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THE SOCIAL WORLD OF ATHLETES: SOCIAL AND PSYCHOLOGICAL
DISTINGUISHABLE CHARACTERISTICS OF FOUR
COLLECTIVITIES OF ATHLETES

by

Ellen Jeanne Meyers

A Dissertation Submitted to the Faculty of the Graduate School
of Loyola University of Chicago in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy

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1987

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VITA

The author, Ellen Jeanne Meyers, is the daughter of Jeanne (Pahlke) Habenicht and the late George Carl Habenicht. She was born on July 1, 1949 in Blue Island, Illinois.

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CHAPTER I

INTRODUCTION: THE ROLE OF SPORTS IN MODERN SOCIETY

Leisure time has grown markedly in American society. This growth is one of the many factors in the long-term social development of humankind. Enjoyment, relaxation and "freedom of expression," however momentary, are known to all humans during their lives. In modern industrial society, which produces affluent classes with higher disposable incomes, sports participation is a prevalent choice for leisure activities. In fact, involvement in sports may rapidly be becoming part of the "American way of life."

The word "sport" is an abbreviation of "disport," which means "a diversion." Rooted in the Latin "desports," it literally means "carry away." As is evident today, millions of individuals from professional athletes to enthusiastic spectators are carried away from their everyday work worlds and reality to a world of enthusiasm, excitement, challenge, and "becoming," by participating in some forms of sports.

During the twentieth century, sports have become a cultural phenomenon of great magnitude and complexity. Kenyon and Loy (1969) note that sports are fast becoming a social institution, permeating education, economics, art, politics, law, mass communications and international diplomacy. They insist that their scope is awesome: that nearly everyone has become involved in some way, even if only vicariously. For example, Kenyon and Loy point out that as a business sports represent annual

penditures by the American public of over twenty billion dollars.

Sports, then, have become a potent social force with the capacity to create consumer demands ranging from seats in "sky boxes," to cycling shorts in pastel colors. The sports industry is growing and expanding its arena to include more types of activities and more individuals.

This arena has grown to include both corporate and private concerns. In the Chicago area alone, for example, Baxter Laboratories recently built a large sports facility so their employees can recreate during lunch hours and before and after work. Bell Laboratories also provides a running track, as does Culligan International. Schools invite parents to use sports facilities such as tracks, tennis courts, and swimming pools. Demands for "all weather" facilities represent significant capital and dollar expenditures on the part of the American public. Furthermore, American individuals, who tend to be "time expenditure" conscious, demand sports equipment for the home, e.g. video tapes, exercise music, home rowing and weight lifting machines. These things, which a few years ago were only available in well-equipped gyms, are now available for home markets.

In addition, the demand for sports equipment has affected both quality and price. There are \$150 running shoes with cushion insoles and balanced platforms, so the runner need not worry about twisting an ankle, \$350 dollar cross country skis so light the skier can hardly detect them underfoot, anatomically designed bicycle seats especially suited to male or female bone structure costing \$60 or more. Foam-fitted downhill ski boots can cost well over \$400. Scuba equipment, for a "premium cost" of several hundred dollars, now allows the diver to regulate the pressure at

which the air within the tank enters his mouth. Golf clubs with graphite shafts allow golfers to hit balls greater distances, now selling for over \$200 dollars. Boron tennis racquets are available for almost \$500 dollars each, without strings. Sports are indeed big business!

Sports continue to maintain their presence as a social force through the mass media. Spectator sports and associated advertising are a multi-million dollar business. Sports magazines allow the public to keep informed regarding equipment break-throughs, as well as sporting techniques. Most bookstores have sports sections. And television devotes much of its programming to sporting events. There are cable television stations devoted solely to sports.

Statement of the Problem

People participate in different sports for different reasons including individual preferences. In the past, social scientists have differentiated persons participating in different athletic activities on the basis of socioeconomic factors. I propose, however, that different athletic collectivities have different social-psychological characteristics which may not be directly related to socioeconomic characteristics alone. If, in fact, there are unique social-psychological factors present in different athletic collectivities, then these may better characterize the athletic collectivities than the more traditionally used socioeconomic characteristics.

This study examines the social world of four kinds of athletes: downhill skiers, cross country skiers, runners, and bicyclists. I attempt to distinguish between and characterize these four athletic collectivities. In addition to socioeconomic characteristics, I

consider: extent of athletic participation, the athletes' perceptions of athletic collectivity cohesiveness, and the self-concept (especially the self-esteem) of the individual athletes. More specifically, I will attempt to determine whether and to what extent social-psychological variables may be utilized to distinguish between athletic collectivities. The four athletic collectivities which were chosen for study with a good deal of consideration as to similarities and differences between sports. Since sports activities are by nature different from one another, I chose cross country skiing, downhill skiing, cycling, and running because these sports were some of the most popular American individual sports (as opposed to "team sports"). All of the chosen sports are land sports which have competitions at high levels (allowing participants to excel as much as they choose or are able to do by virtue of their individual abilities). All sports are activities which appeal to women and men, as well as children, although all assume a certain amount of physical fitness on the part of the participant.

It is assumed that participants spend time and money on participation and equipment, and these costs vary from sport to sport (downhill skiing equipment is more expensive than running equipment). Sports also require different types of commitment in order to participate in them. For example, a downhill skier must plan to go skiing if he needs to travel a relatively long distance in order to do so. A runner, by comparison, needs only to "open his door." Bicycling may be enjoyed for an afternoon, skiing for a day or a week, and running for a much shorter duration of time -- perhaps only minutes. There was much attention to the similarities and differences between sports selected for

study in this research.

The reasons for my doing this are reflected in the two basic premises of this study. These are (1) the role of sports in modern society; and (2) the effect of sports on individuals' self-concepts.

The Role of Sports in Society:
Primary Groups and the Needs of Individuals

Though sports have a variety of social, economic, and physiological functions in society, Cheek and Burch (1976, pp. 188-189) suggest that they (as well as other leisure activities) play two primary roles. First, they permit dramatic enactment of ordinary routines, and join individuals to a "larger social order." Durkheim's notion of mechanical versus organic solidarity may be relevant. Primary groups, according to Durkheim, are sources of nurturance and stability for individuals living within modern societies. Thus the cohesion within groups as well as their normative systems allow the individual members a framework of stability and security within which they may live and play. Durkheim proposed that individuals who reside within "traditional communities" shared similar values and beliefs, as well as similar tasks for living. Durkheim characterized this as "mechanical solidarity" based on likenesses of people and a sense of common identity. People are thus bound together by the fact that they act and think alike, follow similar life routines, and share a "common conscience." In simpler societies, the major sources of cohesiveness are the laws, sacred and secular, which consist of shared beliefs and practices. But with industrialization came a diversity of beliefs, ideas, values, norms and social positions, occupations, and experiences. The division of labor in a more complex

industrialized society involves high degrees of specialization. Durkheim characterizes the functionally interdependent bonds of modern industrial societies as "organic solidarity." As a result of such interdependence, people need participatory and solidarity groupings to survive (Denisoff and Wahrman, 1978). Athletic collectivity membership may reflect this need for participation in solidarity groupings in modern society.

Second, in industrial societies, sports provides a type of communication interpreted similarly among individuals who are otherwise dissimilar. Greg Stone (in Cheek and Burch, 1976) has argued that sports provides a "coin of communications" among people. Sports are an "expressive, socially acceptable outlet" for individuals within an industrialized society, allowing them to communicate on the basis of sports-related similarities. Thus, this research includes a treatment of sports as a vehicle for "collective celebration," communication and intracollectivity cohesiveness among athletes.

Sports and Individual Self-concept

The second premise of this research is that the individual's thoughts and attitudes toward himself and others are learned in a social environment, socialized by sources beyond himself, including others with whom he affiliates. Sports participation may be thought of as a socialization process within the social structure of sports collectivities. I treat the influence of a particular sport on an athlete, then, as a case of group socialization. Olmsted and Hare (1978) report that groups influence the individual's self-concept, as well as other perceptions and behaviors. Because groups are known to influence the way in which individuals think, act, and interpret their environment,

individuals' attitudes or interpretations of concepts vary according to group memberships (Wells and Marwell, 1976). Furthermore, the athletic reference group may also have a marked influence on the individual athlete's self-esteem since it is part of the self-concept.

An individual plays many roles and, according to Homans (1950), in each case the role-relevant group with its particular demands and feedback (sanctions) affects the self-concept. The social group influences the individual's self-concept and, subsequently, self-esteem (Snygg and Combs, 1949). In each role, the individual feels differently towards others associated with his particular role (Cooley, 1902).

Furthermore, according to Cheek and Burch (1976), the locale in which each particular role is played has special meaning to the individual. This locale may influence the group's identity, and subsequently the self-concepts of its members. Thus the individual who participates in a "rugged, outdoor" activity, for example, may come to think of himself as a "rugged, outdoor" individual. The person who participates in a controlled indoor activity (such as ballet) may learn to think of himself as "controlled" or "deliberate."

Olmsted and Hare (1978) state that, if an individual develops a particular self-concept from group membership, those who do not belong to or identify with the group may not exhibit the same type of self-concept. Therefore, if belonging to a collectivity of athletes with a unique "within-group self-image" affects a person's self-concept and influences his attitudes (especially those pertaining to activities of the collectivity -- such as attitudes toward pain and injuries resulting from athletic participation), those who do not identify themselves as that

type of athlete should lack similar characteristics. And, by sharing in the intracollectivity cohesion, the athlete becomes able to discriminate between those who are and are not members of the social organization.

For the individual, conformity to traditions or rituals by which she enters the group may also provide a sense of identity and security. These rituals may include the lessons or instructions by which the individual becomes a proficient member. Thus, lessons or instruction come into play in sports participation, both as a part of the "ritual" of collectivity membership, and as a mechanism for highlighting consciousness of differences between collectivity members and non-members. The dimensions of involvement in athletic collectivities are many.

Basic Scope of the Research

To summarize, this research will consider sports and sports participation as a function of the development of industrialized society with its bureaucratization, depersonalization, and individuals' need for social integration. C.H. Cooley's theory of "the looking glass self" notes the reflexive influence others have on individuals. In this research, then, I examine the extent to which sports participation influences the attitudes and behavior of individual participants, particularly those concerning the self.

In order to better understand the interplay between the individual and the athletic collectivity, this study focuses on the social-psychological characteristics associated with athletic participation. I will attempt to determine which traits are most clearly associated with a particular athletic collectivity, and how best to distinguish between the

athletic collectivities on the basis of my primary variables.

To understand the similarities and dissimilarities of athletic collectivities, I initially focus on the generalized characteristics of each of four selected athletic collectivities. A questionnaire given to over 1700 runners, cyclists, cross country skiers, and downhill skiers provides the data. The questionnaire covers socioeconomic and demographic characteristics, the views the athlete has of other athletes, collectivity cohesion, the views the athlete maintains of her sport, the attitudes which the athlete holds toward pain and injuries as a result of participation in her sport, her level of participation, and the view the athlete maintains of herself as an individual (self-concept and self-esteem). The questionnaire also deals with how the individual perceives herself and her lifestyle as a result of athletic participation.

I contrast the four athletic collectivities and explore the differences between them. Then I will test specific hypotheses, about the interrelationship between sports participation and the individual for each athletic collectivity. Finally, I attempt to determine which, if any, factors distinguish the different athletic collectivities from one another.

CHAPTER II

REVIEW OF THE LITERATURE: THE EVOLUTION OF PERSPECTIVES ON SPORTS

The scope of this study involves a wide body of literature. First, I will discuss the historical development and the expansion of interest in sports and sports participation. Then I will address how sports constitute a legitimate academic interest by examining the empirical treatment of sports by the social sciences and macro- and microsocial perspectives of the role of sports in society.

The Nature and Development of Sports: A Historical Perspective

Sports originated in the practice of skills essential to human survival and can be traced to early history. Martial training, accompanied by man's desire to excel with or dominate others, evolved into gaming. This gaming, in turn, spread into other activities to ensure many kinds of good fortune within tribes. For example, the Mexican Zuni tribe played games to magically bring rain to their arid fields (Games of the North American Indians, 1970). Makah Indians played a primitive type of hockey just prior to whaling season, using whalebone for balls and bats. And a hill tribe in Asam, India, arranged regular tug-of-war games to expel demons (Guttman, 1978).

The association of games with religious themes was also evident in ancient Greece. From the beginning of the classical period, games were

thought to aid in accelerating growth, reviving nature, and honoring the gods. For example, the Greeks centered the Olympic Games at the temple of Zeus at Olympia and played in his honor. The Pythian Games were closely linked to the oracle of Apollo and his shrine at Delphi. Viewed today, these "rites" appear as a primitive sort of athletic activity.

Modern athletics and sports evolved from these early rites, training sessions, and primitive magical faiths. After athletes forgot the original utilitarian purposes for these activities, they played them for their own sake. Such events included hunting, fishing, rowing, sailing, hiking, and other similar activities.

The Technological Development of Sports in American Society

Technological advancements and scientific discoveries spurred the evolution and popularity of sports in America and still have a significant impact on their role. The development of American sports parallels the country's large-scale industrialization and industrial growth, and resultant urbanization and mass communication.

Before the Civil War, the American population was primarily agrarian and widely dispersed, and most recreation was centered in the family and closely related to the tasks of subsistence. Transportation was tedious, time-consuming, and crude. Group athletic activities had little opportunity to commence.

After 1850, the development of modern sports commenced. By this time, industrialization began to revolutionize economic institutions, and the lifestyles of American people. The demand for guns and ammunition for the Civil War expanded industry in the United States. The number of

U.S. businesses grew from 140,000 in 1860 to 500,000 in 1900. As people increasingly sought work from these businesses, towns and cities became more densely populated. The reduction of the work week afforded the urban working classes blocks of leisure for perhaps the first time.

Urban areas were not, however, immediately conducive for the development of sports. The unplanned growth of cities crowded immigrants and native-born Americans alike. Workers had to leave the home to earn meager wages in factories. Discontinuity between this new urban culture and the traditional values and mores of rural life occurred. For urban workers, this was a time of hard work, and "play" was considered appropriate only for children. At first, recreation took the form of sports only for those of means, especially for males.

Sociocultural discontinuity contributed to crime and especially juvenile delinquency. Widespread public concern about these social problems helped to create social agencies to organize leisure time activities for adults and juveniles. Recreational activities were organized through factory work groups, and modern team and neighborhood sports were promoted by industry and society-at-large (Edwards, 1973).

