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Gary L. Preston  
*Brigham Young University - Provo*

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ASSESSMENT OF INFLUENCE THAT THE CHURCH OF  
JESUS CHRIST OF LATTER-DAY SAINTS HAS ON  
EXERCISE HABITS OF MEMBERS LIVING  
IN UTAH COUNTY

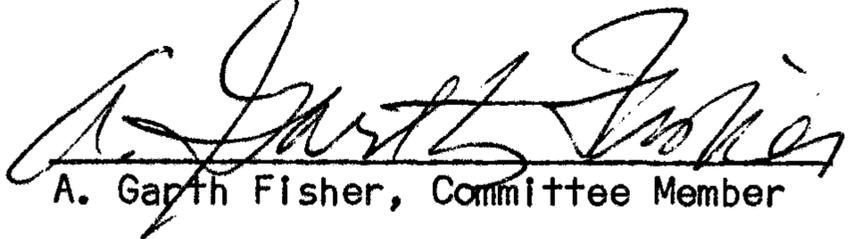
A Thesis  
Presented to the  
Department of Physical Education-Sports  
Brigham Young University

In Partial Fulfillment  
of the Requirements for the Degree  
Master of Science

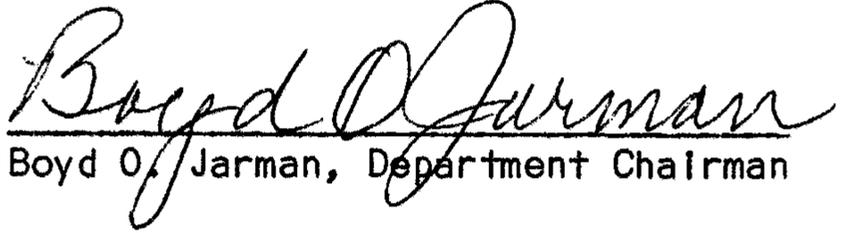
by  
Gary L. Preston  
August 1987

This thesis, by Gary L. Preston, has been accepted in its present form by the Department of Physical Education-Sports of Brigham Young University as satisfying the thesis requirement for the degree of Master of Science.

  
Philip E. Ailsen, Committee Chairman

  
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6-12-87  
Date

  
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## CHAPTER ONE

### Introduction

The Church of Jesus Christ of Latter-day Saints (LDS) places a high premium on physical health. Numerous articles have been written on the subject over the last few years in LDS Church publications, and leaders of the LDS Church have spoken on the importance of keeping the body healthy. From these recommendations and various scriptural references, such as Moses 5:1 in the Pearl of Great Price, and Section 89 of the Doctrine and Covenants, it seems that the physical body is held in high esteem.

To encourage church members to be more physically healthy, the LDS Church has published a personal and family preparedness list, which includes the area of physical health. The LDS Church also sponsors sports programs and physical fitness programs. The physical fitness program, called the Physical Fitness Award Program, was introduced in 1980 to encourage church members to exercise regularly by awarding certificates and patches for various levels of physical activity (Avant, 1981). Currently, nothing has been written that indicates the success of the program.

Although much has been said by LDS Church leaders and through Church publications about the need for physical activity, some questions that still need to be answered are:

1. What are the LDS Church members doing with information concerning the need for physical fitness they have been given, and
2. How has this information concerning physical fitness influenced their lives?

#### Justification

The Latter-day Saint people are goal-oriented people. They set goals for temple attendance, home teaching, visiting teaching, and other aspects of life. The LDS Church leaders who instituted the Physical Fitness Awards Program had a goal of helping Church members become more physically active. A study of this nature would help in assessing how much influence the LDS Church is having in achieving these goals.

#### Statement of the Problem

The purpose of this study was to assess the influence that The Church of Jesus Christ of Latter-day Saints has on the exercise habits of its members in Utah Valley.

In order to solve the problem, answers to the following subproblems were sought:

1. Attendance at church
2. The regularity, frequency, and duration of exercise
3. Types of exercise used by the subjects
4. Methods used by the LDS Church to influence members to exercise
5. Awareness of and participation in the LDS Sports Program
6. Awareness of and participation in the LDS Physical Fitness Awards Program.

### Assumption

It was assumed that valid and reliable data regarding physical activity were obtained from the responses of subjects involved in the study.

### Delimitations

The study was delimited to 156 males and 153 females, 18 years of age and older, who resided in Utah Valley.

### Definition of Terms

Exercise Habits--That lifestyle that might contribute to physical fitness.

LDS Physical Fitness Award Program--An award given for participation in activities that can be done throughout one's lifetime to promote a more physically fit body.

LDS Sports Program--The structured sports program of the LDS Church that includes activities such as volleyball, basketball, softball, golf, and tennis.

Regular Church Attender--An individual who attends church at least once a month.

Regular Exerciser--An individual who exercises at least once a week.

## CHAPTER TWO

### Review of Literature

This chapter contains a review of the literature concerning information about the exercise habits of people in the United States and a survey of the literature concerning statements and articles that pertain to physical activity and the LDS Church.

#### Exercise Habits of People in the United States

In 1974 the President's Council on Physical Fitness and Sport released the results of a survey that was conducted on exercise habits of people in the United States. The results indicated that 55% of American adults engaged in some sort of exercise program. The exercises that were listed in the survey were walking, cycling, jogging, swimming, calisthenics, and weight training. At that time, walking was the most popular form of exercise activity, followed by cycling, calisthenics, and swimming. Adults, at that time, were not doing much jogging or weight training (President's Council, 1974).

In 1983 the Miller Brewing Company conducted a survey to determine the interest of people in the United States toward sports and also to find out the percentage of people who engaged in sports activities. Forty-two percent of the respondents indicated a high interest in sports participation, and a similar percentage engaged in at least one athletic activity every day. Twenty-five percent of the people reported that they participated in an athletic activity at least once a week.

The Miller study indicated that many of the people who participated in sports every day were teenagers. Two out of three Americans 14 to 17 years of age were classified as the most avid sports participants, as compared to 29% of the 18- to 24-year-olds, 16% of 25- to 34-year-olds, 6% of 50- to 64-year-olds, and only 2% of those 65 years and older. A comparison of male participants vs. female participants revealed that 22% of the men were in the highest athletic category, and 14% of the women were in the same category.

The Miller study found that swimming was the most popular sport in America, followed by calisthenics, jogging, cycling, baseball, bowling, weight training, basketball, football, racquet sports, and aerobic dancing. When asked to name the most important reasons why they engaged in physical activities, the people surveyed most often cited enjoyment of the game, improved health, release of tension, and improved mental alertness (Miller, 1983).

