 \end{array}$ | $\begin{array}{r} .2632 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.036 \end{array}$ | $\begin{array}{r} .1356 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ \mathrm{P}=.285 \end{array}$ | $\begin{array}{r} -.1791 \\ \binom{-}{P} \\ P=.157 \end{array}$ |
| Q10 | $\begin{array}{r} .2727 \\ \binom{( }{\hline} \\ \mathrm{P}=.029 \end{array}$ | $\begin{array}{r} .0992 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ \mathrm{P}=.435 \end{array}$ | $\begin{array}{r} -.0479 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ \mathrm{P}=.707 \end{array}$ | $\begin{array}{r} .1062 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .404 \end{array}, ~\right. \end{array}$ | $\begin{array}{r} -.1346 \\ \left(\begin{array}{r} ( \end{array}\right) \\ \mathrm{P}=.289 \end{array}$ | $\begin{array}{r} -.2616 \\ \binom{-.}{\mathrm{P}} \\ =.037 \end{array}$ |
| Q11 | $\begin{array}{r} -.1483 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ \mathrm{P}=.242 \end{array}$ | $\begin{array}{r} -.1144 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ \mathrm{P}=.368 \end{array}$ | $\begin{array}{r} -.0348 \\ \binom{-}{( } \\ \mathrm{P}=.785 \end{array}$ | $\begin{array}{r} .0169 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.894 \end{array}$ | $\begin{array}{r} -.0279 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ \mathrm{P}=.827 \end{array}$ | $\begin{array}{r} .2281 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.070 \end{array}$ |

(Coefficient / (Cases) / 2-tailed Significance)