The "competitive ideal" of the American culture added to this promotion of sports. Continued influx of workers increased athletic talent for athletic competition between enlarged factories. A premium placed on winning, caused the number of persons who athletically represented various factories to drop. The remainder were left as spectators, promoting the development of this role in sports.

Industrialization further promoted involvement in sports by providing less expensive, standardized manufacturing of athletic

equipment and so more access to it. Early athletic equipment, for the most part, had been handmade, relatively expensive, and so had to be provided by the companies for the workers. Further inventions helped the sports industry grow by providing lighting for after work hours sports events, rubber for balls and other sporting equipment, and pneumatic bicycle tires (Edwards, 1973).

While technological advancements and industrialization in the nineteenth century affected the recreational habits of Americans, social scientists of the nineteenth and early twentieth centuries showed concern for the conditions of social life and patterns of changes they thought eminent. They further directed empirical analyses toward sports and games.

Sports as a Subject of the Social Sciences

Social scientists, as well as physical educators, have examined the nature and function of sports, athletics, and games through empirical techniques. This literature goes beyond merely treating physical activity, and considers psychological, sociological, and social connotations. The term "games" largely preceded the now widely used terms "sports." International academic interest in games began as early as the beginning of the twentieth century, where it took two forms. Weber and Simmel studied games as social phenomena in themselves. Piaget studied games as child development mechanisms.

Max Weber thought of games as primary social processes and used feudal society to exemplify this notion. The feudal system, according to Weber, incorporated the game as an important means of training that inculcated primary abilities and qualities of character. Games were not

merely a pastime, but rather a natural medium through which the physical and psychological capabilities of the human organism became alive and supple (Gerth and Mills, 1958).

In 1917, Simmel saw play and games as a part of a "world of sociability:" an artificial world in which "social games" have a double sense of the game being played in society (as its external medium), and with the help of "games in which people play society" (Wolff 1950, p. 87).

The concept of games holds a prominent position in socialization theory. Jean Piaget studied the "play" and games of children to develop general theories of human development. Piaget used perceptions of rules of games as indices of change in the developmental process of the child. Such perceptions range from a vague set of sporadically observed guides, to highly sacred entities still sporadically observed, and finally to a clearly understood mechanism for aiding the collectivity of mankind in accomplishing its goals. Thus, for Piaget, the game was a vehicle for moving from fixed roles to conventions (Piaget, et al., 1965). George Herbert Mead also proposed that play and games are a medium for development of the self-concept. In a game, the child has to organize roles; otherwise she cannot play. The game thus becomes the essential vehicle in the child's understanding the reciprocity of roles in the family as well as in larger society. The child passes from taking the roles of particular others in play to taking the generalized other so essential to the self-consciousness of the adult (Dushkin, 1977). Finally, for Erving Goffman, the game becomes a "situated activity system" or a "focused gathering" and is a part of his study of human

interaction (Goffman 1961, p. 27).

Macrosocial and Microsocial Theoretical Perspectives
of Sports and Athletic Participation

Sociologists consider social organization at two major levels: the macro and micro. Macrosocial perspectives consider the large social patterns which give order to an entire society. In the case of sports, a macrosocial perspective considers how sports and sports participation fit into a modern, bureaucratic society. By contrast, microsocial perspectives focus primarily on patterned interactions between individuals. Thus a microsocial perspective might consider sports by looking at individual sports participants. Such a treatment of sports might consider topics such as the nature of the self, the nature of social interaction, and an explanation of sports participation through theoretical schemes such as exchange theory.

The Nature and Development of Sports:
A Macrosocial Perspective

The growth of sports participation may be examined in a number of ways within a macrosocial perspective. The expansion of the center of society, or the masses, as a result of industrialization allows "common people" access to formerly "elite" activities. The larger middle and working classes have more leisure time which they can devote to such recreational activities as sports. Industrial society lacks mechanical solidarity. Athletic participation allows the individual a sense of identity and feelings of cohesion among the larger collectivity of sports participants. Of course, individual choices and sports participation are dependent on the individual "life chances." Life chances of the

individual are necessary, but not sufficient for selection of a given sports activity. If an individual comes from a relatively affluent family background, s/he would be more likely to ski, sail, or ride horses, as compared with an individual from an impoverished background, who may be more likely to play baseball, basketball, or seek activities enjoyed by others in this immediate locale. The lifestyle of the individual and his values may influence his choices of sports.

In his "Center-Periphery" theory, Shils was concerned with the expansion of the middle classes. According to Shils, one of the most striking changes in modern societies is the increase in the power and authority of the center over its periphery and the simultaneous increase in the power and authority of the periphery over the center. This diminishes the distance between center and periphery (Shils, 1981). Traditionally, only nobility had resources, time, and social approval for participation in sports activities. In the United States, the middle classes are considerably larger in size and more powerful than those of traditional societies. In a traditional society, Shils noted decided differences between the elite class and the masses. In American society, however, there exists an "expansion of the middle classes." "Common citizens," therefore, have the time, resources, and the support of society-in-general to participate in sports.

This participation may result in an increase of shared values and small-group cohesion. According to Shils (1957), values are critical independent variables in accounting for the differences within the diverse urban social structures throughout the world. In industrial urban climates, the number of truly shared values is few. Sports and

athletics may provide a vehicle for the development of shared values among participants in the same sports. Furthermore, Shils and Janowitz (1984), in a study of the German army in World War II, demonstrated that the key to cohesion was intimate ties of affection and trust cultivated in small groups of soldiers who fought together. Those groups of individuals who worked, took risks, and sometimes lived together experienced the strongest cohesion. Their interpersonal feelings demonstrated "primary group" strength. In the case of athletes, those individuals who work towards a single goal of becoming proficient in a sport may feel solidarity therefrom. Even though the risk of athletic injury does not compare well with the risk of death during war, athletics allow the individual to "push to the outer limits" of his or her abilities. The athlete may see himself as a part of a collectivity who take risks together. Some collectivities of athletes even live together for periods of time, such as destination-sport athletes (downhill skiers, and at times, cross country skiers and cyclists).

The concept of "solidarity" in society, and the need for primary groups was of major interest to Emile Durkheim. He noted that in simple, traditional societies, people generally did the same things for a living. They shared the same beliefs, attitudes and the same experiences and behavior. He called these common bonds "mechanical solidarity." Such people were bound together by the fact that they had a "collective conscience" (Durkheim 1933, pp. 130-131).

With the growth of industrialization and increased division of labor, workers experienced job specialization. People performed different jobs and therefore needed each other to survive just as an

organism needs each of its different parts to survive. Durkheim believed that even though a society was complex, it was tied together by "organic solidarity," the reciprocal needs of peoples. "Organic solidarity," however, could not entirely replace "mechanical solidarity," as both were essential to provide adequate support for the individual in modern, industrial society (Denisoff and Wahrman, 1979).

In keeping with this concern for the cohesion of industrial society, Durkheim studied individuals' needs for solidarity. His theory stressed the importance of intermediary groups and solidarity. We may apply his concerns for solidarity to sports participation and see athletic collectivities as one type of intermediary grouping. Athletic collectivity membership may offer the individual cohesion in contrast to the differentiated world of work typical of the "organic society". That is, he may feel commonalities and solidarity with those who share his collectivity membership. The sports participant thus may feel he belongs with the larger contingency of other athletes and receive support and stability in his otherwise differentiated existence. This may be in the form of collectivity solidarity or cohesiveness within the athletic collectivity and shared ideas and values.

Durkheim describes such a phenomenon in his Division of Labor in Society. His concept of the "subculture of each group or organization" (Durkheim 1933, p. 14) asserts that culture is a phenomenon not only of the larger society, but of its subgroups and the interactions of human beings. Furthermore, he describes social solidarity as the degree to which members of a group share a common definition of the situation. We may view sports collectivities as having their own culture and offering a

source of social solidarity for individuals in industrial society.

Weber stated that bureaucracy is one chief means of creating and maintaining authority and, at the same time, one of the major forces which disrupts integration. The individual who lives within the bureaucratic society becomes a "depersonalized cog" within the bureaucratic organization. Sport participation normally provides a position wherein the individual may perform a role separate from his bureaucratic status and have occasion to affiliate with the other athletes, giving him the benefits of athletic collectivity membership.

Eisenstadt's analysis of the development of bureaucratic organizations looks at their influence on societies. He states that, in bureaucratic societies, there develops extensive differentiation between major types of roles and institutional (economic, political, religious, etc.) spheres. Functionally-specific groups evolve, such as that of an athletic or sports organization. (Coser and Rosenberg, 1982)

Today, members of the society request and receive information about government, economics, politics, religion, education, and other concerns, on rather sophisticated, explicit levels. Mass communication has become a socializing agent depicting desirable norms, values, and lifestyles for individuals. The needs of the individuals can be influenced by imagery, which may influence patterned, normative behavior. For example, in advertisements of cereals, if a housewife sees T.V. housewife selling health-oriented cereal while sporting a tennis outfit, the ordinary housewife may mentally translate this T.V. representation as positive support for tennis, and perhaps for exercise in general. Many forms of media today seem to support the "healthy" appeal -- identification with

which is enhanced by sports participation.

Microsocial Theoretical Perspectives of Sports and Athletic Participation

The Individual Athlete in Social Context

Several theorists concerned themselves with the reciprocal exchange of rewards and punishments in an interactive context known as "exchange theory." Homans (1961) notes that, when a person acts, he is rewarded or punished by another. Thus we may say that when an individual participates in a given sports activity, the society or his social circle will respond positively or negatively. This reaction may tend to direct his participation to one sport rather than another.

Blau (1964) thinks that most human pleasures have their roots in social life. Whether the individual thinks of love, power, or the challenge of competitive sports, his gratifications are contingent on actions of others. He states that some social associations are intrinsically rewarding, but others only because of the benefits derived. Thus, while some athletes find sports participation rewarding "just because they enjoy participating," others may derive such benefits as support from others and the camaraderie of "belonging" in the social network of the sport. For the individual, sports participation may be more than physical gratification and the desire for better health.

Ralph Turner (1976) points out that self-conceptions can be compared on the basis of the person's locus of his/her "true self," in institutional roles or personal qualities.. Given the status of the individual in industrial, bureaucratic society, we may view athletic

participation as a vehicle for the individual to be recognized as dependent on, but separate from the bureaucratic system. The athletic participant is economically dependent on industrial society to enable his participation in sports, yet separate from the bureaucratic system due to his own identity as an athletic participant. The relationship between the self and the social order is apparent when the institutionalized self is distinguished from the personal self which is "freer" and more dependent on intrinsic qualities.

While society is becoming highly bureaucratic and routinized, there are cultural values seen in athletic activities. Thus, in the case of the athlete, if the institutionalized goals of a society include notions of good health, benefits of exercise, and relief from stress, and the society sees athletics as contributing to these goals, then the individual who participates in a given sport may be seen as adhering to and even augmenting society's goals.

According to Merton (in Lindesmith, Strauss, and Denzin, 1975), an individual functions within a role-set, which is based on social arrangements integrating the expectations of those in the role-set. Thus, the individual plays many roles, each of which receives expectations from surrounding "significant others," as well as costs and rewards for the individual. In the case of the "athletic role," the individual's role set contains not only the athlete role, but significant others who impose expectations, costs, and rewards associated with sports participation.

Taking the concept of role one step further, Lopata (1980) states that an understanding of social roles depends on understanding a complex

system within the social circle. For individuals, social roles are generally imbedded within "interdependent sets" (pp. vii-ix) of social roles. Changes in a given social role may result in changes in others. Changes in the role of the "skier," for example, may influence or be influenced by changes in any of the roles within the individual's cluster of social roles.

Newcomb, Turner, and Converse (1965) also note that role-taking (as in the case of the athlete) shifts emphasis away from the simple process of enacting a prescribed role to devising a performance on the basis of an imputed role. The actor is not the occupant of a position having a neat set of rules. He is, in the terms of Lindesmith, Strauss, and Denzin (1975), a person who acts in the perspective supplied in part by his relationship to others (whose reactions reflect roles which he must identify).

Sports Participation and the Self-Concept of the Individual

The self-concept of the individual athlete may be considered with respect to the collectivity influences of sports participation. In order to realize the full extent to which sports and athletics interrelate with the self-concept, I will first briefly examine the literature which addresses such issues as (1) reasons for the athlete's extent of participation, (2) collectivity cohesiveness, (3) training and instruction and how these affect collectivity boundaries, (4) perceptions of pain and injuries as a result of sports participation, (5) leisure locale, and (6) self-concept and self-esteem of the individual. These factors seem to be especially relevant to athletic participation, as represented in available literature.

Level of Participation and Commitment

The questions as to why and to what extent an individual pursues a given sports activity can be examined in terms of benefits of collectivity membership for the individual athlete. McDavid and Harari (1968) have defined "lifestyle" as the constellation of values, norms, statuses, roles, attitudes, and opinions that are internalized and enacted by individuals. The patterned regularities manifested by individuals while engaging in behaviors generate and create interaction between the individual and surrounding social structure, and these affect the individual's self-concept. McDavid and Harari essentially argue that rapid social change has fragmented the kinship/friendship and work components within the industrial society. Thus the characteristics of mobility and urbanization in this industrial society have increased the challenges to the "traditional lifestyles," while providing individuals with a wider choice of lifestyles.

Athletic participation, like any other activity, can be seen from the prospect of exchange theory, i.e. producing rewards as well as costs for its participants. George Homans (1961) proposed his theory of elementary social behavior to explain face-to-face social interchanges between two persons. This theory, however, has general implications which are often applied to groups and organizations. Homans asserts that if an interaction yields satisfying outcomes, it will be repeated; and if it yields unsatisfying outcomes, it will be discontinued. He further argues that if an interaction is satisfying, it yields a profit for that individual. If it is unsatisfying for that individual, it results in a

psychological loss (Shaw and Costanzo, 1970). The individual, or athlete in this case, desires to maximize profits and minimize losses. If participation in a given sport yields a profit for the athlete, he will tend to remain a participant. Conversely, if participation results in a new loss for the individual, the athlete would be more likely to discontinue it.