In 1985 the U.S. Department of Health and Human Services conducted a survey on health habits, health knowledge, and physical activity. The results of the survey indicated that:

Less than half (42%) of the adult population exercise on a regular basis, and only one-quarter have done so for five or more years. A higher percentage of adults in the younger than the older age groups engage in regular exercise. . . (Thornberry, 1986).

#### Physical Activity and the LDS Church 5

The Church of Jesus Christ of Latter-day Saints has gone to great lengths to instruct its membership on the importance of maintaining good physical fitness. From the early years of the LDS Church up to the present, much has been spoken and printed encouraging members to take care of their bodies.

In his book, A Rational Theology, Widstoe said:

. . .the condition of the body limits, largely, the expression of the spirit. The spirit speaks through the body and only as the body permits. . . Hence, if the body is in poor condition from birth, man must strengthen it as the days increase; if it is strong from the beginning he must make it stronger (Widstoe, 1957).

McKay indicated that:

The healthy man, who takes care of his physical being, has strength and vitality, his temple is a fit place for his spirit to reside. . . It is necessary, therefore, to care for our physical bodies, and observe the laws of physical health and happiness (McKay, 1952).

Benson expressed the idea that:

Physical well-being is not only a priceless asset to one's self, it is also a heritage to be passed on. With good health all the activities of life are greatly enhanced. A clean mind in a healthy body enables one to render far more effective service to others. It helps one provide more vigorous leadership. It gives our very experience in life more zest and meaning. Robust health is a noble and worthwhile attainment (Benson, 1958).

Richards, in his book, Where is Wisdom?, stated:

I speak of the religious doctrine which teaches that the human body is sacred, the veritable tabernacle of the divine spirit which inhabits it and that it is the solemn duty of mankind to protect and preserve from pollution and unnecessary wastage and weakness (Richards, 1955).

Hanks explained:

I am grateful to understand that my physical body is an eternal, nonevil component of my eternal soul, and that I have, therefore, a duty to honor and respect and care for it and to refrain from knowingly imposing upon it any treatment or substances deleterious to it. While I could not choose nor govern the condition of the body into which I came, I have the responsibility to give it the best care I can, and if I do not I am acting in derogation to a great gift of God (Hanks, 1958).

Durham, in an article entitled, "A New Look at Physical Fitness,"

quoted several physical educators who maintained that too much time

was spent upon intellectual development at the expense of physical development (Durham, 1966).

In his article, "Keeping Physically Fit," Robison stated:

There is a fundamental law that the tissue of the human body will waste away through idleness and disease. Conversely, muscles and vessels that are stressed grow and increase in capacity. This same basic law also applies to man's spiritual growth and his mental capacity, and progress and growth in either of these areas can be achieved only by continual nourishment in day-to-day living.

Not only are all of these areas--physical, spiritual, intellectual--governed by these same laws, but they also seem to be inseparable in that one cannot reach his loftiest potential without support and strength of others. Many members of the Church have developed themselves spiritually and intellectually, but they are being held back because of physical unfitness (Robison, 1972).

It appears that many LDS Church leaders maintain that the body, mind, and spirit are linked together and that the three variables must be developed together. Although much has been said concerning physical activity, it wasn't until 1975 that the LDS Church developed some specific guidelines for a fitness program. Over the signature of the President of the Quorum of the Twelve, LDS mission presidents were instructed to promptly institute a fitness program for their missionaries. The following is a quote from a letter sent to mission presidents:

Members of the Missionary Committee have made a complete review of a number of physical fitness programs in use to determine what might be best suited to missionary needs.

It has been found that most programs concentrate on muscle development but many men have strong muscles but weak hearts. Exercises, to be most effective, must take into consideration cardiovascular development and increase cardiovascular endurance (Church News, 1975).

The letter also pointed out that there was a direct correlation between health and work output and between physical fitness and spiritual development. It mentioned specific exercises that would help the missionaries and the amount of time to engage in physical activity.

This letter and other information were included in the Church News on February 1, 1975. While the letter from President Benson was written to mission presidents, the information was for the whole LDS Church membership. That same month, the Ensign magazine published an article by Zirker entitled, "We Didn't Call It Physical Fitness." The article dealt with family fitness, but there were some points made which would apply to anyone starting a fitness program. They were:

1. The need for an appreciative audience or the company of others.
2. That variety sustains interest.
3. That if the appetite is whetted, the desire will be created.
4. Choose activities that are most readily accessible (Zirker, 1975).

Three years later, the Ensign magazine had three more articles that dealt with physical activity. One was in February of 1978, and it was entitled, "Active Mind, Active Body," by Ellsworth. The article stated that church members needed to keep active physically, mentally, and spiritually. Ellsworth related a story of a crossing guard in Lehi, Utah, who would run 16 to 18 miles a day. This is not so unusual except for the fact that he was 70 years old. Ellsworth went on to state that if a person wants to get fit or stay fit, he or she needs to stay active (Ellsworth, 1978).

In June 1978, the Ensign had an article by Jacobson and Vance entitled, "'Fit' Is More than 'Not Fat'." The article dealt with six women who exercised, not because of feeling guilty, but because they wanted to establish a new relationship with their bodies. After they related these six case studies, the authors suggested ways to get started, with references to turn to to get more information on the subject of fitness (Jacobson & Vance, 1978).

Another article was from the text of an address by Barbara B. Smith, then president of the Relief Society. The title of her address was, "Good Health--A Key to Joyous Living." Her address concerned following good physical health goals. She said:

The Lord promises that if we keep these commandments we "shall run and not be weary, and shall walk and not faint" (D&C 89:20). The Lord might be making us aware of another law of health--the need for proper exercise. Exercise such as walking and running and other forms of rhythmic motion is important in maintaining cardiovascular fitness (Smith, 1981).

Another attempt at directly encouraging the LDS Church membership to exercise came in 1980 when the LDS Church introduced members to a program that was designed to develop skills and good habits of physical fitness. Awards were given to serve as a motivation. The program was set up on a point system, and after the goal was met, an award could be obtained. The awards were:

1. Bronze - 200 points
2. Silver - 300 points
3. Gold - 400 points

There was a chart that could be kept so the participants could keep track of their progress (Avant, 1981).

Elder L. Tom Perry of the LDS Church's Council of the Twelve said the following about the program and exercise in general:

I've been exercising most of my life, but I really got serious about it during the Sesquicentennial when the awards program was introduced. I think it's very important to be physically fit. The body is the temple of mankind; in order for him to better utilize his spiritual side, he must have a strong physical body.