* . . is printed if a coefficient cannot be computed

|  | Q25 | Q26 | Q27 | Q28 | Q29 | Q30 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q12 | $\begin{array}{r} -.0196 \\ \left(\begin{array}{r}  \\ ( \end{array} \quad .84\right) \\ \mathrm{P}=.878 \end{array}$ | $\begin{array}{r} .1416 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .264 \end{array}$ | $\begin{array}{r} .1372 \\ \left(\begin{array}{r} 64) \\ \mathrm{p}= \\ .280 \end{array}\right. \text { } \end{array}$ | $\begin{array}{r} .3049 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline .014 \end{array}, ~\right. \end{array}$ | $\begin{array}{r} .0162 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} \mathrm{899}\right. \end{array}$ | $\begin{array}{r} .0392 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} .759\right. \end{array}$ |
| Q13 | $\begin{array}{r} .1235 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ \mathrm{P}=.331 \end{array}$ | $\begin{array}{r} .1276 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .315 \end{array}\right. \end{array}$ |  | $\begin{array}{r} .2555 \\ \left(\begin{array}{r} . \\ \mathrm{P}= \\ .042 \end{array}\right. \end{array}$ | $\begin{array}{r} .4219 \\ \left(\begin{array}{r} \text { r } \end{array}\right. \\ \mathrm{P}=.001 \end{array}$ |  |
| Q14 | $\begin{array}{r} .2653 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .034 \end{array}$ | $\begin{array}{r} .3703 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .003 \end{array}, ~\right. \end{array}$ |  |  | $\begin{array}{r} .1883 \\ \binom{184)}{P=} .136 \end{array}$ | $\begin{array}{r} -.0454 \\ \left(\begin{array}{r} -74) \\ P= \\ \hline \end{array}\right) .722 \end{array}$ |
| Q15 | $\begin{array}{r} -.1350 \\ \left(\begin{array}{r} ( \end{array}\right) \\ P=.288 \end{array}$ | $\begin{array}{r} .1101 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} .386\right. \end{array}$ | $\begin{array}{r} .2880 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=\begin{array}{r} .021 \end{array} \end{array}$ | $\begin{array}{r} .2520 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.045 \end{array}$ | $\begin{array}{r} .2075 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ .100 \end{array}\right. \end{array}$ | $\begin{array}{r} .1294 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ \mathrm{F} \end{array} \mathrm{~F} 08\right. \end{array}$ |
| Q16 | $\begin{array}{r} -.0728 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ \mathrm{P}=.568 \end{array}$ | $\begin{array}{r} -.0718 \\ \left(\begin{array}{r} 18 \end{array}\right) \\ \mathrm{P}=.573 \end{array}$ |  | $\begin{array}{r} .2268 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .072 \end{array}, ~\right. \end{array}$ | $\begin{array}{r} .1198 \\ \left(\begin{array}{r}  \\ \hline \end{array}\right) \\ \mathrm{P}=.346 \end{array}$ | $\begin{array}{r} .4232 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}=.000 \end{array}$ |
| 217 | $\begin{array}{r} -.0584 \\ \left(\begin{array}{r} -64) \\ P= \\ \hline \end{array}\right) .647 \end{array}$ | $\begin{array}{r} .0434 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .733 \end{array}$ | $\begin{array}{r} .3651 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.003 \end{array}$ | $\begin{array}{r} .2202 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} \mathrm{O80}\right. \end{array}$ | $\begin{array}{r} .1414 \\ \left(\begin{array}{r} 64) \\ P= \\ \hline \end{array}\right) .265 \end{array}$ | $\begin{array}{r} .2071 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ \hline \end{array} .101\right. \end{array}$ |
| Q18 | $\begin{array}{r} -.0028 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ P=. .982 \end{array}$ |  | $\begin{array}{r} .1347 \\ (64) \\ \mathrm{P}=.288 \end{array}$ | $\begin{array}{r} .2300 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .068 \end{array}\right. \end{array}$ | $\begin{array}{r} .2098 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .096 \end{array}\right. \end{array}$ |  |
| Q19 | $\begin{array}{r} .3248 \\ \left\{\begin{array}{r} 64 \\ \mathrm{P}= \\ .009 \end{array}\right. \end{array}$ | $\begin{array}{r} .2716 \\ \left(\begin{array}{r} 64 \end{array}\right. \\ \mathrm{P}=\quad .030 \end{array}$ | $\begin{array}{r} .0733 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.565 \end{array}$ | $\begin{array}{r} .1135 \\ \left(\begin{array}{r}  \\ \mathrm{P}= \\ \mathrm{F} \end{array}\right) \\ .372 \end{array}$ | $\begin{array}{r} .0109 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.932 \end{array}$ | $\begin{array}{r} -.2340 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ \mathrm{P}=.063 \end{array}$ |
| Q20 | $\begin{array}{r} -.0446 \\ \left(\begin{array}{r} 1 \end{array}\right) \\ \mathrm{P}=.726 \end{array}$ |  | $\begin{array}{r} .1044 \\ \left(\begin{array}{r}  \\ P \end{array}\right) \\ P=.412 \end{array}$ | $\begin{array}{r} .1361 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}=.284 \end{array}$ | $\begin{array}{r} -.0981 \\ \left(\begin{array}{r} 1 \\ P= \\ P=.440 \end{array}\right. \end{array}$ | $\begin{array}{r} .1730 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}= \\ .172 \end{array}$ |
| Q21 | $\begin{array}{r} .1681 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .184 \end{array}, ~\right. \end{array}$ | $\begin{array}{r} .2572 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .040 \end{array}\right. \text { } \end{array}$ | $\begin{array}{r} .8195 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}= \\ .000 \end{array}\right. \text { } \end{array}$ | $\begin{array}{r} .3216 \\ \left(\begin{array}{r}  \\ \hline \end{array}\right) \\ \mathrm{P}=.010 \end{array}$ | $\begin{array}{r} .2109 \\ (64) \\ \mathrm{P}=.094 \end{array}$ | $\begin{array}{r} .1169 \\ \left(\begin{array}{r} 64) \\ \mathrm{P}=. \\ \hline \end{array}{ }^{2} 58\right. \end{array}$ |
| Q22 | $\begin{array}{r} -.0459 \\ \left(\begin{array}{r} 1 \\ ( \end{array} \quad .719\right. \\ \mathrm{P}=.719 \end{array}$ | $\begin{array}{r} .2286 \\ \left(\begin{array}{r} 64 \end{array}\right) \\ \mathrm{P}=.069 \end{array}$ | $\begin{array}{r} .1730 \\ \left(\begin{array}{r} 1 \end{array}\right. \\ \mathrm{P}=.172 \end{array}$ | $\begin{array}{r} .4318 \\ \left(\begin{array}{r} 18 \end{array}\right. \\ \mathrm{P}=.000 \end{array}$ |  | $\begin{array}{r} .2288 \\ \left(\begin{array}{r} 1 \\ \mathrm{P}= \\ = \\ \hline \end{array} 069\right. \end{array}$ |

(Coefficient / (Cases) / 2-tailed Significance)
. . . is printed if a coefficient cannot be computed


## APPENDIX B

## DEMOGRAHIC FORM \& SURVEY

## Demographic Information Form

## Please Check One:



Ethnic group:
___ Native American African-American
Hispanic
__Caucasion
__Asian-American/
Pacific Islander
$\qquad$ other

Residence: $\qquad$ campus housing $\qquad$ off-campus
$\qquad$ family

Age: $\qquad$ less than 18 yrs $\qquad$ $18-22 \mathrm{yrs}$
__ 22-26 yrs
$\qquad$ 27 plus

Do you participate in intramural sports? $\qquad$ yes $\qquad$ no

If yes, please complete the following survey.
If no, please explain. .....

## Motivation_Eactors for Intramural_Sports_at_Small_Liberal_Arts Colleges

Please read each carefully and circle your responses to the following questions.