Homans further states that when an individual has invested time and energy in a given activity, there exists a strong feeling that he should be rewarded to some degree. In the case of the sports participant, the person who devotes himself whole heartedly to the sport should be rewarded for this effort, even when ranked as average in terms of ability and performance (Homans, 1950). Persons of unequal ability in sports may perceive the same sport to be of equal importance to them. Those who participate more frequently may tend to have more invested in their participation efforts, thus making the respective activity more important to them. As mentioned earlier, Homans considers rewards as both personal- and group-oriented. Personal rewards are those experienced directly by the individual. Group rewards are those rewards which are provided by the group for the given individual and which afford that individual personal gratifications and higher levels of self-esteem. Thus the idea of "costs and benefits" for the individual member of a sports collectivity is recognized as having influence on the attitudinal structure (and perhaps behavioral structure) of that individual.

Olmsted and Hare (1978, pp. 65-81) report that the extent to which the individual participates in a group is positively associated with the effect the group has on that individual's attitudes and behavior. They

further state that it is easier to change individuals that are part of groups than to change an individual in isolation. The group tends to impose on its individual members "normative values, behavioral, and attitudinal structures," and it does so in an "efficient" manner to the extent the individual participates in the group.

We can view a more complete picture of the effect of sports participation on the individual if we include the concepts of status and prestige in our analysis. Lewin (1935) stressed the function of group-given status as influencing the totality of individual prestige and status. Lewin saw the group as a means to an end for individual members. The social position acquired through membership may be one of the primary vehicles for an individual's further achievement (Martindale, 1960). For athletes, the sports collectivity may be viewed as such a means to an end. For Durkheim, one of the means of maintained social solidarity was the collective ritual. Solidarity was enhanced through ritual. Therefore, membership in sports perhaps allows the individual "equality" in the sense of performances comparable to those of higher and lower economic groups (Olmsted and Hare, 1978).

Lower-income persons (for example blacks), may not feel inferior in athletics since "athletic prestige" is not necessarily based on income, education, occupation, sex, or age. Some sports, such as tennis, were originally considered elite activities. Athletes such as Arthur Ash, who are members of ethnic or racial minorities, have gained prestige as athletes in traditionally elite sports activities. This permits an individual, within the recognized social order of larger society, an equivalence among those who would otherwise not be socially equal. (In

the example of a lower-class youth who becomes a football hero -- the individual's social status as an athlete may be seen as relatively higher than the disadvantaged background lower status from which he came. His social status would be enhanced due to his ability to participate at a high level in football.)

While an individual athlete finds status within his/her own collectivity, the collectivity finds status within larger society. This may explain why differing sports have different "social value." For example, cross country skiing has been a part of Northern European athletics for many centuries. In fact, the oldest known set of skis are over 2000 years old! Yet in the United States, cross country skiing is thought to be a relatively new form of entertainment and exercise. Because of the uncertainty of its position in society, many individuals are not sure of its value or even how the sport is performed. As cross country skiing becomes more visible in our society, it will most likely be tried by more people. (This was the case with sports like soccer and field hockey, for example.)

Other sports take on different identifications. The sport of bicycling may be thought of as a common activity since many individuals participate, especially children. Other sports, such as polo, may be thought of as elitist or costly. Some sports, like bowling, have traditionally been thought of as working-class. Rock climbing and backpacking are generally perceived as rugged activities for those who are physically fit and able. While power boating has been identified with beer drinking and fishing, sailing is thought to be technically more difficult.

Collectivity Cohesiveness

Lewin (1935) first introduced and defined the technical term "cohesiveness." He describes cohesion as all those forces which attract members to remain in the group. The greater the cohesiveness of the group, the clearer the definition of its boundaries, and the sharper the distinction between members and nonmembers. There is greater resistance to threats of disorganization in cohesive groups. Lewin notes that the greater the difficulty in entry to a group, the greater the value attached to belonging to it, and the greater the adherence to its norms (Lewin, 1951). If it is relatively more difficult to learn to become a skier (as compared to becoming a runner), according to Lewin one may tend to find more cohesiveness within the collectivity of skiers than runners.

Festinger, Schacter, and Back (1950, p.132.) restated this definition to "those forces which act on members to remain in a group." The dimensions contributing to cohesiveness include the attraction of individual members to one another, the attraction of individual members to the activities of the group, and the extent to which the individual is attracted to the group as a means of satisfying his own personal needs.

McDavid and Harari (1968) note a circular relationship between group cohesiveness, group performance, and group morale. As the group becomes more cohesive, group performance increases, which leads to higher levels of group cohesiveness. Caron and Chelladurai (1981) have provided a summary of their studies of cohesiveness in group sports. Briefly, they found that cohesiveness and performance are highly related in athletic collectivities. Highly cohesive sports collectivities also tend to elicit high levels of individual satisfaction with group membership.

Conformity is also a correlate of group membership. That is, the higher the level of group cohesiveness, the more influence the group has on the individual to conform to group standards.

Olmsted and Hare (1959) note that cohesive groups tend to be relatively friendlier, in general, than groups which are not. There is a uniformity of behavior and attitudes among cohesive groups. Thus if skiers, for example, are within a cohesive skiers' collectivity or social organization, they should exhibit such characteristics as internalizing collectivity norms, having feelings of "belonging," or sharing similarities with collectivity members.

According to Fisher (1976, pp. 41-44), an exchange theorist, group cohesiveness depends on benefits and costs: Whether or not an individual becomes and remains a group member depends on the balance between positive and negative reinforcement. For Fisher, "incentive properties" refers to the group's goals, programs, style of operation, prestige, and the characteristics of its members. "The motivational base for attraction" consists of the individual's needs (affiliation, recognition, approval, security) that the group can gratify. Furthermore, the "expectancy" that group membership will be either beneficial or detrimental is significant to the group's attractiveness. All potential members come to the group with past experiences, and the "comparison level" indicates probable outcomes of group membership. Thus, if seen as a potential reward and therefore a positive attraction to the group, cohesiveness is a cause as well as an effect of individual attachment to a group.

Training and Instruction

Training and instructions are often crucial aspects of sports participation. Loy (1968) notes that to become a part of a sports organization, the individual athlete must conform to some of the ritual and training that enables him to become a participant in a chosen sport. Training and instructions should create identities so that those who have trained should tend to become a given type of athlete, as compared with those who have not. Through training, instructions, and imitation, the athlete may tend to embrace particular types of attitudes and actions. For Bandura (1971), people tend to model their behavior after role models. It may very well be that people who take athletic lessons/coaching see their teacher/coach as a suitable role model.

The resulting definition of a particular type of athlete gives rise to particular role expectations and subsequent collectivity boundaries as expressed by we versus they identities of athletes versus non-athletes. Groups which exhibit such boundaries tend to be cohesive (Lewin, 1941). Furthermore, since cohesive groups with well-defined boundaries are difficult to enter, there is greater value attached to belonging to them, and greater adherence to their norms (McDavid and Harari, 1968). The degree of training, then, affects the cohesiveness of the collectivity and the value the individual athlete attaches to his belonging to it. And this training and ritual tends to influence the lifestyles of the individuals (Loy, 1968).

Training may also be a source of status for athletes. Homans argues that sources which make up an individual's status in the social organization include the kinds of rewards he receives and activities he

emits. In the case of the trained athlete, performing a particular sport affords him a higher status vis a vis others who recognize his specialized skill. From this, the athlete reflexively absorbs this higher prestige into his self-concept. For example, both downhill and cross country skiing generally involve more formal instruction and/or training and experience to reach proficiency, as compared with many other sports (including running and bicycling). The general public may therefore see downhill and cross country skiers as performing an activity which untrained persons cannot. Thus, according to Homans, these activities receive higher status and recognition as compared with other respective sports. Individual downhill and cross country skiers may then internalize this relatively higher status, and one byproduct may be higher levels of individual self-esteem. Thus training and instructions are related to role expectations and collectivity boundaries, as well as lifestyle of the individual sports participant.

In different sports there are different amounts of instruction or lessons involved in becoming "marginally proficient," that is, becoming able to perform the sport at an elementary level. Downhill skiing requires proportionately more lessons than the other sports for the athlete to become proficient enough to actually perform the sport. Cross country skiing is akin to "running or walking on skis," and although balancing weight of the body over the skis takes some practice, it is at least initially easier to learn than downhill skiing. Bicycling can be learned in a relatively short period of time. Again some balancing is requisite, but most can learn that in a short period of time. Running involves a natural gait, and runners do not need instruction to perform

at rudimentary levels. However, it must be pointed out that, in order for an athlete to achieve maximum proficiency in any of these sports, i.e. performing at an "olympic level" requires much training and/or coaching.

Perceptions of Pain and Injuries

The concept of pain and injuries and their relationship to sports participation is an interesting one. Since sports are governed by a set of expectations placed on the respective athlete by the athletic collectivity the individual will see himself as "obligated" to conform to the collectivity's norms (McDavid and Harari, 1968). If acceptance of pain and possible injury is considered the norm within an athletic collectivity, then the attitudes of athletes within that collectivity should reflect that position: pain and injuries are an acceptable part of sports participation.

The popular literature exhibits diverse attitudes toward pain in each sport. Michael Brady (1982, p. 117), a cross country competitor, stresses that "pain is your body's warning signal that something is wrong, and you should never ignore those signals. Strain, on the other hand, is something else again; that's part of the challenge of doing." Brady explains that in any high level physical sport, both physical and mental strain is involved. While strain can exhilarate, pain is detrimental.

Jim Fixx (1977), on the other hand, asserted that pain is a normal part of running. He stated that it is possible to run without pain, but that pain always accompanies attempts at improvement. The severity of pain in running, according to Fixx, depends on the intensity of the

mind-body struggle. That is, when progressive improvement causes pain, the mind tells the body to "push on," in spite of the pain it experiences. Fixx attributed this willingness to accept pain by runners to the intimate "kinship" between pleasure and pain.¹

Horst Abraham (1983) also asserts that pain is a normal part of the challenge of downhill skiing. Downhill skiing involves an element of risk, threat, and challenge. He reminds the reader that Americans like to participate in or watch activities which push the body to what might be considered its "upper limits." Accepting danger and surviving seems to be a foremost reason for the popularity of downhill skiing. He calls attention to "skiing the steep" (p. 18) and proposes that this "learning experience" (p. 22) has challenge for the individual, possibly becoming obsessive. Thus, pain in downhill skiing is related to the meeting of challenges and extension of skills to "upper limits." It therefore has a positive aura about it.

In contrast, bicycling books and articles speak of pain and injuries negatively, in relation to malfunctions of bicycles and poorly fitting equipment. Tim Wilhelm (1980, p. 79) writes, "Efficiency and comfort are good reasons for properly fitting your bike, but even more important is the prevention of actual injury." Wilhelm states that many injuries and pains can be traced to improper adjustment of various

¹This statement may give an insight to the source of pain acceptance for runners. Richard Stiller (1975) has called attention to the pain-pleasure relationship. He states that because pain and pleasure are seen as opposites, we see confusion when trying to discern between the two. He calls attention to the fact that individuals tend to describe pleasure as being so intense that it is "unbearable." There have been statements made about "exquisite pain." Thus agony and ecstasy are seen as a continuum; one exists only in relationship to the other.

components, thus interfering with the bicycle and the body working as a unit. There are few mentions of pain in bicycle journals and books.

Pain tolerance and athletic participation are interrelated. That is, the individual who is capable of withstanding pain may choose a different sport than someone not so capable (Ryan and Kovacic, 1975). Furthermore, those who participate in a sports collectivity tend to accept the collectivity's normative views toward the pain and injuries inherent in the sport's performance (Balant, 1972). Thus, we would expect individual athletes to differ from each other regarding their views of sports pain and injury according to their respective collectivity membership.

Leisure Locale

Cheek and Burch (1976) add the dimension of "leisure locale" to the influences on the social organization of the group, and consequently to the identity (including self-concept) of the individual. They note that throughout an individual's lifetime, behaviors are separated by designated spaces (e.g., people do not bathe, eat, or rest in the same place). The location where the sport can be performed (i.e., the spatial or physical environment) may influence the collectivity's identity and the identity of the individual members. Since many downhill skiers "go away to ski," that is, they ski at destination ski areas for week-ends or weeks at a time, there is more to downhill skiing than the physical act of skiing. Downhill skiing, for many, involves travelling, renting rooms, eating in restaurants, and living in the atmosphere of the "ski area." By contrast, cross country skiers are more likely to travel relatively shorter distances for "a day of skiing." They perhaps stop at

a warming hut on the ski trails where they enjoy their packed lunch. At the end of the trail, and the day, cross country skiers return to their homes. For cyclists and runners, the extension of the respective sport beyond the actual activity is almost non-existent. Cyclists are very likely to cycle away from home at the beginning of the day, and return home at the end of the day. Bicycle racks which fit automobile roofs allow some cyclists to transport their bicycles away from home to cycle in "new areas." Most cyclists in the United States tend to return home at the end of a day of cycling. Runners are very likely to open their door, and go for "a run." While some runners will enjoy running in different settings while travelling for other reasons, very few runners travel to run in different surroundings. The "leisure locale" for the four sports of downhill skiing, cross country skiing, cycling, and running imply different individual experiences and efforts on the part of the athlete.

The Self-concept and Self-esteem of the Individual

A positive attitude towards the self (self-esteem) is the result of many influences. Sports participation is influential in forming parts of the whole self-concept of the individual athlete, including self-esteem. Both Cooley's (1902) and Mead's (1934) theories are fundamental in any examination of the concept of the self. Each wrote of identification processes, or the way in which a person takes on values, beliefs, and actions of other persons. In the case of the athlete, these

identification processes are key issues in the development of the individual as an athlete.

Briefly, Cooley's theory of the "looking glass self" provides us with the notion that we see ourselves as others see us. Basically, the self-concept is composed of three elements: our imagination of how we appear to others; our imagination of others' judgments of that appearance; and finally, a "me" feeling, such as pride. The self-concept, and thus self-esteem, is formed through relationships with other people. In the case of the athlete, this self-esteem may be related to athletic participation, as well as a result of his other roles.

For Mead, emergence of the social self is a three-step process involving the preparatory, the play, and the game stages. In the preparatory stage, the child does not take other people into consideration, and does not fully understand the meanings of the actions he invokes. In the play stage, the actual playing of a role occurs. The child learns that particular roles have certain meanings and that meanings and roles exist in relation to one another. In the game stage, the child takes on a series of roles of different "others" considering a series of such general roles simultaneously. Thus, Mead speaks of a more abstract position -- that is the "generalized other," which is an objective, organized and more universal perspective of the self. Probably it is difficult for the very young child to play true athlete roles, since this role can only be experienced by those who have reached a stage in life where they can both play a series of roles and take into consideration several roles simultaneously. Both Cooley and Mead describe the individual's self-concept in terms of how others see him.