Exercise is definitely not play. It's a vital part of our lives. I think we've become spectators and not involved enough. We ought to cut out a little television time and put more of it into physical exercise. One should schedule time for exercise just as one would schedule time for other activities, such as reading the scriptures or going to Church meetings. You build it into a regular calendar so you'll have time for it and so you can keep track and reach your physical fitness goals as well as other pursuits in life. When I'm physically fit, everything else works better for me. I don't tire as fast (Avant, 1981).

In order to motivate members and keep the importance of physical activity in the forefront of their thinking, several articles espousing physical fitness have appeared since 1980 in LDS Church publications.

One article was entitled, "Stay Healthy: Welfare Services Suggests How." The article dealt with various ways to stay healthy, including how to stay motivated to exercise, the benefits of jogging, and guidelines for proper diet and exercise. The article had 10 authors who wrote on a wide variety of topics (Ensign, 1981).

Another article by Zimmerman, entitled, "Running Away from It All," described the use of exercise in controlling weight. Zimmerman stated that exercise:

. . . increases the efficiency of burning fat and therefore prevents net loss of muscle tissue during dieting. It decreases appetite relative to calories burned during increased activity, and it increases the body's lean body mass (while it decreases the amount of fat) to help maintain strength and fitness. Most of the difficulties of losing weight through diet alone can be overcome through endurance exercise (Zimmerman, 1981).

Zimmerman wrote of four ways to lose weight:

1. Run and/or walk 10 miles per week spread over four or more days.
2. Increase walking distance gradually to 20 miles per week.
3. Eat a balanced diet.
4. Listen to the body.

He mentioned running because it was the right type of exercise, that is a repetitive, large muscle exercise. Running is convenient and can be either competitive or noncompetitive and is also enjoyable. He explained that a distance of 20 miles per week reduced fat and made the cardiovascular system more efficient (Zimmerman, 1981).

Vriens published an article entitled, "Home: Where the Hearty Is." She quoted from Fairbanks' book, "A Principle with a Promise," in which he indicated:

Health isn't just a state of not being ill. Health is the ability to use the body to perform all needful activities; health is strength, vigor, endurance, and robust appearance; health is lack of fatigue, the ability to think and make decisions quickly, unhampered by physical lethargy; health is bringing the body to the same level of perfection to which the Lord admonishes us to bring our spirits (Vriens, 1981).

Vriens suggested using sound nutrition and sound exercise habits along with proper rest. In the area of exercise, she suggested that people be consistent, be sure they are working toward desired results, and start at the level that the body can tolerate in its present condition (Vriens, 1981).

In June 1981, the Church News printed several articles on physical fitness. One article entitled, "Omaha Folks Stay on the Move," told about the Omaha Second Ward's way of staying fit. One ward member stated, "Participants feel better and some excess weight has been taken off." Another article, "Grandma's in Better Shape," told of a

47-year-old grandmother in Arizona who jogged five miles a day, six days a week (Church News, 1981). A third article reported on an aerobic dance class and its success. One participant had suffered a heart attack in 1972 and had arthritis. Her doctor gave her permission to go to the class, and she said she now had "more energy and inner youth" (Church News, 1981).

In 1982 two articles appeared, one in the Ensign and the other in the Church News. The Ensign article, "Notes from a Jogging Saint," by Kathy Summers, said that because of her jogging program, her rewards had been many. She stated, "We have felt stronger and better, and have enjoyed a new awareness and gratitude for the temples in which our spirits dwell" (Summers, 1982).

The Church News article consisted of seven statements from the News' Mormon Forum section. This particular forum dealt with ways a person could stay on an exercise program. The main points the participants made were:

1. Enlist your Heavenly Father's help in any exercise program.
2. Run with others so that you have a responsibility not to let them down.
3. Keep a journal about each day's running experience.
4. Develop discipline for other aspects of your life as well as for exercising (Church News, 1981).

In 1983 an article appeared in the Church News entitled, "Exercise Your Right to Obtain Blessings," by Fisher. He said the physical body was important, and for that reason we have been given numerous guidelines from the Lord on how to take care of the body. He then

explained the role exercise had in keeping the body fit for the spirit (Fisher, 1983).

In 1984 another article by Fisher appeared, this time in the Ensign magazine, entitled, "The Weight-Loss Battle: Helping Your Body to Win." Fisher said the key to losing weight was exercise. He indicated through exercise people can lose fat weight and not lean body mass and that exercise changes the enzymes of the muscle system to be more effective in burning fat. He stated that the best type of exercises were aerobic exercises, because they help to reduce body fat. To be effective, exercise must be performed at a moderate pace, and elicit heavy breathing (but not so hard that a person cannot carry on a conversation). Exercise should be engaged in five days per week or more. A person should start out moderately and increase duration gradually. He also instructed older people and people with special health problems to consult a physician before starting an endurance exercise program (Fisher, 1984).

#### Summary

The review of literature revealed that the majority of adults in the United States did not engage in an ongoing physical fitness program. A shocking aspect of the survey was that less people participated in activity in 1985 than in 1974.

The literature review indicated that the leadership of the LDS Church and many members were committed to good health and recommended that an exercise program be a part of any health program.

## CHAPTER THREE

### Procedure

#### Subject Selection

Three hundred and nine subjects, 156 males and 153 females, 18 years of age and older, were surveyed in this study. All subjects were residents of Utah Valley and lived in either Lehi, American Fork, Pleasant Grove, Provo/Orem, Springville, Spanish Fork, or Payson. The number of subjects selected from each city was determined by counting the number of pages of telephone numbers listed in the telephone book, and a proportional number of subjects was selected from each city. Subjects were then randomly selected and enough subjects were surveyed by telephone until the proper number of LDS people responded to the questionnaire.

#### Questionnaire

A questionnaire was constructed to collect the data. Questions concerning the following areas were utilized: gender, age, religion, exercise habits, knowledge of the LDS Sports Program and knowledge of the LDS Fitness Program, and LDS Church influence on participation in physical fitness or sports activities.

After the questionnaire was developed, a panel of three experts from Brigham Young University analyzed the questionnaire to determine the validity of the questions. Appendix A contains the names and addresses of the selected experts. The questionnaire was then taken

to the Instructional Studies Department at Brigham Young University to be examined to determine its validity.

A pilot study was then conducted to determine the ease of administering the questionnaire. Twenty subjects, 10 males and 10 females living in the LDS Orem 74th Ward were utilized for the pilot study. An example of the questionnaire used in this study can be found in Appendix B.

#### Data Collection

The questionnaire was then used by the researcher to collect the data from the selected subjects. All data were collected by telephone in 1986 from June 2 to June 30. The calls were made after 1:00 p.m. If the person selected did not wish to be part of the survey, the next person on the list was called. If the subject was not at home, a check was made by the subject's name and at a later time the subject was called again. After three calls, another subject was selected.