1. The intramural sports program was a factor in the selection of my attending this institution.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree
E. Strongly Disagree
2. There must be quality indoor facilities in order for me to participate in intramural activities.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree E. Strongly Disagree
3. I participate in intramural sports 1 to 3 hours a week.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree
E. Strongly Disagree
4. I participate in intramural team sport activities such as flag football, softball and basketball.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree E. Strongly Disagree
5. I play intramural sports in order to win a championship $t$-shirt.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree E. Strongly Disagree
6. I participate in intramural events that are held on campus.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree
E. Strongly Disagree
7. I play intramural sports because my organization requires me to.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree E. Strongly Disagree
8. The intramural sports program is a factor in my staying at this institution.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree
E. Strongly Disagree
9. I play intramural sports so that I can stay healthy.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree
E. Strongly Disagree
10. I have had at least one positive experience while playing intramural sports.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree
E. Strongly Disagree
11. I participate in intramural individual and dual sport activities such as tennis, racquetball and badminton.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree
E. Strongly Disagree
12. I play intramural sports in order to be social with my friends.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree
E. Strongly Disagree
13. I participate in intramural sports 4 to 6 hours a week.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree E. Strongly Disagree
14. I play intramural sports because I enjoy them.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree
E. Strongly Disagree
15. I participate in intramural events that are held off-campus.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree E. Strongly Disagree
16. I play intramural sports in order to re-live past experiences from my high school athletic days.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree
E. Strongly Disagree
17. I participate in intramural special events such as road races and late night events.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree
E. Strongly Disagree
18. I participate in intramural sports because it costs little or no money.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree
E. Strongly Disagree
19. I have had more than one positive experience while participating in intramural sports.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree
E. Strongly Disagree
20. There must be quality outdoor facilities in order for me to participate in intramural sports.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree
E. Strongly Disagree
21. I participate in intramural sports 7 to 9 hours a week.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree E. Strongly Disagree
22. I play intramural sports in order to win awards such as water bottles or certificates.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree E. Strongly Disagree
23. I have had at least one negative experience while participating in intramural sports.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree E. Strongly Disagree
24. I play intramural sports because of a point system.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree E. Strongly Disagree
25. The intramural program is well publicized on and around campus.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree E. Strongly Disagree
26. I play intramural sports in order to get some exercise.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree E. Strongly Disagree
27. I participate in intramural sports 10 or more hours a week.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree
E. Strongly Disagree
28. I play intramural sports in order to meet new people.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree E. Strongly Disagree
29. I have had more than one negative experience while participating in intramural sports.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree E. Strongly Disagree
30. I play intramural sports in order to re-live past experiences from my collegiate athletic days.
A. Strongly Agree
B. Agree
C. Undecided
D. Disagree E. Strongly Disagree

## OKl AHOMA STATE ENIVERSITY NGTITUTIONAL. REY!FW BOAND 



## APPENDIX C

INSTITUTIONAL REVIEW BOARD FORM

# OKLAHOMA STATE UNIVERSITY INSTITUTIONAL REVIEW BOARD HUMAN SUBJECTS REVIEW 

Date: 06-26-95
IRB\#: ED-95-094

Proposal Title: THE DEVELOPMENT OF AN ASSESSMENT TO DETERMINE MOTIVATIONAL FACTORS FOR PARTICIPATION IN INTRAMURAL ACTIVITIES

Principal Investigator(s): Christine Cashel, Timothy Matthew Prasifka

Reviewed and Processed as: Exempt

Approval Status Recommended by Reviewer(s): Approved
ALL APPROVALS MAY BE SUBJECT TO REVIEW BY FULL INSTITUTIONAL REVIEW BOARD AT NEXT MEETING.
APPROVAL STATUS PERIOD VALID FOR ONE CALENDAR YEAR AFIER WHICH A CONTINUATION OR RENEWAL REQUEST IS REQUIRED TO BE SUBMITTED FOR BOARD APPROVAL.
ANY MODIFICATIONS TO APPROVED PROJECT MUST ALSO BE SUBMITTED FOR APPROVAL.

Comments, Modifications/Conditions for Approval or Reasons for Deferral or Disapproval are as follows:

Signature:


VITA
Timothy Matthew Prasifka
Candidate for the Degree of
Master of Science

Thesis: THE DEVELOPMENT OF AN ASSESSMENT TO DETERMINE MOTIVATION FACTORS FOR PARTICIPATION IN INTRAMURAL ACTIVITIES

Major Field: Health, Physical Education and Leisure
Biographical:
Personal Data: Born in Dallas, Texas, on September 8, 1970, the son of Timothy B. and Dorothy Prasifka.

Education: Graduated from Bishop Dunne High School, Dallas, Texas in May 1989; received Bachelor of Arts degree in Business Administration from Southwestern University, Georgetown, Texas in May 1993. Completed the requirements for the Master of Science degree with a major in Health, Physical Education, \& Leisure at Oklahoma State University in July 1999.

Experience: Undergraduate Supervisor in the Intramural/Recreational Sports Office, Southwestern University (1990-93); Recreation Supervisor, City of Georgetown, Texas (1991-93); Day Camp Counselor, City of Lancaster, Texas (1993); Graduate Assistant for Intramural Sports, Oklahoma State University (1993-95); Assistant Director of Intramural Sports, Washington State University (1995-98); Director of Recreational Sports, University of St. Thomas (1998-present).

Professional Memberships: National Intramural-Recreational Sports Association.