In other words, the individual tends to shift self-concepts according to the changes in others' attitudes.

Rosenberg and Abelson (1960) discuss "self-esteem" within the context of self-concept motives. Self-esteem here signifies a positive or negative orientation towards the self. Positive self-esteem, then, represents a feeling of self-respect whereby the individual considers himself a person of worth (as opposed to harbouring feelings of arrogance, conceit, or contempt for others). Rosenberg and Abelson further feel that maintenance or enhancement of the self are central to motivation. If the athlete, for example, is rewarded by his collectivity for either performance or endurance, perhaps his self-concept will include this internalization and motivate him to maintain this self-enhancement.

Participation in high school athletics has been shown to greatly enhance males' and (somewhat) females' thoughts about themselves. Males tended to attribute a higher positive self-image benefits to athletic participation, as compared with females (Douctre, Harris, and Watson, 1983). In children's sports, children were tested for strength of self-esteem and perceptions of academic ability, athletic performance, and socioeconomic status. It was found that perceptions of athletic and academic abilities affected self-esteem, but not the reverse. Moreover, when performances were publicly verifiable, there was greater likelihood that the perceptions of the performance affected self-esteem, rather than vice versa (Bohrnstedt and Felson, 1983). Trujillo (1983) found that, in college women, body image affected self-esteem, so that increased fitness can contribute to an improvement in self-concept. These studies support

the notion that sports participation can lead to more positive self-concepts among participants.

Summary

I suggest that by understanding differences in (1) cohesiveness, (2) training and instruction, (3) participation and level of commitment, (4) costs and benefits of pain and injuries, and (5) self-esteem and the self-concept, we may comprehend the interrelation of the self-concept of the individual collectivity (athletic) members, and the effects of the membership on the collectivity member. All of these considerations will be examined through the use of the questionnaire data in this research.

CHAPTER III

SOCIAL-PSYCHOLOGICAL ASPECTS OF SPORTS PARTICIPATION

The hypotheses in this research explore the aforementioned topics of cohesiveness within the collectivity, the impact of the collectivity on the individual athlete in terms of attitudes and values, and the effect the athletic collectivity has on individual self-esteem. The hypotheses are examined through analyses of questionnaire data from downhill skiers, runners, bicyclists, and cross country skiers. These hypotheses will be tested in all four athletic collectivities. An effort will be made to determine the strength and applicability of each hypothesis for each athletic collectivity, in order to compare and contrast athletic collectivities according to the dimensions of the hypotheses.

Hypothesis 1

Parsons (1951) notes that elements of a shared symbolic system which serve as criteria or standards for selection among alternatives of orientation may be called "values." Such values provide the basis from which one may distinguish between "like me" and "not like me" types of people. Furthermore, according to Cheek and Burch (1976, p. 94), the experiences of "collective celebration" and "ritual" are socialization mechanisms which teach individuals appropriate behavior for sports participation.

If instructions delineate collectivity members from non-members, those athletes with more instructions in their sport may experience higher levels of within-collectivity cohesiveness than those athletes who have had less. Therefore:

1. The level of cohesion within a particular athletic collectivity correlates positively with the extent of training and instruction in the sport.

Hypothesis 2

Homans suggests that, the more often an individual's activity is rewarded within a given period of time, as in the case of the athletic collectivity rewarding an athlete for performance, the more frequently the individual will engage in the activity (Shaw and Costanzo, 1970). Furthermore, Aronfreed (cited in McDavid and Harari 1968, pp. 112-14) suggests that "induction techniques" of socialization consist heavily of the bestowal of reward (social approval), by a given group for desirable behavior. To the extent that an individual receives rewards or social approval, he develops awareness of the social group's values and attitudes and realizes similarities among members based on and extended by these group-presented value structures. In other words, the potential for reward increases with participation, and individuals increasingly perceive commonalities with other group members as rewards increase. Therefore:

2. Cohesion positively correlates with level of participation.

Hypothesis 3 and Hypothesis 4

According to Blau (1964), the cost incurred in obtaining social benefits from a given activity affect the significance of that activity for the given individual. For the athlete, risking pain and injury in order to participate in a sport may enhance the personal "meaningfulness" of that participation, as well as provide benefits in terms of his lifestyle. Conversely, highly valued and in-demand rewards must be obtained with greater effort. The athlete who feels his participation in a given sport is personally important to himself as an individual, and/or to his lifestyle, may then participate despite or even as a result of awareness of its inherent dangers or "costs". Therefore:

3. Athletes, despite recognizing the possibility of resulting pain and injury, will tend to continue athletic participation according to the extent they perceive positive personal rewards from that participation.

And:

4. Athletes, despite recognizing the possibility of resulting pain and injury, will tend to continue athletic participation according to the extent they perceive positive effects on their lifestyles from that participation.

Hypothesis 5

According to Cheek and Burch (1976), individuals learn or are "conditioned" to see, think, and act via social transactions. As a result, members of social groups share similar definitions of the situation and patterns of common behavior. The major variable which distinguishes individuals in a social group from other conspecifics may be affective arousal associated with the recognition of each other.

These affective states are not idiosyncratic but are social in character; moreover, they are products of particular transactions sustained initially among small numbers of conspecifics. Therefore, matters of taste and patterns of ordinary occurrences are substantially learned as an aspect of social bonding among members of the social group. Matters of taste and observations of normality enable individuals to perceive the special nature of the affective ties of those with whom they are bonded.

Such is the case of the athlete within the specific athletic collectivity. The individual who participates most frequently in the given activity will most likely have the greatest opportunity to absorb the normative values of the social group, or, in this case, those of the specific athletic collectivity. Attitudes toward pain and injury are learned through athletic collectivity participation and the individual participant's assimilation of the athletic collectivity's shared definitions. Therefore:

5. Athletes will accept the pain attitudes of their athletic collectivity to the degree they participate in the given activity of that collectivity. Level of participation is, therefore, positively correlated with the individual's acceptance of pain and injury.

Hypothesis 6 and Hypothesis 7

Ralph Turner (1976) notes that self-conception defines a person in qualitative and locational terms, not merely in evaluative ones such as self-esteem. The self is an object in relation to other objects, all of which are constantly modified in dynamic interrelationship. Self-conception, according to Turner, refers to the continuity of an

individual's experience of himself through a variety of situations. In the case of the individual athlete, his participation contributes to the continuity of his experiences, which in turn modifies his self-concept.

Williams (1970, p. 37) states that, in sports participation, some element of involvement must be taken into account when considering the impact of informational inputs upon the sports participant. The notion of "relative centrality" refers to the significance of sports activities in relation to one's interests, life concerns, and outcomes. As relative centrality decreases, overt behavioral responses to the value demands and the impacting consequences of sports likewise decrease (ultimately diminishing to zero as in the case of one who was unaware of a given sport). If however, relative centrality of sports increases, then the individual's interests, life concerns, and outcomes are likewise increasingly affected by his sports involvement.

Olmsted and Hare (1978, p. 80) report that the extent to which an individual participates in a group is positively associated with the effect the group has on his attitudes and behavior. Thus, in the case of the athletic collectivity, the collectivity tends to impose on its members the "normative value, behavioural (sic.), and attitudinal structures" of that collectivity, in an "efficient" manner to the extent that the individual participates. Therefore:

6. The effect athletes perceive that their sport has on their lifestyles positively correlates with level of participation.

And:

7. The effect athletes perceive their sport has on themselves positively correlates with level of participation.

correlates with level of participation.

Hypothesis 8

Edwards (1973) states that amateur sports participation, for most, produces no material benefits for the participants. However, there is no shortage of willing participants, since well over two million amateur athletes annually risk pain and injury for nominal or no financial remuneration. Some athletes may enjoy sports as an end in itself: They enjoy the activity for its own sake. Some may see sports participation as a means to non-economic ends such as health benefits. In both cases, the athlete derives benefit from participation in the given sport.

Ausubel (1965) noted that repeated encounters with learning materials and experiences (as in the case of regular sports participation) increase the degree of learning retention. Consequently, this learning becomes more meaningful to the individual learner. Such meaningfulness may be interpreted as a kind of enjoyment or positive feelings about participation.

Thorndike (1935) referred to a person's tendency to respond to a designated stimulus as a "bond." Thorndike saw stimulus-response connections as being strengthened by practice and positive consequences as weakened by disuse. He argued that the positive consequences or satisfying state-of-mind which accompanied a given response were strengthened by repetition of a given activity. Thus, according to Thorndike's thinking, increased participation in a sports activity should tend to strengthen the "bond;" i.e. positive consequences would occur as a result of participation. Therefore:

8. Athletes' enjoyment of a given sport positively correlates with their level of participation in that sport.

Hypothesis 9

Edwards (1973) notes that sports demand meticulous preparations on the part of the participant since it may have a substantial impact on the outcome of the sporting event. The athlete may seek self-discovery as he or she utilizes personal resources within the rules governing participation to efficiently defeat the opposition, or improve his position within the sport collectivity. If an athlete is "prepared" and performs well in an athletic endeavor, then he or she is successful to the extent that he or she and the surrounding public see these efforts as successful. This allows individuals a range of successful performances, according to individual capabilities and efforts. Since success is, by definition, a positive attribute in our society, the success one achieves through athletic achievement may bolster self-opinion, and promote higher levels of self-esteem.

Rogers (1967) postulates a basic though learned need for "positive regard" -- that is, desire for warmth, liking, respect, sympathy, and acceptance from others -- and "positive self-regard," which is related to or dependent upon such positive regard from others. (Positive self-regard for Rogers, is synonymous with self-esteem.) Sports participation may provide the individual athlete with the opportunity to gain positive self-esteem by eliciting the positive regard of others.

Sherwood (1969) indicates that the aspirations and goals which one sets for oneself actually are derived from a "referent public" (reference groups). In other words, groups yield goals which the individual may

aspire to reach. Again, the self-concept is seen with reference to a "totality of roles" within which the individual lives, and not just a single role which the individual plays at a given time. Therefore, if an individual is praised by a reference group for athletic participation, she may deem this participation valuable. If the referent public gives a framework from which the individual sets goals and these goals are met, the individual may have a higher opinion of herself. Athletic participation is one way in which the individual may meet the referent public's goals, allowing positive regarding for herself.

The more frequently the individual has the opportunity to participate in a given athletic activity, the more frequently he or she experiences these potential benefits. Thus, with increased levels of participation in a given athletic activity, we may find increased opportunities for the individual to bolster his or her self-opinion, and possibly enhance the self-image of that individual. Therefore:

9. There is a positive correlation between level of participation in a given activity and level of the participant's self-esteem.

Summary

I suggest that the cohesion of participants in a particular sport, extent of participation, level of commitment, and self-esteem may differ from one collectivity of athletes to another. Furthermore, the correlations between these variables should provide a better understanding of each athletic collectivity, and provide "social-psychological profiles" of each collectivity. These profiles may be unique for each collectivity, or some collectivities may exhibit some

similarities. Tests of these hypotheses should allow a characterization of the collectivities' similarities and differences on key aspects.

CHAPTER IV

PROBLEMS AND PROSPECTS IN EXAMINING SPORTS PARTICIPATION

This study analyzes the relationship between athletic collectivity membership and individual identity. I will determine the presence and extent of an identity resulting from sports participation and its subsequent effect on the self-concept of the respective athletes. It is prudent to remember that the participants are self-selected and that the samples of athletes are not random. Therefore, the findings must be interpreted with caution. I make no effort to draw inferences from these findings to the larger society in general.

Methods of Data Collection and Analysis

General Overview

I collected the data by means of questionnaires administered in person between February 15 and June 15, 1983, from a total of 1702 athletes (798 downhill skiers, 525 cross country skiers, 260 runners, and 112 bicyclists). I collected the downhill and cross country skier data between February 15 and April 15, and the runners and cyclists data between April 15 and June 15.

Prior to actual data collection, I asked the permission of appropriate individuals (heads of ski areas, chairpersons of events) to distribute questionnaires to the athletes. At no time was I denied such permission.

I approached all the athletes and asked for a few minutes of their

time to fill out a questionnaire on skiing, running, or cycling. I explained that I was a doctoral student at Loyola University, studying athletes and athletic behavior. I assured the athletes that their answers were completely confidential and would in no way be identified as individual responses. I gave the respondents pencils to use and remained nearby at all times, so that I could answer any questions. I wore clothing appropriate for each sport during the gathering of the data. I was friendly and responded to the comments and questions of the athletes. I collected completed questionnaires from approximately 93% of all the persons I asked to participate.²

I also kept a log of field notes, which I use as supplementary materials in this research. I talked with athletes in all locations, in an effort to better understand their perspectives of how participation in their sport affected their identities and/or lifestyle. I spent as much time as each individual athlete would give me, which ranged from only five minutes to over one hour. I asked them how they felt about their sport, what was its primary benefit, its major disadvantage, and how participation had affected themselves and their lifestyles. Some spoke about specific instances and gave me insight into their thoughts and feelings. Others spoke in generalities. I made notes during and after each conversation, recording age, sex, and any other notable characteristics. These interviews allowed much insight in interpreting the data.

²The remaining 7% included those questionnaires not returned, and those returned "incomplete."

Subjects

I sampled all the athletes in their leisure locales, that is, "on site" at their respective sporting areas. Because it is reasonably difficult to access large numbers of recreational athletes from the population, I selected respondents either at large sporting areas (ski resorts), or at registrations for organized, mainly non-competitive, events. I thus made no attempt to "randomize" sampling in any way. That is, I sampled only those athletes at a specific place during a specific time period. Furthermore, I did not choose respondents systematically, but rather selected those in my immediate vicinity at the time. And I did not select any professional athletes (athletes who are paid for various services, such as instructors). Finally, all respondents were at least sixteen years of age.

Downhill Skiers

I administered the downhill skier questionnaire on the mountain at ski areas. The sample includes skiers from three ski areas in Colorado ski areas and five in the Midwest (Michigan, Wisconsin, and Minnesota). I administered the questionnaire during lunchtime while the skiers were on the mountains, as opposed to being at lodges, restaurants, and shops nearby.³ The 798 respondents were selected out of an estimated total of 10,000 potential respondents on the mountain at the time of data collection.