Consultation with a statistician determined that a total of 150 males and 150 females was sufficient to provide the necessary information for the study. Enough people were contacted to complete the sample size for data analysis. In all, 156 males and 153 females responded to the questionnaire.

#### Data Analysis

The questionnaire provided the data necessary for assessing the influence the LDS Church had on the exercise habits of members in Utah Valley.

In order to analyze the data, tables were constructed to present the totals and percentages of the selected questions. To determine if

any differences existed between the responses of men and women, an analysis of the data was computed utilizing chi-square and significance was accepted at the .05 level. The formula for chi-square was:

$$X^2 = \frac{(O-E)^2}{E}, \text{ where}$$

O = the observed

E = the expected

$X^2$  = the means squared.

CHAPTER FOUR  
Analysis of Data, Discussion, Conclusions,  
and Recommendations

The purpose of this study was to assess the influence the Church of Jesus Christ of Latter-day Saints has on the exercise habits of members living in Utah Valley.

In order to assess influence, the researcher surveyed 309 Latter-day Saints, 156 males and 153 females, 18 years of age and older, living in Utah Valley. Each respondent was surveyed by telephone and asked questions referring to religious activity, exercise habits, LDS Church influence on decision to exercise, and awareness of and participation in LDS sports and fitness programs.

The subjects contacted in this study were surveyed according to gender, age, and city. Appendix C contains this information.

The data presented in Table 1 are the responses to a question on activity in the LDS Church. According to the data, 130 males and 129 females, or 83% and 84% respectively, consider themselves regular church attenders.

Table 2 contains responses to questions on exercise habits. The data revealed that 100 males (65%) and 120 females (78%) females considered themselves regular exercisers. Of those who considered themselves regular exercisers, 73 males (72%) and 115 females (97%) exercised more than three days per week, with 77 males (75%) and 117 females (98%) exercising for 15 minutes or more per exercise session.

Table 1

Regular Church Attenders

<u>Question</u>	<u>Gender</u>	<u>Yes</u>	<u>%</u>	<u>No</u>	<u>%</u>
Are you a regular church attender?	Male	130	83	26	17
	Female	129	84	24	16
	Total	259	84	50	16

Table 2

Exercise Regularity, Frequency & Duration

<u>Question</u>	<u>Gender</u>	<u>Yes</u>	<u>%</u>	<u>No</u>	<u>%</u>
Do you exercise regularly?	Male	100	65	54	35
	Female	120	78	35	22
	Total	220	72	89	28

## Days individual exercises/week

Less than 3 days	Male	28	28		
	Female	4	3		
	Total	32	15		
More than 3 days	Male	73	72		
	Female	115	97		
	Total	188	85		

## Minutes/exercise session

Less than 15 min.	Male	24	25		
	Female	2	2		
	Total	26	12		

Table 2 cont'd.

<u>Question</u>	<u>Gender</u>	<u>Yes</u>	<u>%</u>	<u>No</u>	<u>%</u>
More than 15 min.	Male	77	75		
	Female	117	98		
	Total	194	88		

Table 3 lists the types of exercises engaged in by the subjects. Among the males, 50% of those surveyed either jogged or walked, with cycling, swimming, or team sports (basketball, softball, etc.) ranked third. Walking and aerobic dance were the choice of 73% of the female subjects, and cycling was ranked third. Appendix D contains further information about the activities selected by various age groups.

Table 3

Types of Exercise Activity

<u>Question</u>	<u>Activity</u>	<u>No.</u>	<u>%</u>
What type of exercise do you do?			
Male	Jogging	28	28
	Walking	22	22
	Cycling	10	10
	Swimming	10	10
	Team Sports	10	10
	Weights	5	5
	Racquetball	4	4
	Calisthenics	4	4
	Tennis	2	2
	Rowing	2	2
	Aerobic Dance	1	1
	Martial Arts	1	1
	Lawn Mowing	1	1
Total		100	100

Table 3 cont'd.

	<u>Activity</u>	<u>No.</u>	<u>%</u>
Female	Walking	48	40
	Aerobic Dance	40	33
	Cycling	13	11
	Jogging	8	7
	Swimming	4	3
	Mini-tramp	2	2
	Racquetball	1	.9
	Dance	1	.9
	Calisthenics	1	.9
	Tennis	1	.9
	Weights	1	.9
Total		120	100

The data presented in Table 4 are the responses to the influence the LDS Church had on the subject's decision to exercise. Among the male subjects, 27 (26%) said that the LDS Church had influenced their decision to exercise, and of the female respondents, 55 (46%) said that the LDS Church had influenced their decision to exercise.

Table 4

Church Influence on Participants' Decision to Exercise

<u>Question</u>	<u>Yes</u>	<u>%</u>	<u>No</u>	<u>%</u>
Has the LDS Church influenced your decision to exercise?				
Male	27	26	74	74
Female	55	46	64	54
Total	82	37	138	63

Table 5 represents the data regarding the way the LDS Church encouraged the respondents to exercise. Of the subjects who felt

Influenced by the LDS Church, 20 males (74%) and 22 females (40%) said the LDS Church generally encouraged its members to be physically active. The scriptures, especially the Word of Wisdom, influenced some of the respondents to exercise. Five males (19%) and 21 females (38%) answered this way. Among the females, eight subjects (15%) said that the Relief Society influenced them to exercise.

Table 5

Ways LDS Church Influenced Participants' Decisions to Exercise

<u>Question</u>	<u>Male</u>	<u>#</u>	<u>%</u>
What way has the LDS Church influenced your decision to exercise?	Church	20	74%
	Scriptures	5	19%
	Other	2	7%
	<u>Female</u>		
	Church	22	40%
	Scriptures	21	38%
	Relief Society	8	15%
	Physical Fitness		
	Awards Program	3	2%
	Other	5	9%

Table 6 indicates responses to reasons why subjects exercised other than LDS Church influence. Many of the subjects indicated that they just wanted to exercise or they have always exercised. These reasons were listed under personal reasons. Among male respondents, 73% indicated they exercised for personal reasons, 16% because of health reasons, 5% because of family reasons, 3% because of the media influence, and 3% because of something they had learned at school.

Among female respondents, 66% exercised for personal reasons, 13% because of health reasons, 8% were influenced by family, 6% were

influenced by the media, 2% said that school had influenced them, and 6% were influenced by friends.

Table 6

Reasons, Other than LDS Church, That Influenced Participants' Decision to Exercise

<u>Question</u>	Male	Number	%	
If the LDS Church has not influenced you to exercise, what has influenced you?	Personal	54	73	
	Health	12	16	
	Family	4	5	
	Media	2	3	
	School	2	3	
	<u>Female</u>			
	Personal	42	66	
	Health	8	13	
	Family	5	8	
	Media	4	6	
School	1	2		
Friends	4	6		

The subjects' responses to questions referring to their awareness of the LDS sports program are found in Table 7. Of the subjects surveyed, 153 males and 143 females were aware of the LDS sports program. This accounted for 98% and 93% respectively.