³This eliminates the possibility of having people who do not actually ski respond to questionnaires and interviews, influencing data responses.

Runners

I define "runners" as those who run (or jog) for pleasure or recreation, or as a personally selected activity. This therefore excludes athletes "in training," who jog as a part of another sports program.

I selected the sample of runners at two "fun run" events. One such event was the "Turkey Trot" in Aurora, Illinois. This was a five-mile, untimed run, but it was noted which individuals finished the entire course. There was a \$3.00 registration fee for this event. I also selected runners from "Al's Run," a seven-kilometer event in Milwaukee, Wisconsin. It was a timed race, but all who finished received pins. There was a \$5.00 fee for this event. Both events appealed to recreational joggers and organizers emphasized that charities would benefit. Though they included some highly competitive runners among the participants, the majority were recreational. This eliminated the exclusively long-distance runners from the sample. I selected 130 runners from each event, for a total of 260. This was from a total of 4000.

Bicyclists

I define a "bicyclist" as one who considers bicycling an activity, or sport, for recreation. I asked cyclists at two cycling events in the Midwest to fill out questionnaires just prior to the events. These were non-competitive rides for individual enjoyment and which benefitted charities. In both cases, there was a \$5.00 registration fee. One event was the "Lakefront Ride-a-thon" in Chicago, sponsored by the Lake Shore

Wheelmen, a local cycling club. The other event was also a club-sponsored event, and benefitted "National Heart Week." (There were also talks given on the cardiovascular benefits of cycling.) No times were recorded at these events, although monitors accounted for all riders at the end of each. I approached 112 cyclists out of a total of 350 participants at these events.

Cross country skiers

I sampled cross country skiers at the Birkebeiner, in Cable, Wisconsin, which is the largest amateur cross country ski event in the United States. The main event was a fifty-five kilometer race, but participants also had the option of skiing thirty kilometers. There were over 7000 entrants from all over the U.S., but primarily from the Midwestern states. The "Birkie," as participants called it, was a race, but non-competing participants were welcomed. Advertisements for this event appealed to recreational skiers. All cross country skiers were made to feel welcome and "worthy" of participation. All who completed the event received pins, and the last person to finish, as well as the first, received trophies. There was a \$25.00 registration fee for this race.

During registration, I selected 525 cross country skiers who were registering or accompanying a registrant.

The Instrument

I utilized an eight-paged questionnaire to gather data (see

Appendix)⁴. These were printed and collated by a professional printing agency. The questionnaire had three formats. Since all but a few questions applied to each sport, the wording differed only slightly on each set of questionnaires to accommodate terminology appropriate for skiers (both downhill and cross country), runners, and cyclists. I created most of the questionnaire items, with two exceptions: For the attitudinal variables I relied on Coopersmith (1976),⁵ and for the semantic differential items I relied on Sherwood (1965).⁶ I pretested all other attitudinal items, in an effort to determine whether potential respondents could understand them.

The Data Analysis

After the data collection process, I transferred the questionnaire information to optical scanning sheets by hand. These sheets were scanned and the data transferred to computer cards at the Computer Center of Loyola University, Water Tower Campus. The data were then recorded on computer files in my name.⁷

⁴The questionnaire contained some questions not used in this analysis.

⁵Coopersmith studied fifth and sixth grade children. I modified his study slightly to include the words "sports" and "athlete" where appropriate. I included twenty-three of these items were on the questionnaire. They appear as statements to which the respondent could respond with a "strongly agree," "agree," "disagree," or "strongly disagree" response.

⁶I derived these items from Sherwood's Inventory of the Self-Concept test. The items are two-tailed tests of opposites, between which the participant rates himself on a one-to-seven scale. I utilized Sherwood's original format.

⁷When I checked the data after scanning, I found that the scanning device caused 20 percent to 30 percent errors. All optical scanning sheets were scanned a second time, and the data again transferred to

I determined, at this point, that a few questions presented analytical problems. The question which asked respondents to list in order of importance the three sports they felt most important posed a problem since many people responded with the question "Other than <skiing>?" and no additional response. For this reason, I eliminated the item from data analysis.

There were similar problems encountered with the question asking what are the respondent's most important roles. Fewer than 35 percent answered this question (less than 20 percent in the case of runners). I therefore eliminated this item from the data analysis.

When I asked how much money the skiers spent on transportation, lodging, equipment and lift/trail tickets, less than half of the respondents provided responses for three of the four fixed responses. I therefore eliminated this item from data analysis as well.

Respondents answered the question regarding occupations only about 10% of the time. Because occupation is very often related to education and income, I used these variables instead.

Analysis of the Variables

I constructed one large data set from the data. I analyzed it with Loyola University's IBM 3033S computer, and SPSS-X. Initially, in an

computer cards, and recorded on computer files in my name. Again, I found the scanning device responsible for about 20 percent to 30 percent errors in the data. Because of the size of the data set, I determined that it would take too long to clean the data of the approximately 25 percent errors. I therefore hired a private company, who scanned the data for a fee. Afterward, I determined that the data contained less than 1 percent errors. Nonetheless, I checked the data carefully for errors, and cleaned it.

effort to organize and simplify data analysis and explain interactions between variables, I examined the semantic differential and attitudinal variables through factor analysis, and derived new "composite variables" (factors). Second, I obtained frequency counts from the data, examining the mean scores and standard deviations. Third, I performed bivariate analyses via crosstabulations. I thus obtained the "between-collectivity" analysis. This centered on the comparison of primary variables, and the strength of correlation of socioeconomic variables with regard to these primary variables. Fourth, analysis of variance of primary variables helped to determine the extent of variation of the variables between the collectivities, as compared to within each collectivity.⁸ (See Chapter V.)

Next, I examined variables in light of the hypotheses (see Chapter V). Careful scrutiny of the variables and correlations between them provided insight into the applicability of the hypotheses for each athletic collectivity. These tests of correlations and strength of relationships (Kendall's Tau, Eta, and Chi-square) allowed me to determine the differences in primary variable correlations in the case of all athletes as a whole compared to each athletic collectivity.⁹ At times I "broke down," or reduced, factors to the initial variables from which they were obtained in an effort to better describe true

⁸In other words, in the case of a given variable, I tried to determine if there was greater variance between groups than within groups. If so, then perhaps the groups are significantly different from each other in terms of that variable.

⁹Socioeconomic variables were used as control variables, and bivariate analyses of primary variables were obtained for each athletic collectivity. No substantial differences were found, controlling for socioeconomic characteristics.

correlations between variables, and to further study the athletic collectivities in terms of the hypotheses.

Finally, I examined the different sets of variables to determine what characteristics of each athletic collectivity allowed them to be best distinguished from one another. Since there are four athletic collectivities, I selected discriminant analysis rather than regression to best accomplish this.¹⁰ (See Chapter VI.)

A discriminant analysis and its resulting canonical correlations allows me to distinguish between the four sets of data based on analysis of the variables, and predict how each individual can best be assigned to his correct athletic collectivity on the basis of these variables. Since discriminant analysis tells what percentage would be classified correctly using the variables in the equation, it also lends insight as to the applicability of the questionnaire in studying athletes and their collectivity differences. If it demonstrates that certain sets of questions allow fairly accurate classification of athletes into athletic collectivities, then we may consider the questionnaire a valuable instrument in studying such collectivities. The last portion of the data analysis is of this nature.

¹⁰The discriminant function is a regression equation with a dependent variable that represents group membership. In short, if there are four groups of the dependent variable (athletic groups), the discriminant function gives the "best" prediction, according to "least squares," for correct group membership of each athlete in the entire sample. These predictions are based on the scores from at least two measures. The higher R^2 , the better the prediction for group membership. When dealing with only two groups, the discriminant function is no more than a multiple regression equation with the discriminating variable treated as nominal-level, coded "0, 1", representing group membership. With three or more groups, the discriminant analysis surpasses regression, since it can handle more than two groups simultaneously.

Description of the Variables

The relationship between "being an athletic participant" and the identity one gains through socialization by that participation is multidimensional, and can best be understood by comparing athletic collectivity membership with several correlates. How I treat each variable depends on the analysis I perform. When testing hypotheses through bivariate analyses, I treat collectivity membership as a control variable. The relevant social-psychological variables I treat as independent and dependent variables, as the particular hypothesis dictates (see Table 1, below). When I perform discriminant analysis, collectivity membership becomes the dependent variable, while the social-psychological and socioeconomic/demographic characteristics I treat as independent variables.

TABLE 1

The Disposition of the Variables in the Hypotheses

Hypothesis #	Dependent Variable	Independent Variable
1	Cohesion	Instructions
2	Cohesion	Participation
3	Pain Attitudes	Perceived Effects of Sport on Self
4	Pain Attitudes	Perceived Effects of Sport on Lifestyle
5	Pain Attitudes	Participation
6	Perceived Effects of Sport on Lifestyle	Participation
7	Perceived Effects of Sport on Self	Participation
8	Enjoyment of Sport	Participation
9	Self-esteem	Participation

Athletic Collectivity Membership

Downhill skiing, cross country skiing, running, and bicycling are

similar in several respects. First, all are largely individual as opposed to team sports. Second, although it is not necessarily the case for all participants, high-level competitions are held in each (such as the Olympics). Sports which have high-level potentials may be viewed as "serious" endeavors. The high level competitor may be viewed with admiration, allowing individuals role models. Role models allow individual participants input as to their own performance. Third, amateur competitions in each sport are available and encouraged. Older individuals who will never be "high-level" athletes are invited into the sport to compete at their own level. Some sports (such as polo or ski jumping) are either "high-level" or "no level" (no participation) sports. In other words, in some sports, only those who are able to participate at relatively "high levels" of proficiency are included or able to participate. Data in this research are gathered from amateur athletes. Fourth, each caters to both sexes, as well as a wide range of ages. Some sports, such as football, attract primarily male or female participants. A focus on such types of sports would tend to skew the data. Fifth, the level of proficiency needed to perform at a minimal level in each is such that even beginners can do so. Some sports, such as cliff diving or hang gliding assume a level of proficiency which is initially quite high. The four sports chosen have a rather wide range of proficiencies which are acceptable and at which the participant can enjoy the activity. Sixth all are land speed sports, that is, they are performed on land with the intention of gaining a given amount of speed. Water sports may not appeal to some due to fear of water. (This fear is not uncommon.) This and similar problems in sport selection led me to choose only land

sports.

There are several differences between the activities, however. These variations are seasonal dimensions, time allocations, availability of locations, length of time to learn proficiency, leisure locales, and cost factors. These differences could result in variations in the attitudes of the athletes toward the activity. They are therefore also characteristics which may affect collectivity cohesion and other collectivity characteristics.

Seasonal Dimensions

Runners can, potentially, participate in their sport 365 days per year. Although in inclement weather (such as cold, rain, and fog), running can be hazardous, it is possible for one to run indoors at a prepared track, or in a large room (such as a gymnasium). Running indoors requires access to indoor space, and it does not compare aesthetically with outdoor running.

Bicyclists in relatively snow and ice-free climates can enjoy their sport year-round; but in cold, slippery weather bicycling can be hazardous. It is ideally performed in dry weather. The fact that bicyclists can ride locally, however, gives them many opportunities to ride.

While it is feasible that an individual could run 365 days a year, it is very unlikely that a downhill skier could ski 365 days a year. Since downhill skiing requires depths of snow (generally one to five feet) evenly distributed over hilly to mountainous terrain, it is the most limiting in terms of seasonal access of the four sports. Cross

country skiing is less limiting because it requires relatively less snow (two inches to one foot minimum), and less incline in terrain.

We would expect to find that downhill skiers participate least days annually, as compared with runners, who most likely participate most days annually. However, since downhill skiers participate in skiing in "concentrated" amounts of time, the relatively fewer days annually of participation may provide a memorable experience which permeates their thoughts and attitudes regarding skiing and participation in skiing. In fact, the extent to which the athlete in any of these given activities participates out of all possible annual days of participation, may be a better indicator of the impact participation has on the given athlete, as compared with only "annual days of participation."

Time Allocation

While an individual may ski or bicycle for an entire day, one would not likely run for so long. Downhill skiers generally ski for an entire day at a time. Often, they vacation at destination ski resorts for a week-end, a week, or longer. Cross country skiers can ski for an entire day, but often ski for only an hour or a few hours at a time. Since cross country skiing is generally more easily accessible than downhill skiing, fewer cross country skiers go to resorts to ski. Bicyclists can enjoy their sport for an entire day, but many ride for an hour to several hours at a given time. Most American cyclists do not vacation for a week or more for the sole purpose of cycling. Runners generally run for short periods of time, when compared with time they spend participating in other sports. Because running is an intense, strenuous activity, runners

generally participate only for minutes up to one or two hours at a time.

In summary, downhill skiers tend to participate in their sport fewer days annually, but more hours per day, than cross country skiers, cyclists, and runners. Runners tend to participate more days annually but fewer hours per day than downhill skiers, cross country skiers, and cyclists. Both cross country skiers and cyclists take intermediate positions between downhill skiers and runners. That is, they spend more hours per day than runners, but fewer days annually, and more days annually than downhill skiers, but fewer hours daily. I learned through interviews with the athletes that downhill skiers ski a mean of 5.5 hours per day, cross country skiers average 2.4 hours per day, cyclists 1.2 hours a day, and runners .45 hours per day.

Olmsted and Hare (1978) noted that the extent to which one participates in a group is positively associated with the effect that group has on the individual's attitudes and behavior. Therefore, if runners participate with other runners most days per year, or if downhill skiers participate more hours per day in a give time span, their "sports reference group" may exert a stronger influence on their attitudes and we would expect that these groupings would exhibit such attitude and/or characteristics as skier cohesion, skier's acceptance of pain as part of skiing, runner's views that pain and pleasure are intermixed, and runner's attitudes that running will make them healthier.

Length of Time in Learning

The formality of lessons or training must be considered in

comparative sports.¹¹ While the manner in which one learns a sport varies greatly, one can generally classify it as "informal training" such as teaching by friends, family, or "formal training" such as teaching by coaches or by taking lessons.

Running is a natural gait, but the physical act may be improved in terms of safety, efficiency of movement, and speed through instructions. Cycling, cross country skiing, and downhill skiing are not natural activities, and therefore, must be learned. While a beginner may learn any of these activities in a few hours, downhill skiing, perhaps requires the most time to reach an intermediate level of proficiency. Cross country skiing requires less time, and cycling even less to reach a proficient level. Therefore, since time involved in participating in a given activity as well as effort (planning) and preparation (as in the case of the downhill skier who needs to make reservations and arrangements in order to ski) tend to demarcate between "me" and "not me" views of athletes, we may expect to find greater levels of cohesiveness in downhill skier groupings and runners as compared with other athletic groupings in this research. Since running is likely to be enjoyed most frequently of all four sports, we would expect to find that those who could not run would tend to feel that their lifestyles and they (themselves) would be affected by not being able to run.

¹¹In a pretest of questionnaires, I found that the term "lessons" caused much questioning, and even some resistance, among cyclists and runners. Downhill and cross country skiers related to the concept of "lessons" quite well. The term "lessons" was thought inappropriate for bicycling and running. For this reason, I consider "who helped the runner, cyclist, downhill skier, and cross country skier" learn to perform the respective sport, as well as experience with lessons in the cases of both downhill skiers and cross country skiers.

Leisure Locale and Ambience

There are decided differences between locations of sports participation and the ambience relative to these locations.

Since many downhill skiers ski at destination ski areas for weekends or weeks at a time, there is more involved with the sport than the physical act of skiing. Downhill skiing, for many, involves travelling, renting rooms (condominiums), eating in restaurants, and living in the atmosphere of the ski area for a period of time. Furthermore, many ski areas offer diversions other than restaurants and hotels. Skiers wander through ski shops which provide much more than necessities for skiing. In these shops, one may find clothing for skiing and for off the ski slopes. There are shops which sell t-shirts, candies, mementos, and even perhaps furs -- creating an escape from everyday living.

Individual downhill skiers tend to come together with the common interest of skiing in mind. Downhill skiers meet others in bars or slopeside cafes after skiing. The sport, then, extends well into the evening, non-skiing, hours. Even at "day only" ski areas, which have no slopeside accommodations, there are generally shops, bars, and restaurants. The ambience of skiing is very much a part of the sport, and for many a major attraction.

Some cross country ski resorts parallel those found in downhill skiing. People may travel to a ski area where mechanical devices have set cross country ski racks. But these are far fewer in number and smaller in size when compared with downhill ski resorts, since cross

country skiing is a daytime endeavor for most. Skiers arrive, ski, and return home that evening. A "warming hut" may provide a warm refuge from the winter cold during the lunch break. It may even have a small shop to purchase lunch and/or necessities for skiing. But in many cases, there is no warming hut. The ambience associated with cross country skiing, then, springs primarily from the daytime trip along the trails.

For cyclists and runners, there is almost no extension of the sport beyond the actual activity. The United States has no cycling and running resorts. There are, however, clinics or workshops occasionally at hotels, universities, and clubs.

Cyclists begin their activity from home, and then return at the end of the afternoon or day. Occasionally, a cyclist or collectivity of cyclists "tours." They ride from place to place touring on their bicycles, making a "vacation on wheels." Most cyclists, however, bicycle for a portion of a day at a time. Runners use trails, streets, tracks, inside gymnasiums, and generally run for relatively short periods of time. If they gather at a health club after running, they generally do so for relatively short periods of time. This cannot compare with the ambience of the downhill ski area. In summary, there is much ambience stemming from the ski area, or leisure locale, of downhill skiing. While there is some ambience involved in cross country skiing, there is relatively less, or almost none, involved in cycling and running. Therefore, we may expect to find higher levels of grouping cohesiveness in downhill skiers, as compared with runners, and intermediary levels of cohesiveness in cross country skiers and cyclists. We may also find that the lifestyle of the downhill skier would be affected greatly in the

skier were unable to ski, since downhill skiing most likely occupies planned vacation time (away from home) for most downhill skiers.

Cost Factors

Cost factors for participation in the four sports may vary considerably. Downhill skiing, for example, requires expensive equipment for participation, as compared with running, which requires perhaps only the purchase of a pair of running shoes. For most participants, the costs of bicycling and cross country ski equipment would probably fall somewhere between those of downhill skiing and running equipment. We would expect to find relatively more affluence in the grouping of downhill skiers as compared with other athletic collectivities. Since costs involved in participation may have something to do with commitment to the activity on the part of the athlete, those who invest more money in "their sport" may also tend to feel more "a part of the grouping," and therefore would exhibit higher levels of group cohesiveness, and perhaps even a greater degree of acceptance to grouping values such as pain attitudes of the "greater collectivity."

The Social-Psychological Variables

"Athletic identity" will be defined as how the individual sees himself. Several considerations in terms of "athletic identity" will be examined (See Table 2, below.)

Cohesiveness of collectivity, as mentioned before, has been defined

as "the result of all forces acting on all the members to remain in a group" (Cartwright and Zander 1960, p. 74). I therefore will consider cohesiveness of collectivity in terms of the "we-feelings" or within-collectivity support and attitudes, including feelings of similarity with others.

TABLE 2

List of the Social-Psychological Variables

=====

Athletic Identity and Participation:
 Perceived Cohesiveness of Collectivity
 Views of Pain and Injuries
 Level of Participation and Commitment

Self-concept:
 Self-esteem
 Locus of Control
 Self-confidence

=====

Views of pain and injuries refers to the individual's acceptance of the collectivity's attitudes toward pain. These include the view of injuries as a probability in sports participation, the relation of pain to effort in sports performance, and electing to stop participation in a sports activity due to fear of possible serious injury.

I will consider level of commitment in terms of extent of participation in the respective sport, the extent to which the sport permeates leisure time, and the importance of the sport to the respective individual. I explore assessment of the hypothetical impact that not participating in the sport would have on the individual and his lifestyle. I will also consider experience with instructions or lessons as a measure of commitment.

As stated before, microsocial theorists generally view "self-

concept" as the reflexivity of the individual's perception of others' perceptions of him. I will consider positive attitudes (self-esteem, self-confidence) of the individual's self-appraisal of his competence and individuality. I will also use feelings of "being in control of one's direction and destiny" (locus of control) to describe self-concept. Finally, I will consider how the individual relates to other individuals (relations with others).

Factor Analyses

Factor analysis enables the grouping of variables into factors to facilitate data analysis.¹² The factored "composite variables" allow the analysis of data with fewer major variables, and also allow the relationships between variables to become clearer.

The variables I term "attitudinal variables" are those twenty-three questionnaire items which could be answered "strongly agree," "agree," "disagree," and "strongly disagree." When factored, seven "composite variables" (factors) resulted.¹³ (See Table 3, below.)

¹²Factor analysis of both the attitudinal variables and semantic differentials permitted statistically correct (which may not be "conceptually correct") grouping of variables into factors, or "composite variables."

¹³In all cases, I recoded "composite variables" so that the responses were equivalent in terms of "high" and "low" scores. For all "composite variables," component variables were added, and then divided by the number of variables in the respective "composite variable."

TABLE 3

Factor Analysis of the "Attitudinal Variables"

Self-esteem

1. I am able to do things as well as most other people. (.64971)
2. I feel I have a number of good qualities. (.71658)
3. I certainly feel useless at times.* (.47329)
4. I nearly always feel sure of myself even when people disagree with me. (.51343)

Luck

1. I seem to be the kind of person who has more bad luck than good.* (.66262)
2. There's not much use for me to plan ahead because there's usually something that makes me change my plans.* (.66563)
3. The average person is largely the master of his own fate. (.48409)
4. Most people have little influence over things that happen to them. (.62779)

Views of Pain and Injury

1. Pain is just "part of the game" in most sports. (.64284)
2. If you participate in skiing <appropriate sport> long enough, you're bound to get hurt. (.60373)
3. If you don't hurt some of the time in sports, you're just not trying hard enough. (.68842)
4. If I thought I could get hurt badly, I'd stop skiing <appropriate sport>. (.68918)

Self-acceptance

1. I often wish I were someone else.* (.50400)
2. There are lots of things about myself I would change if I could.* (.45280)
3. On the whole, I am satisfied with myself. (.54496)

Fate Control

1. I would rather decide things when they come up than always trying to plan ahead.*
2. I have always felt pretty sure that my life would work out the way I wanted it to.
3. I never have any trouble making up my mind about important decisions. (.37059)
4. I have always felt that I have more will power than most people. (.44049)
5. I feel <skiers> share a special feeling of "similarity" with all other <skiers.> (.67024)

Youth

1. I wish I were younger. (.49622)

*Reverse coded for factor analysis.
Commonality values appear in parentheses.

One important measure of self-concept I use later is "locus of control." I determine this characteristics by the factors "fate control" and "luck." Fate control measures the extent to which the respondent feels "in control" of his life and direction in life. This is different from feelings of "being lucky." Luck measures the respondent's feelings of "good fortune." This includes feelings of fate which are not directly controlled by the individual, or those beyond his control.

TABLE 4

Factor Analysis of "Semantic Differentials"

<u>Self-confidence</u>	<u>Relations with others</u>
1. self-confident (.52502)	1. tolerant of others (.48180)
2. value myself highly (.86638)	2. skillful with others (.61042)
3. competent (.67297)	3. democratic (.80244)
4. likeable (.79209)	4. friendly (.85207)
5. intelligent (.61101)	
6. independent (.52436)	<u>Participant</u>
7. individual (.87211)	1. participant (.69789)
	2. active (.72077)
<u>Competitive</u>	3. bold (.45834)
1. competitive (.79795)	4. talkative (.51018)
2. aggressive (.48897)	

Commonality values appear in parentheses.

I factored the semantic differential variables, and three "composite variables" (factors) formed (see Table 4).

Other Variables

The cohesion variable is derived from the two attitudinal items on the questionnaire which deal with perceived similarities and commonalities with other athletes. The lesson variable was obtained differently from the skiers than from the runners and cyclists. I simply asked the skiers if they had ever had any lessons. For the runners and cyclists, I determined lessons by their response to the question asking who helped them most to learn to run or cycle. If runners and cyclists responded school coach, club coach, or other, I coded Lessons = yes.

I learned the athletes' perception of the affect of their sport on themselves and their lifestyle by asking their response to the hypothetical impact of not participating in their sport. Their responses could range from 1 (not at all) to 7 (a tremendous amount). (See appendix.)

CHAPTER V

INFLUENCES OF PARTICIPATION ON ATHLETES' SELF-CONCEPTS: TESTS OF HYPOTHESES AND RESULTS

General Background Information

Demographic and Socioeconomic Background

Table 5, below, contains the demographic and socioeconomic backgrounds of each of the athletic collectivities. Specifically, each athletic collectivity has the following demographic and socioeconomic characteristics.

Cross Country Skiers

The mean age of cross country skiers is 24 years. There are three males (60 percent) for every two females (40 percent). Almost 35 percent are married, and an additional two percent cohabit with a person of the opposite sex. Over 99 percent are white. In terms of education, most cross country skiers had at least "some college," but only 11 percent had achieved college degrees, graduate degrees, or professional degrees. While mean income levels hover around \$36,000 annually, over half (53 percent) indicated family incomes in excess of \$55,000 annually.¹⁴

Cross country skiers were divided evenly in terms of where they lived while growing up. About 40 percent stated that they grew up in small towns or rural areas, while an additional 40 percent were reared in large cities.

¹⁴Many women and youth reported zero income, thus the discrepancy between mean income and mean family income.

TABLE 5

The Demographic and Socioeconomic Backgrounds of the Athletes

	All (n=1695)	XC Skiers (n=525)	DH Skiers (n=798)	Cyclists (n=260)	Runners (n=112)
Mean Age	26%	24%	26%	27%	31%
Sex: Male	60	60	60	78	63
Female	40	40	40	22	37
Married	42	35	45	55	51
Not Married	58	65	55	45	49
Race: White	98	99	88	93	97
Black	1	1	9	3	2
Other	1	0	3	4	1
Where Reared:					
Cities	29	40	24	28	20
Suburbs	21	20	26	31	26
Sm Towns	20	12	16	22	23
Rural	30	28	35	19	31
Education:					
Some College	34	63	12	38	41
College Grad.	35	5	43	21	42
Grad./Prof.	14	6	9	18	26
Mean Family Income	\$25,000	\$36,000	\$32,500	\$32,000	\$19,000

Downhill Skiers

The mean age of downhill skiers is 26 years. About 60 percent are male. While almost half (45 percent) are married, another two percent "cohabit with a person of the opposite sex. Most (over 88 percent) are White, but nine percent are Black, and two percent are Oriental; less than one percent (0.8 percent) are Hispanic. 43 percent achieved a college degree (nine percent an advanced degree). Mean family incomes of downhill skiers is about \$32,500 annually.

Downhill skiers grew up in all sizes of towns and cities while growing up. A substantial 35 percent grew up in rural areas, and an additional 16 percent grew up in small towns. Another 26 percent grew up in suburban areas, and an additional 24 percent grew up in large cities.

Cyclists

The mean age of the cyclists is 27 years. Over three-fourths (78 percent) are males. About one in three (37 percent) are married and three percent cohabit with a person of the opposite sex. Over half (55 percent) are not married. Almost 93 percent are White, four percent are Hispanic, and three percent are Black. The cyclists had relatively high levels of education. Only 14 percent had high school or less educations, and 59 percent had some amount of college education. Eighteen percent hold professional or graduate degrees. Their mean income hovers around \$32,000.

More cyclists were reared in suburban or urban settings than in rural areas or in small towns. While 28 percent grew up in cities, 31 percent lived in suburban areas during childhood. Twenty-two percent grew up in small towns, and only 19 percent grew up in rural areas.

Runners

The mean age of the runners is 31 years. Sixty-four percent are males. More than half (51 percent) are married and an additional two percent "cohabit with a person of the opposite sex. Ninety-seven percent are White, and two percent are Black. Most runners had attended

at least some college.¹⁵ Overall 83 percent attended some college or more; 13 percent held professional degrees, 13 percent held graduate degrees, and another 35 percent were college graduates. Interestingly enough, mean incomes hover around \$19,000 annually. Runners are highly educated, but only modestly affluent, compared with other collectivities of athletes.

More runners were reared in small towns and rural areas than in suburbs or cities. Just over 31 percent of the cyclists had grown up in rural areas, and another 23 percent had grown up in small towns. Over one-fourth (26 percent) of the runners had grown up in suburban areas, but 20 percent had spent their formative years in cities.