Table 7

Awareness of LDS Sports Program

<u>Question</u>	<u>Gender</u>	<u>Yes</u>	<u>%</u>	<u>No</u>	<u>%</u>
Are you aware of the LDS sports program?	Male	153	98	3	2
	Female	143	93	10	7
	Total	296	96	13	4

Table 7 cont'd.

<u>Question</u>	<u>Gender</u>	<u>Yes</u>	<u>%</u>	<u>No</u>	<u>%</u>
Have you ever participated in the LDS sports program?	Male	121	78	35	22
	Female	96	63	57	37
	Total	217	70	92	30
Are you currently participating in the LDS sports program?	Male	27	17	130	82
	Female	23	15	129	85
	Total	50	16	259	84

When the subjects were asked if they had ever participated in the sports program, 121 (78%) males and 96 (63%) females responded in the affirmative. When asked about current participation, 27 (17%) males and 23 (15%) females said that they were currently participating.

The data presented in Table 8 are the responses to the questions on awareness of and participation in the LDS Physical Fitness Awards Program. Of the subjects surveyed, 83 (53%) and 78 (51%) were aware of the program, and when asked if they had ever received an award, three (2%) males and three (2%) females said they had received such an award. When asked if they were currently working for an award, two (1%) males and 1 (1%) female responded in the affirmative.

Table 8

Awareness of the LDS Physical Fitness Awards Program

<u>Question</u>	<u>Gender</u>	<u>Yes</u>	<u>%</u>	<u>No</u>	<u>%</u>
Are you aware of the LDS Physical Fitness Awards Program?	Male	83	53	73	49
	Female	78	51	75	49
	Total	161	52	148	48
Have you ever received one?	Male	3	2	153	98
	Female	3	2	150	98
	Total	6	2	303	98

Table 8 cont'd.

<u>Question</u>	<u>Gender</u>	<u>Yes</u>	<u>%</u>	<u>No</u>	<u>%</u>
Are you currently working for one?	Male	2	1	154	99
	Female	1	1	152	99
	Total	3	1	306	99

In Table 9 are the results of the chi-square test for significance of various questions administered to the men and women in the study. In order to be significant, the chi-square had to be 5.024 or greater. The chi-square analysis revealed that significance existed for 5 of the 11 areas surveyed.

Questions 2, 3, and 4 showed significant differences for exercise regularity, along with exercise frequency and duration. These three areas showed that women exercised more regularly, more often, and for a longer period of time than men. Question 5 showed that there was a significant difference between men and women when it came to the amount of influence the LDS Church had on their exercise habits, and women were more influenced than men. Question 7 dealt with participation in the LDS Church's sports program. There was a significant difference, with more men than women having participated in the sports program.

Table 9

Results of Chi-square Analysis of Selected Questions for Males and Females

<u>Question</u>	<u>Gender</u>	<u>Yes</u>	<u>No</u>	<u>Chi-square</u>
1. Are you a regular church attender?	Male	130	26	.05
	Female	129	24	

Table 9 cont'd.

<u>Question</u>	<u>Gender</u>	<u>Yes</u>	<u>No</u>	<u>Chi-square</u>
2. Do you exercise regularly?	Male	100	54	5.83*
	Female	129	34	
3. Days individual exercise/week				27.18*
Less than 3 days	Male	29		
	Female	4		
More than 3 days	Male	73		
	Female	115		
4. Minutes/exercise session				
Less than 15 min.	Male	25		
	Female	2		
More than 15 min.	Male	77		
	Female	117		
5. Has the LDS Church influenced your decision to exercise?	Male	27	75	9.19*
	Female	55	64	
6. Are you aware of the LDS sports program?	Male	153	3	4.07
	Female	143	10	
7. Have you ever participated in the LDS program?	Male	121	35	7.64*
	Female	96	57	
8. Are you currently participating?	Male	27	130	.24
	Female	23	129	
9. Are you aware of the LDS Physical Fitness Awards Program?	Male	83	73	.16
	Female	78	75	
10. Have you ever received one?	Male	3	153	.00174
	Female	3	150	
11. Are you currently working for one?	Male	2	154	.32
	Female	1	152	

\*Significant at .025 level

### Discussion

In this study, a large number of the people surveyed were regular church attenders, with 83% of the males and 84% of the females in this category. It may be assumed that with this type of attendance the subjects would be aware of the LDS Church's view concerning physical fitness. But when the data concerning the LDS Church's influence on the decisions to exercise were examined, only 27% of the males indicated that church influence was a factor. Among females, 46% indicated the LDS Church was a factor in their decision to exercise.

Only 5 males out of 156, and 21 females out of 153 subjects indicated that the LDS scriptures had an effect on their decision to exercise. Yet, a review of the literature revealed that for years LDS Church leaders have been using scripture references and religious relationships as reasons for stimulating the human body through physical activity. It may be that the LDS Church leaders can observe a relationship between exercise and increased productivity and spirituality, but whether the lay membership is influenced by this factor is questionable.

A comparison of the regularity of exercise of LDS Church members and other people in the United States revealed some interesting facts. The President's Council on Physical Fitness and Sport in 1974 indicated that 55% of American adults engaged in an exercise program, but this number had dropped to 42% in 1985. The Miller Brewing Company's study in 1983 revealed similar participation results. The findings of the LDS study show that 65% of the men and 78% of the women exercise on a regular basis. This is much higher than the

national results. This might be attributed to the emphasis placed on Section 89 of the Doctrine and Covenants--known as the Word of Wisdom--which explains health principles.

Two of the factors that influence cardiovascular endurance are frequency and duration of activity. The recommended frequency is at least three times per week with 15 minutes or more duration for each exercise session. Of the LDS subjects, 85% of the regular exercisers (72% males and 97% females) engaged in activity more than three days per week, and 88% (75% males and 98% females) of the people exercised for more than 15 minutes each session. If the people living in Utah Valley represent other LDS individuals, a large majority of LDS Church members are receiving a proper cardiovascular endurance stimulus to obtain a training effect.

The above observation is further supported by the type of activity engaged in by the subjects. The four most common activities for exercise were jogging, walking, cycling, and aerobic dance, which are large muscle activities that contribute toward the aerobic capacity of the human body.