Overall Characteristics

The mean age of all the athletes is 26 years. Approximately 56 percent are males, and 44 percent are females. Almost half are married and an additional 2.2 percent cohabit with a person of the opposite sex. Of the athletic collectivities, the cyclists have the highest percentage of males, and are most likely to be married. Ninety-eight percent are white, with the remaining two percent composed of Hispanics, orientals, and blacks. Fifty percent of the athletes grew up in rural areas or small towns, and the remaining 50 percent grew up in suburban or urban areas. A substantial 70 percent had attended at least some college and 14 percent had obtained graduate or professional degrees. Runners are most likely to have been reared in small towns or rural areas, whereas cyclists are most likely to have been reared in suburban or urban areas.

¹⁵This may be a function of age. One would expect relatively older individuals to have experienced higher levels of education.

Incomes average around \$25,000 annually. These athletes, then, are predominately young, white, fairly affluent males.

The runners have the highest levels of education. The downhill skiers have achieved the least. Most of the cross country skiers had at least some college education, but only 11 percent earned college, graduate, or professional degrees. And, while their mean income hovers around \$36,000 annually, over half indicated family incomes greater than \$55,000 annually. This sample of cross country skiers, then, represents a relatively young collectivity of men and women from affluent, educated (to various levels beyond high school) backgrounds. While the downhill skiers report the highest mean family income, the runners earn the lowest. The latter's income averages around \$19,000 annually. Only 36 percent have incomes exceeding \$25,000, the largest portion making between \$10,000 and \$25,000. The runners, then, are highly educated but only modestly affluent, compared to the other collectivities.

Olmsted and Hare (1978) note that when an individual belongs to and identifies with a collectivity, they gain an identity from it. Their affiliation affects their attitudes in a general sense. Socioeconomic characteristics indicate underlying realities of the athletes which may influence their attitudes and values. This means, for example, that when an athlete has at his disposal, certain amounts of disposable income and the time to participate in athletic activities, he is more likely to participate in an activity that requires blocks of time and some money, as compared with an individual who has little disposable income and very small amounts of "free time." Therefore, we may expect to find that downhill skiers are individuals who have some disposable income, as well

as time to participate in skiing. Since running requires less disposable income, and shorter periods of time (at more frequent intervals), an individual who has less money, and short, but frequent periods of time may be likely to participate in running.

Influences and Experiences of the Athletes

About one-half of the athletes began their sport as adults aged twenty or older. Of the remaining, approximately one-fourth began as children, ten years or younger, and one-fourth as adolescents, eleven to twenty years old. Over half had participated in their sport for three to nine years, but less than one in five had participated ten years or longer. About one-third of the athletes were relative newcomers to their sport, having participated for two years or less. (See Table 6.)

I found relatively few newcomers to cross country skiing, downhill skiing, and cycling. Almost two-thirds of the cross country skiers began skiing at twenty years old or younger. Thus, more than half had skied three to ten years, and 14 percent had skied longer than ten years. Half the downhill skiers had skied between three and ten years, and over a quarter longer than ten. And although over half started only after the age of twenty, almost another third learned to ski as children. Similarly, almost three-quarters of the cyclists had cycled for three to ten years, and 14 percent longer than ten years.¹⁶ While over a third

¹⁶Many cyclists considered themselves "beginning cyclists" when they began cycling "seriously," as a sport in itself.

began before the age of ten and an additional 17 percent started as adolescents, almost half began after the age of twenty-five. In brief, the downhill skiers and cyclists include both athletes who started participating as children, and as adults. But even those who started as adults had been participating longer than two years.

TABLE 6

The Experience of the Athletes in Their Sports

	All (n=1695)	XC Skiers (n=525)	DH Skiers (n=798)	Cyclists (n=260)	Runners (n=112)
<u>Introduced to Sport by:</u>					
Family	71%	91%	75%	56%	27%
Friends	19	9	18	33	40
Coaches	9*	1	7	11	34*
<u>Taught most by:</u>					
Family	43	61	41	39	16
Friends	14	30	23	38	34
Coaches	10	1	25	22	12
Self	33	9	13*	0*	38*
<u>Length of Participation:</u>					
2 yrs. or less	32	29	22	13	19
3 - 10 years	50	57	51	73	66
10 + years	18	14	27	14	15
<u>Age as Beginner:</u>					
10 yrs. or less	26	30	29	38	47
11 - 20 years	23	32	18	17	0.0
20 + years	51	37	53	45	53

*Percentages do not total 100% due to rounding error.

Most of the runners began running as adults and had not been running for an extended period of time. Over half began when they were thirty years old or more. Over two thirds had run five years or less, including 19 percent who had run two years or less. Only 15 percent had run longer than five years.

Family members have had the most influence on individuals' beginning to cross country ski, downhill ski, and cycle. Over 90 percent of the cross country skiers were introduced to their sport by parents, siblings, or other relatives. In learning skiing techniques, over 60 percent were most helped by relatives, and 30 percent by their friends. Of the downhill skiers, three-quarters were introduced to skiing by their families -- parents, siblings, or relatives. A majority were primarily helped to learn their sport by family and friends, while only one in four found instructors or coaches most helpful. Over half the cyclists stated their parents had introduced them to cycling (39 percent thought parents helped most; 38 percent listed friends; and 22 percent listed coaches).

Three sources had substantial impact on the runners' beginning to run: 40 percent stated friends had introduced them, 34 percent reported teachers and/or coaches, and 27 percent listed family. When asked who helped them most to learn to develop running techniques, over one-third indicated themselves, another third reported friends, while 16 percent listed family; only 12 percent had coaching or other types of instruction.

Runners essentially began running due to their own interests and they improved their techniques "on their own," or with the help of friends. In cross country skiing, downhill skiing, and cycling, family

members introduced and taught respective athletes the athletic activity.

In summary, in the cases of downhill skiers, cross country skiers, and cyclists, their families had most likely introduced individual participants to "their sport," and helped them to learn the activity. In the case of runners, the individual was more likely to have been introduced to running by friends, and the individual was helped most to "learn" running techniques by their friends or by themselves.¹⁷ Most athletes had participated in their sport for three to 10 years. While cyclists, runners, and downhill skiers were most likely to have begun participation in "their sport" as an adult (20 years or older), about equal numbers of cross country skiers began skiing as children as those who began as adults.

Enjoyment of Sports

Some of the athletes found their sport less than enjoyable. Less than one-third of the cross country skiers felt skiing was enjoyable, and only nine percent rated it very enjoyable. During interviews, they explained that their sport is "hard work which is rewarding," but not necessarily enjoyable. The cross country skiers noted that they were "hard working individuals," and that their sporting activities were

¹⁷Since families generally exhibit more cohesion than friendship groups, we may expect to find that the collectivities of downhill skiers, cross country skiers, and cyclists may exhibit higher levels of cohesiveness, as compared with runners.

similar in nature to their work activities. The sports activities had a purpose. That purpose need not be "just to have fun," but to also enjoy staying in shape, being outdoors, and being in the company of others. Just over 60 percent of the downhill skiers felt skiing was very enjoyable, and most others felt it was, at least, somewhat enjoyable. Almost one-third (30 percent) of the cyclists did not find cycling enjoyable. But 62 percent did, ranking it seven on a scale of one to seven (seven = most enjoyable). Those who enjoy cycling, then, enjoy it a great deal. Almost half (49 percent) of the runners rated their sport seven, another 30 percent rated it six, and 11 percent rated it five. Overall, then, the runners thought their sport was very enjoyable, but not as frequently as cyclists.

Tests of Hypotheses

Hypothesis 1

The first hypothesis states: The level of cohesion within a particular athletic collectivity positively correlates with the extent of training and instruction in the sport. Lewin (1951) notes that the greater the difficulty in entry to a group, the greater the value attached to belonging to it. If it is more difficult to become a skier, for example, as compared with a runner, we would expect to find higher levels of cohesiveness in skiers as compared with runners. Training promotes clearer boundaries for grouping members by teaching participants how to "act like a skier," or "how to act like a cyclist," for example. Lewin notes (1935) that the clearer the definition of it's boundaries, the sharper the distinction between group members and non-members. In

the case of the four athletic collectivities, the amount of instruction/training (independent variable) may influence the level of collectivity cohesion (dependent variable).

Furthermore, Cheek and Burch (1976, p.94) stated that the experience of "collective celebration" and "ritual" may be seen as socialization mechanisms which teach individuals appropriate behavior (and techniques) for sports participation. If individuals, according to Cheek and Burch, have experienced similar experiences in the forms of "instructions," and these instructions have delineated grouping members from non-grouping members, then those athletes who have had instructions in their respective sports will tend to have higher levels of within-grouping cohesiveness, as compared with athletes who have not had similar instructional experiences.

Cohesion of the Four Athletic Collectivities

The cohesion factor measures the feelings of commonality among the individuals who participate in the same sport. While the athletes participate in their sport for a variety of reasons, there is an overriding reason which most seem to recognize. Over half (54 percent) of all the athletes "strongly agree," (and a total of 89 percent "agree") that athletes share a special feeling of commonality with other athletes in the same sport. These feelings of similarity among same-sport athletes may override individual differences in other areas.

Certain cross country skiers may enjoy skiing because of the others with whom they associate. Although most ski alone, some ski with others. (See Table 7, below.) Of those who do, 17 percent chose their spouse or mate, and another 6 percent skied with one friend. Only three percent skied with several friends. The cross country skiers may simply prefer to ski alone, but in addition they have relatively few friends who also ski. For most, only a fourth, or fewer, of their friends did so, and only four percent had half or more of their friends who did.

The cross country skiers feel positively about being part of a skier population, however. Almost nine of ten agreed that cross country skiers share a special feeling of "similarity" with all others. (See Table 8, below.) A similar percentage agreed, with 80 percent agreeing strongly, that they feel something in common with all other skiers. These feelings of commonality or similarity may be referred to as cohesion. And cohesion is readily apparent among the cross country skiers, given these characteristics.

TABLE 7

Persons with Whom the Athletes Participate in Their Sport,
and the Proportion of Their Friends Who Also Participate

	XC Skiers (n=525)	DH Skiers (n=798)	Cyclists (n=260)	Runners (n=112)
<u>Participate with:</u>				
Several Friends	3%	54%	18%	5%
One friend	6	8	16	9
Spouse or mate	17	31	28	7
Self only	72	3	38	69
<u>Proportion of Friends Who also Participate:</u>				
< 1/4	91	20	57	34
1/4 - 1/2	5	66	45	52
> 1/2	4	14	8	14

TABLE 8

Cohesion and Training Characteristics of
the Four Athletic Collectivities

	XC Skiers (n=525)	DH Skiers (n=798)	Cyclists (n=260)	Runners (n=112)
Feel Something in Common with Same-sport Athletes	80%	90%	94%	88%
Feel Similarities with Same-sport Athletes	86%	90%	87%	79%
"Cohesion" Score:				
Mean*	2.05	2.55	2.43	2.07
Std. Dev.	.42	.80	.08	.56
Had Lessons	60%	61%	51%	14%
Eta Correlation of Cohesion and Training	.07	.26	.12	.12

*Values range from one to 4: Lower values = higher scores.

The downhill skiers also demonstrate high levels of intracollectivity cohesion, based on these characteristics. A substantial 90 percent agreed that downhill skiers share a special feeling of similarity with all others. Similarly, 90 percent felt that they have something in common with all other skiers.

These very strong feelings of similarity and commonality explain partly why they enjoy skiing; and this enjoyment, in turn, leads to cohesion among skiers. The downhill skiers, unlike their cross country counterparts, largely ski with others. Most ski with several friends. 31 percent ski with their mate or spouse. Only eight percent prefer to ski with one particular friend, and a mere three percent ski alone. One reason why downhill skiers enjoy skiing with others is that most have several friends who also ski. The majority affirmed that between one quarter and one-half of their friends ski, and an additional 14 percent said that over half of their friends do so. This allows the downhill skiers access to others who share their interests in downhill skiing, more so than the cross country skiers.

A very high percentage of the cyclists felt that they have something in common with all other cyclists. The cyclists also feel bonds of similarity with other cyclists. However, over one-third cycle alone; another 28 percent cycle with their spouse or mate; and 16 percent cycle with one particular friend. Only one in five cycle with several friends. Perhaps many cycle alone because they lack friends who also cycle. Over half stated that less than 25 percent of their friends also cycle, and only eight percent stated that half or more of their friends cycle.

The runners also feel they share commonalities with other runners. 88 percent felt that they have something in common with all other runners. While 69 percent of the runners enjoy running alone, some run with others. In interviews, it was determined that nine percent run with one particular friend, while another seven percent run with several friends. An additional seven percent of the runners run with family members, and five percent run with their mate or spouse. The runners' friends also run. While over one-third of the runners have fewer than 10 percent of their friends also run, more than half have between 10 percent and 50 percent of their friends who run. It may be summarized that all athletic collectivities have high levels of cohesion, but cyclists show slightly higher levels of cohesion when compared with other athletic collectivities.

Lessons and Training

Although lessons, instructions, or coaching are not necessarily a prerequisite to cross country skiing, 60 percent of the cross country skiers had taken some lessons or had some coaching. (See Table 8, above.) Lessons are generally a necessary part of the downhill skiing experience: Downhill skiers are warned not to attempt to ski without some instruction from magazines, media, or other skiers. Not surprisingly, over half the downhill skiers had obtained downhill skiing instruction. Even though lessons are not thought of as integral for cycling or running, more than half the cyclists and 14 percent of the runners felt

that they had experienced some form of instruction through others or coaches.

The Correlation of Training and Cohesion

There is no substantial correlation between lessons and cohesion in any of the athletic collectivities. (See Table 8.) This results fail to support the first hypothesis. Lessons do not necessarily facilitate collectivity boundaries to include and exclude members. Those who took lessons did not experience substantially higher levels of cohesion than those who didn't. For example, the cyclists scored higher on cohesion than the cross country skiers. Yet the cross country skiers received more training than the cyclists. What, then, might explain the high levels of cohesion in the athletic collectivities, besides training?