The LDS Church has organized two programs related to physical activity. They are the LDS Sports Program and the LDS Physical Fitness Awards Program. When surveyed, 96% of the people (98% males and 93% females) were aware of the sports program, and 70% had participated at one time or another. However, only 16% were currently engaged in the program at the time of the survey. Only 52% (53% males and 51% females) were aware of the fitness program. Participation was extremely low, with only 2% ever having received an award and only 1% currently working on an award.

An examination of the relatively high participation rate of exercise in this study indicates that a large number of the people surveyed might qualify for the fitness award. If the purpose of the program is to motivate activity, it might be that LDS Church leaders should re-examine the methods used to explain this program to the church members.

A final result of this study was the difference between men and women in the regularity of exercise. Women exercised more regularly, more often, and for a longer period of time than men. The study also revealed that women were more influenced by the LDS Church to exercise than men. If the LDS Church wishes to exert a greater influence on the males, leaders might want to examine methods that have been used to influence the women. For example, the Relief Society, a women's organization of the LDS Church, was mentioned by females, but the Priesthood, an organization for male members of the LDS Church, was never mentioned as an influence in the decision to exercise.

### Conclusions

The following conclusions were made as a result of the findings of this study:

1. Women were more influenced by the LDS Church to exercise than men.
2. LDS males and females exercise more than average adult Americans.
3. Walking, jogging, and aerobic dance were the most popular choices for activity of LDS exercisers.
4. Members of the LDS Church need to be made more aware of the Physical Fitness Awards Program.

### Recommendations

1. Lessons on physical fitness should be included in classes taught for LDS male members.
2. The LDS Church should emphasize, on an organized basis, such activities as walking, jogging, or swimming for its members.
3. The LDS Church might want to include additional activities in their sports program, such as road races, cycling events, or swimming events that enhance cardiovascular endurance.
4. The LDS Church should emphasize and use all available methods, such as Relief Society, Priesthood, Sunday School, Young Women, and Primary classes to explain and promote the Physical Fitness Awards Program.

## CHAPTER FIVE

## Article for Publication

## EXERCISE: WHAT ARE WE TAUGHT?

## WHAT ARE WE DOING?

"And God said, Let us make man in our own image, after our likeness . . . So God created man in his own image, in the image of God created he him; male and female created he them" (Genesis 1:26-27).

"Know ye not that ye are the temple of God, and that the Spirit of God dwelleth in you? If any man defile the temple of God, him shall God destroy; for the temple of God is holy, which temple ye are" (1 Corinthians 3:16-17).

These two scriptures probably describe as well as any the sacredness of our bodies. The question is, how well do we take care of these sacred edifices?

When Adam and Eve left the Garden of Eden, they were told to live by the sweat of their brow. They were faced with many physical challenges, and so it has been down through the ages. But within this century our lifestyle has become increasingly easier. Walking has been replaced by riding. Hard manual labor has been replaced by sitting behind a desk or flipping a switch. Many communicable diseases which were once killers have been arrested. These

communicable diseases have been replaced by degenerative diseases, with cardiovascular disease, including heart attacks and strokes being the number one killer (1).

How can we change this? Where can we turn for help?

Fortunately, a great deal has been written on the subject of physical health by our Church leaders. David O. McKay indicated that:

The healthy man, who takes care of his physical being, has the strength and vitality, his temple is a fit place for his spirit to reside. . . It is necessary, therefore, to care for our physical bodies, and observe the laws of physical health and happiness (2).

Ezra Taft Benson has said:

Physical well-being is not only a priceless asset to one's self, it is also a heritage to be passed on. With good health all the activities of life are greatly enhanced. A clean mind in a healthy body enables one to render far more effective service to others. It helps one provide more vigorous leadership. It gives our very experience in life more zest and meaning. Robust health is a noble and worthwhile attainment (3).

Marion D. Hanks commented:

I am grateful to understand that my physical body is an eternal, non-evil component of my eternal soul, and that I have, therefore, a duty to honor and respect and care for it and to refrain from knowingly imposing upon it any treatment or substances deleterious to it. While I could not choose nor govern the condition of the body into which I came, I have the responsibility to give it the best care I can, and if I do not I am acting in derogation to a great gift of God (4).

Two very good ways to take care of our bodies are to partake of proper meals and engage in an exercise program. Many of our Church leaders have encouraged us to exercise because they know the importance of keeping fit. L. Tom Perry stated:

I think it's very important to be physically fit. The body is the temple of mankind; in order for him to better utilize his spiritual side, he must have a strong physical body.

I think we've become spectators and not involved enough. We ought to cut out a little television time and put it into physical exercise. One should schedule time for exercise just as one would schedule time for other activities, such as reading the scriptures or going to Church meetings. . . . When I'm physically fit, everything else works better for me (5).

In a Conference address in October, 1981, Barbara B. Smith spoke of fitness this way:

The Lord promises that if we keep these commandments we "shall run and not be weary, and shall walk and not faint" (D&C 89:20). The Lord might be making us aware of another law of health--the need for proper exercise. Exercise such as walking and running and other forms of rhythmic motion is important in maintaining cardiovascular fitness (6).

A good exercise program should exercise the large muscles of the body, be done a minimum of three days per week, and be engaged in for not less than 15 minutes per exercise session (7). This type of program brings the following positive results in the human body:

1. The resting heart rate is decreased.
2. Endurance is increased.
3. The circulatory system becomes more efficient.
4. The heart ejects more blood per beat.
5. The capacity to utilize fats is increased (8).

These are some of the things we have been taught. What are we doing about it? In 1974 the President's Council on Physical Fitness and Sport released the results of a survey which showed that 55% of the American adult population over the age of 18 was engaged in some type of exercise program (9). In 1985 the Department of Health and Human Services conducted a survey which said that less than half (42%) of the American adult population 18 years of age or older were involved in a consistent exercise program, such as the one previously

described. When the results are compared, it indicates that the American adult population is exercising less than previously.

As a result of this information, the question arose concerning the exercise habits of adult Latter-day Saints. In June of 1986 a survey was completed by the Department of Physical Education-Sports of Brigham Young University. This survey researched the exercise habits of Latter-day Saints living in Utah Valley. The survey questioned 309 subjects, 156 males and 153 females. The survey covered these questions:

1. Do you consider yourself a regular exerciser?
2. How often do you exercise?
3. How long do you exercise?
4. Has the LDS Church had any influence on your decision to exercise?
5. Are you aware of the LDS Church's Sports Program and the LDS Church's Physical Fitness Awards Program?

When the data were collected, comparisons were made between men and women. The data showed that 65 % of the males and 78% of the females considered themselves regular exercisers. Of those who exercised, 72% of the males and 97% of the females said they exercised for three or more days a week, and 75% of the males and 98% of the females said they exercised for 15 minutes or more per exercise session.

When asked what types of activities they liked best, 50% of the males preferred jogging and walking, while 73% of the females preferred walking and aerobic dance.

The LDS Church influenced about half (46%) of the females to exercise, while 26% of the males said they were influenced by the Church to exercise. One possible reason is the LDS Church members' belief in the Word of Wisdom, which teaches to abstain from alcohol, tobacco, and hot drinks, and to eat in moderation so that they can "run and not be weary, walk and not faint."

The last question dealt with the subject's awareness of the LDS Church's Sports Program (basketball, volleyball, etc.) and the LDS Church's Physical Fitness Awards Program. It was found that almost everyone surveyed had heard of the sports program (males 98% and females 93%), and a majority had participated (males 78% and females 63%) in this program.

The Physical Fitness Awards Program data revealed different results. Of those surveyed, 53% of the males and 51% of the females had heard of the program, but only 2% had ever received an award or were working for one. Some of the reasons given for this lack of participation were the lack of publicity in the wards. What people seemed to be saying was that although they had heard of the program, no one was pushing it on a local level. A few respondents indicated that they had qualified for the award but didn't know how to receive it. No one surveyed realized that they could find out more about the program by looking in their Family Home Evening Resource Book.

Some observations that were made from this survey were that women tended to exercise more than men. They also tended to exercise more frequently and for longer periods of time when they did exercise. Also, women tended to be more influenced by the LDS Church to

the physical benefits of exercise but they also obtain some social benefits. Men, on the other hand, do not get the lessons in Priesthood meeting. With the exception of basketball, men have a tendency to do more of their activities on their own. It takes more discipline to exercise this way, and this might be one possible reason why fewer men exercise regularly.

Some conclusions that can be made from this survey are:

1. LDS Church members are more physically active than the national average.
2. LDS women are more active than LDS men.
3. LDS women are more influenced by the Church to exercise than LDS men.
4. The LDS Sports Program is well known and actively used.
5. The LDS Physical Fitness Awards Program is not as well known and is not used to its potential.

From this survey we can see that while we are above average, we still have room to improve. We are taught to be an example to the world, to our neighbors, and to our family. If we are to "lengthen our stride," as President Kimball was so fond of saying, we need to have the stamina. This can be reached only if we include physical activity along with spiritual activity.

exercise. One reason for this probably stems from the fact that the Relief Society has had lessons on physical fitness and many of the local wards have programs for their women. Not only do the women get the physical benefits of exercise but they also obtain some social benefits. Men, on the other hand, do not get the lessons in Priesthood meeting. With the exception of basketball, men have a tendency to do more of their activities on their own. It takes more discipline to exercise this way, and this might be one possible reason why fewer men exercise regularly.

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## References

1. American Heart Association. Heart Facts 1983. Dallas, 1983.
2. McKay, David O. "The Whole Man." Improvement Era, April 1952.
3. Benson, Ezra Taft. Talk given at President Eisenhower's 2nd Annual Council on Physical Fitness. Maryland, September 8, 1958.
4. Hanks, Marion D. "For Man is Spirit." Improvement Era, December 1958.
5. Perry, L. Tom. Church News, June 20, 1981.
6. Smith, Barbara B. "Good Health--A Key to Joyous Living." Ensign, November, 1981.
7. American College of Sports Medicine Position Statement.
8. Allsen, Phillip E., Harrison, Joyce M., and Vance, Barbara. Fitness for Life: An Individualized Approach. Wm. C. Brown Publishers, Dubuque, Iowa, 1984.
9. National Adult Fitness Survey. Physical Fitness Research Digest, President's Council on Sport and Fitness, April 1974.
10. Thornberry, Owen T., and Golden, Patricia. "Health Promotion and Disease Prevention: Provisional Data from the National Health Interview Survey--United States--June 1985." Advanced Data from Vital and Health Statistics of National Center of Health Sciences, Hyattsville, MD, May 1986.

## Bibliography

- Avant, J. (1981, June 20). Fitness awards emphasize good physical health. Church News.
- Benson, E.T. (1958, Sept. 8). Talk given at President Eisenhower's 2nd Annual Council on Physical Fitness, Maryland.
- Broyles, D., & Broyles, S. (1981, June 20). Physical fitness. Church News.
- 1 Corinthians 3:17.
- Doctrine and Covenants 89. Published by The Church of Jesus Christ of Latter-day Saints.
- Durham, G. H. (1966, September). "A new look at physical fitness." Improvement Era.
- Ellsworth, H. S. (1978, February). Active mind, active body. Ensign.
- Exercise class helps mind and body. Church News, June 20, 1981.
- Fisher, A.G. (1983, February 20). Exercise your right to obtain blessings. Church News.
- Fisher, A.G. (1984, August). The weight loss battle: helping your body to win. Ensign.
- Fitness is key in missions. Church News, February 1, 1975.
- Grandma's in better shape. Church News, June 20, 1981.
- Hanks, M.D. (1958, December). For man is spirit." Improvement Era.
- How to develop exercise discipline. Church News, November 6, 1982.

Jacobson, P.C., & Vance, B. (1978, June). Fit is more than not fat.

Ensign.

Job 38:4-7.

McKay, D.O. (1952, April). The whole man. Improvement Era.

Miller Brewing Company (1983). Miller lite report on American attitudes toward sports.

Omaha folks stay on the move. Church News, June 20, 1981.

Personal and family preparedness. Welfare Services Handbook, Church of Jesus Christ of Latter-day Saints, 1980.

President's Council on Fitness and Sport (1974, April). National adult fitness survey. Physical Fitness Research Digest.

Richards, S.L. (1955). Where is Wisdom? Deseret Book Company.

Robison, C. (1972). Keeping physically fit. Ensign.

Smith, B.A. (1981, November). Good health--A key to joyous living.

Ensign.

Stay healthy: Welfare Services suggests how. Ensign, January 1981.

Summers, K. (1982, July). Notes from a jogging saint. Ensign.

Thornberry, O.T., & Golden, P. (1986, May). Health promotion and disease prevention: Provisional data from the National Health Interview Survey--United States, January-June 1985. Advance Data from Vital and Health Statistics of National Center Health Sciences, Hyattsville, MD.

Vriens, H. (1981, June). Home is where the hearty is. Ensign.

Widstoe, J.A. (1957). A Rational Theology, Deseret Book Company.

Zimmerman, S.S. (1981, February). Running away from it. Ensign.

Zirker, S. (1975, February). We didn't call it physical fitness.

Ensign.

APPENDIX A  
PANEL OF EXPERTS

1. Philip E. Allsen, Physical Education-Sports, 269 SFH, Brigham Young University.
2. A. Garth Fisher, Physical Education-Sports, 116 RB, Brigham Young University.
3. Elmo S. Roundy, Physical Education, 214 RB, Brigham Young University.

APPENDIX B  
QUESTIONNAIRE

1. What is your religious preference?
    - a. LDS
    - b. Catholic
    - c. Protestant
    - d. Other
    - e. None
  
  2. Do you consider yourself a regular church attender?  
 Yes\_\_\_\_\_ No\_\_\_\_\_
  
  3. Do you exercise regularly?  
 Yes\_\_\_\_\_ No\_\_\_\_\_
 

(If yes)

    - a. What kind of exercise do you do? \_\_\_\_\_
    - b. How often per week do you exercise?
      1. Three or more days per week\_\_\_\_\_
      2. Less than three days per week\_\_\_\_\_
  
  4. How many minutes do you usually exercise?
    - a. More than 15 continuous minutes without stopping
    - b. Less than 15 continuous minutes
  
  5. Has your church had any influence on your decision to exercise?  
 Yes\_\_\_\_\_ No\_\_\_\_\_
 

(If yes)

    - a. In what way?

(If no)

    - b. What or who influenced you?
- 
6. Are you aware of the LDS Church's sports program?  
 Yes\_\_\_\_\_ No\_\_\_\_\_
 

(If yes)

    - a. Have you ever participated in it?  
 Yes\_\_\_\_\_ No\_\_\_\_\_
    - b. Are you currently participating in it?  
 Yes\_\_\_\_\_ No\_\_\_\_\_
  
  7. Are you aware of the LDS Church's Physical Fitness Awards Program?  
 Yes\_\_\_\_\_ No\_\_\_\_\_
 

(If yes)

    - a. Have you ever received one?  
 Yes\_\_\_\_\_ No\_\_\_\_\_
    - b. Are you currently working for one?  
 Yes\_\_\_\_\_ No\_\_\_\_\_

8. Your age category:

18-24\_\_\_\_\_

25-34\_\_\_\_\_

35-44\_\_\_\_\_

45-54\_\_\_\_\_

55-64\_\_\_\_\_

65 & over\_\_\_\_\_

9. Gender:

Male\_\_\_\_\_

Female\_\_\_\_\_

APPENDIX C  
CHARACTERISTICS OF QUESTIONNAIRE RESPONDENTS BY CITY

<u>Gender</u>	<u>No.</u>	<u>18-24</u>	<u>25-34</u>	<u>35-44</u>	<u>45-54</u>	<u>55-64</u>	<u>65 &amp; over</u>
<u>LEHI</u>							
Male	5	1	0	0	1	2	1
Female	5	0	2	2	1	0	0
<u>AMERICAN FORK</u>							
Male	12	3	4	4	0	0	1
Female	12	1	4	4	1	2	0
<u>PLEASANT GROVE</u>							
Male	9	1	3	3	0	0	2
Female	9	0	4	1	2	1	1
<u>PROVO/OREM</u>							
Male	100	20	38	17	8	8	9
Female	98	22	24	13	10	12	17
<u>SPRINGVILLE</u>							
Male	11	1	0	2	2	5	1
Female	11	1	2	2	2	2	2
<u>SPANISH FORK</u>							
Male	11	1	2	3	2	0	3
Female	10	1	2	3	3	1	0
<u>PAYSON</u>							
Male	8	0	2	3	0	1	2
Female	8	0	4	1	0	2	1
Male(N=156)		27	49	32	13	16	19
Female(N=153)		25	42	26	19	20	21
Total(309)		52	91	58	32	36	40

APPENDIX D  
ACTIVITY BY AGE

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	<u>18-24</u>	<u>25-34</u>	<u>35-44</u>	<u>45-54</u>	<u>55-64</u>	<u>65 &amp; Over</u>	<u>Total</u>
Male							
Jogging	5	13	5	4	1	0	28
Walking	0	2	3	3	5	9	22
Cycling	3	2	2	1	0	2	10
Swimming	2	5	2	0	0	1	10
Team Sports	3	4	3	0	0	0	10
Weights	3	2	0	0	0	0	5
Racquetball	0	3	0	0	1	0	4
Calisthenics	0	1	1	0	2	0	4
Rowing	0	0	2	0	0	0	2
Tennis	0	2	0	0	0	0	2
Martial Arts	0	1	0	0	0	0	1
Aerobic Dance	1						1
Manual Labor (pushed lawn mowers)	0	1	0	0	0	0	1
Total Exercisers	17	36	18	8	9	12	100

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	<u>18-24</u>	<u>25-34</u>	<u>35-44</u>	<u>45-54</u>	<u>55-64</u>	<u>65 &amp; Over</u>	<u>Total</u>
Female							
Walking	5	7	8	9	10	9	48
Aerobic Dance	11	16	11	0	2	0	40
Cycling	2	2	3	2	4	0	13
Jogging	3	3	0	1	0	0	8
Swimming	3	1	0	0	0	0	4
Mini-Tramp	0	1	1	0	0	0	2
Racquetball	0	0	0	0	0	0	1
Isometrics	1	0	0	0	0	0	1
Dance	0	0	0	0	0	0	1
Calisthenics	0	1	0	0	0	0	1
Tennis	1	0	0	0	0	0	1
Weights	1	0	0	0	0	0	1
Total Exercisers	27	31	23	13	16	11	120

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ASSESSMENT OF INFLUENCE THAT THE CHURCH OF  
JESUS CHRIST OF LATTER-DAY SAINTS HAS ON  
EXERCISE HABITS OF ITS MEMBERS LIVING  
IN UTAH VALLEY

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Department of Physical Education-Sports

M.S. Degree, August 1987

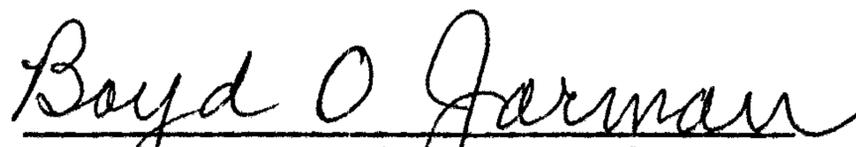
ABSTRACT

This study identified and analyzed the influence the Church of Jesus Christ of Latter-day Saints had on the decision of 309 respondents to exercise. The data obtained from the questionnaires were analyzed using chi-square to compare males and females. Within the limitations of this study, the following conclusions were justified: women were more influenced by the LDS Church to exercise than men; LDS males and females exercised more than average American adults; walking, jogging, and aerobic dance were the most popular choices of LDS exercisers; and, there is a need to improve the awareness of LDS members concerning the Physical Fitness Awards Program.

COMMITTEE APPROVAL

  
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