Part of the explanation may lie in the different athletes' understanding of the word "lessons." The runners and cyclists may not understand the meaning of "lessons" as clearly as the downhill and cross country skiers. For the skiers, formal lessons are both available and clearly recognizable. About two-thirds of the cross country and downhill skiers took lessons in their sport. (See Table 8, above.) For the majority of the cyclists and runners, lessons take a more informal character. That is, most learn to cycle from relatives or friends, rather than instructors or coaches. Still, though, half the cyclists reported they took lessons in cycling. The runners learned to run on their own or developed techniques with the aid of family or friends. A scant 14 percent of all runners reported having had instruction in running. Even though not statistically substantial, the data show that

runners tend to exhibit lower levels of athletic collectivity cohesion. Thus while the data do not substantially support the hypothesis, there is reason to believe that lessons still may have some small impact on collectivity cohesiveness.

Leisure locale and time allocation may contribute to collectivity cohesiveness for the cross country and, especially, downhill skiers. Downhill skiers generally spend longer time participating in their sport at any one time than the others, because it also involves the ambience created by ski areas. The tiny shops, the abundant food, and the merry atmosphere of the downhill ski area extend far beyond the skiing activity. Some skiers, in fact, prefer to spend more time on these apres ski activities. There are even clothes sold specifically for apres ski activities. Downhill skiing is in many ways then "a way of living" for short periods of time.

Cross country skiing, although by no means centered at resorts to the same degree as downhill skiing, is rapidly becoming more of a sport around which vacations center. Cross country skiers now concentrate a considerable amount of skiing during one time period. Cross country skiing provides some ambience, although not comparable to that of downhill skiing. Some experience the ambience of ski areas or beautiful back woods settings. Some also wear special clothes on the trails and during apres ski lounging. However, many cross country skiers still practice their sport near their homes.

This phenomenon of leisure locale and ambience perhaps allows downhill and cross country skiers to identify with other skiers, since their sport entails additional experiences beyond skiing itself. In the

case of the cross country skier, "skier experiences" occur during lunch (while on the trails), and perhaps before and after skiing. Especially in the case of the downhill skiers do we find that apres ski life is perhaps as much a part of skiing as is the experience of skiing on the slopes. For example, in the cases of both cross country and downhill skiing, people choose ski areas (trails and slopes) for reasons other than "just skiing." Ambience is a great factor in skier selection of "the best ski area."

The importance of the leisure locale for the skiers becomes evident by examining why the athletes enjoy their respective sports. Skiers seem to love the "great outdoors." An overwhelming 77 percent of the cross country skiers identified the scenery as the primary source for enjoyment in cross country skiing. Almost half (46 percent) the downhill skiers stated that scenery was the most important advantage in downhill skiing, and an additional 10 percent found the solitude, which may be associated with the scenery, the primary advantage. A plurality of the cyclists (48 percent) enjoyed cycling because it was good for overall health. When asked to discern the primary advantage of running, over half (58 percent) the runners stated that running was good for their health. Another 12 percent ran to keep in shape, and still another eight percent ran to keep their weight down. In brief, the skiers focus on the beauty of the surroundings, rather than the utility of exercise so that the leisure locale itself becomes the reason for skiing. These attitudes permeate the basic philosophies of the athletic collectivities, and new members are presented with these feelings.

Hypothesis 2

The second hypothesis states: Cohesion positively correlates with level of participation. Aronfreed (in McDavid and Harari, 1968, pp.112-114)) suggests that "induction techniques" of socialization rest heavily on occurrence of reward, or social approval (by the given group) of desirable behavior. To the extent that this occurrence is presented to the individual, the individual has the opportunity to develop awareness of the social group's (athletic grouping's) values and attitudes, and realize similarities between members, based on and extended by these group-presented value structures. Therefore athletic group cohesion (dependent variable) is influenced by grouping participation (independent variable).

Levels of Participation

Most of the athletes participate in their sport quite often. (See Table 9, below.) More than three-fourths of the cross country skiers ski in excess of seven days annually, while almost half skied in excess of twenty-one. Over one-fourth ski more than fifty days per year. Almost nine in ten of the downhill skiers ski in excess of eight days annually, while four in ten ski more than twenty-one days annually. About one in ten ski more than fifty days annually. The cyclists participate in their sport most frequently, compared to the runners, cross country skiers, and

TABLE 9

Percentage of Individual Participation
Correlation of Participation with Athletic Collectivity

	XC Skiers (n=525)	DH Skiers (n=798)	Cyclists (n=260)	Runners (n=112)
Level of Participation: (Days Annually)				
0 - 7	22%	11%	5%	1%
8 - 14	12	20	6	1
15 - 21	16	39	11	15
22 - 50	24	30	18	10
More than 50	26	10	60	73
Tau-b	.22****	-.02	.20**	.16***

**p < .05

***p < .01

****p < .001

downhill skiers.¹⁸ Sixty percent cycle in excess of fifty times annually. An additional 18 percent cycle between twenty-two and fifty times annually. Likewise, almost three-fourths of the runners run more than fifty times, and another 10 percent run twenty-two to fifty times per year.¹⁹

For the cross country skiers, runners and cyclists, there is a

¹⁸The cyclists, in fact, participate infrequently in almost all other sports.

¹⁹The runners, like the cyclists, participate heavily in their sport, to the exclusion of most others. Of the other sports they bicycle and swim most often. This may be due, in part, to the new interest in triathlon events. It is also important to realize that runners and cyclists can most easily participate in their sports, as compared with downhill skiers and cross country skiers, who need specific terrain, blocks of time, and seasonal snows in order to participate in skiing.

substantial correlation between level of participation and cohesion. This indicates that those athletes who participate most frequently in their sport also tend to have the strongest feelings of similarity with other athletes of the same sport. Likewise, those who participate infrequently tend not to have strong feelings of similarity with other athletes.

For the downhill skiers, this was not the case. The frequency of participation had little correlation with collectivity cohesion. In testing Hypothesis 1, I showed that cohesion was enhanced by instructions among the downhill skiers. Collectivity boundaries are delineated by instructions. And definite collectivity boundaries permit collectivity identity, and subsequently support cohesion for the downhill skiers.

Hypotheses 3 and 4

The third hypothesis states: Athletes, despite recognizing the possibility of resulting pain and injury, will tend to continue athletic participation according to the extent they perceive positive personal rewards from that participation. The fourth hypothesis states: Athletes, despite recognizing the possibility of resulting pain and injury, will tend to continue athletic participation according to the extent they perceive positive effects on their lifestyles from that participation. According to Blau (1964), the perceived costs in obtaining social benefits from a given activity reflect the significance of that activity for the given individual. In the case of the athlete, being willing to "pay the price" of risk of injury in order to participate in the sport may be the result of the "meaningfulness" the athletic activity has for

the individual. In terms of the hypotheses, pain attitudes (dependent variables) are influenced by the meaningfulness participating in the activity has for the individual (independent variable, Hypothesis 3) or for the individual's lifestyle (independent variable, Hypothesis 4).

Attitudes Toward Pain and Injury

A hazard of participation in any sports may be pain and/or injury. I asked the athletes to express their attitudes about the pain and injury related to sports. (See Table 10.) I also asked if they would be willing to undergo pain in order to continue participating in their sport. And I asked if they had actually experienced pain as a result of participating in their sport.

The cyclists and runners are willing to endure more pain than they now experience in their sports. Only 27 percent of the cyclists actually endured moderate or greater pain from cycling, but 43 percent would be willing to endure such pain, if necessary, to continue cycling. The pattern for the runners is similar. The reverse is true for the downhill and cross country skiers: they now experience more pain from skiing than they would prefer. Over three-fourths (77 percent) of all the downhill skiers have suffered moderate or greater pain as a result of skiing, but only 35 percent are willing to do so. Only 15 percent of the cross country skiers say they are willing to endure moderate pain, but almost 60 percent have in fact experienced such pain.

TABLE 10

The Pain Experiences and Attitudes of the Athletes*

	XC Skiers (n=525)	DH Skiers (n=798)	Cyclists (n=260)	Runners (n=112)
"Pain is just part of the game."	83%	92%	75%	74%
"If you participate long enough, you're bound to get hurt."	78	79	33	32
"If you don't hurt sometimes, you're not trying hard enough."	85	70	25	39
"If I thought I could get hurt, I'd stop."	81	87	93	97
"I'd be willing to undergo moderate pain to be able to continue participating in 'my sport.'"	15	35	43	56
"I have experienced moderate (or more) as a result of participating in 'my sport.'"	60	77	27	50

*All values represent percentages of each collectivity agreeing with the statements.

This may be explained by the athletes' views of pain in sports (i.e. their "pain attitudes"). Downhill skiers are most likely to agree that pain is a normal part of sports, followed by the cross country skiers, the cyclists, and the runners. More than eight of ten would stop skiing if they thought they could get hurt badly, compared to three-fourths of the cyclists and less than half of the runners. Furthermore,

only one-third of the runners and cyclists believed that continuing their sport would eventually lead to injury, compared to over three fourths of the skiers. Apparently, most cyclists and runners do not think of their sport as inherently dangerous and do not consider pain a normal part of sports participation nor perceive injury a threat in their sport. Downhill and cross country skiers do.

Perceived Effects of Participation

I measured how the athletes perceived their sports participation affects them as individuals and their lifestyles through two hypothetical questions. I asked how they, personally, and their lifestyles would be affected by not being able to participate any longer. I generally found that they feel their sport affects themselves as individuals more than their lifestyles. (See Table 11, below.)

The cross country skiers were evenly divided on the former question. On a scale of one to seven, almost half stated that never being able to ski again would affect them greatly. A relatively lower percentage felt it would affect them very little, and the remaining thought it would affect them somewhat. Their responses regarding how cross country skiing affects their lifestyles contained fewer extremes. About half felt that not skiing would affect their lifestyles at least somewhat. Only 28 percent felt it wouldn't affect their lifestyles very much, while 26 percent felt it would affect their lifestyles a great deal.

TABLE 11

The Athletes' Perceptions of the Effects of Their
Athletic Participation on Themselves and Their Lifestyles

	XC Skiers (n=525)	DH Skiers (n=798)	Cyclists (n=260)	Runners (n=112)
<u>Effect on Themselves:</u>				
Great*	46%	54%	66%	55%
Somewhat**	16	13	11	13
Little***	38	33	22	32
<u>Effect on Their Lifestyles:</u>				
Great*	26	42	55	32
Somewhat**	46	12	27	34
Little***	28	26	18	34

*Scoring 6 or 7 on a one-to-seven scale.

**Scoring 3, 4, or 5 on a one-to-seven scale.

***Scoring 1 or 2 on a one-to-seven scale.

Over half the downhill skiers (54 percent) stated that not being able to ski would affect them greatly (seven on a scale of one to seven), but a rather substantial 26 percent thought that the absence of skiing would not affect themselves "as individuals" very much (scored one to three on the scale). Fewer thought skiing affected their lifestyles. Over half felt the lack of skiing would affect their lifestyles somewhat to greatly, 42 percent greatly. Over one-fourth (26 percent) however, thought no being able to ski would affect their lifestyle none to little.

Sixty-six percent of the cyclists felt that not cycling would affect them as individuals tremendously, but only 55 percent thought it would likewise affect their lifestyles. As stated above, the cyclists

tend to participate most frequently in their sport. They also generally find little time for other sports, whereas the other athletes have varying interests in many other sports. Perhaps this explains why they believe cycling affects themselves and their lifestyles so much.

Runners thought not running would affect them as individuals greatly. Not being able to run would affect their lifestyles greatly, but, again, not as much as it would affect them as individuals.

Correlation of Pain Attitudes with Perceptions of Sports Effects

To summarize, both the downhill and cross country skiers seem to recognize inherent dangers in their respective sports, while runners and cyclists do not. But the skiers tend to accept the perceived risk, and ski anyway.

Both hypotheses are generally confirmed by the statistical evidence, but they apply more appropriately to the downhill and cross country skiers than to runners and cyclists. The "pain attitudes" factor measures the athletes's acceptance of the pain and injury associated with athletics. The extent to which participation in the sport affects the individual as an individual substantially correlates with this factor among the downhill and cross country skiers. (See Table 12, below.) The perceived effect of athletic participation on the athlete's lifestyle substantially correlates with the "Pain Attitudes" factor only among the downhill skiers. (See Table 13, below.)

I also examined the correlations of perceived effects of participation with each of the individual pain variables comprising the factor. I feel this allows a more complete understanding of the relationship between the variables.

TABLE 12

Tau-b Correlations of the Perceived Effects of Athletic Participation on the Individual with the "Pain Attitudes" Factor and the Separate Pain Variables

	XC Skiers (n=525)	DH Skiers (n=798)	Cyclists (n=260)	Runners (n=112)
"Pain Attitudes" Factor	.26***	.48***	.07	.01
<u>Separate Variables:</u>				
"Pain is just part of the game."	.34***	.24***	-.14	-.05
"If you participate long enough, you're bound to get hurt."	.21***	.22***	.19*	-.03
"If you don't hurt sometimes, you're not trying hard enough."	.23***	.23***	.12	-.02
"If I thought I could get hurt, I'd stop."	.18***	.28***	.24**	.16***
*p < .05				
**p < .01				
***p < .001				

Downhill and Cross Country Skiers

All the individual pain variables substantially correlate with the perceived impact of athletic participation on the individual for both the downhill and cross country skiers. (See Table 12.)

Among the downhill skiers, then, the following statements apply to those who perceive their sport strongly affecting themselves as individuals. First, they tend to accept pain and injuries as a normal characteristic of sports. Second, they strongly believe that continued

skiing can result in pain and injury. Third, they link pain with athletic effort. Fourth, as is the case with all the other athletes who perceive strong effects on themselves from sports participation, they do not desire to stop their participation despite a real risk of serious injury.

TABLE 13

Tau-b Correlations of the Perceived Effects of Athletic Participation on Lifestyle with the "Pain Attitudes" Factor and the Separate Pain Variables

	XC Skiers (n=525)	DH Skiers (n=798)	Cyclists (n=260)	Runners (n=112)
"Pain Attitudes" Factor	.01	.12***	.04	-.04
<u>Separate Variables:</u>				
"Pain is just part of the game."	.00	.02	-.13	-.05
"If you participate long enough, you're bound to get hurt."	.09**	.02	.13	-.04
"If you don't hurt sometimes, you're not trying hard enough."	.18***	.11***	.15*	-.02
"If I thought I could get hurt badly, I'd stop."	.07*	.14***	.21**	.17***
*p < .05				
**p < .01				
***p < .001				

The cross country skiers manifest a slightly different pattern. The cross country skiers who strongly feel that pain is a normal part of sports are divided into two categories: those who feel their participation affects them greatly and those who do not. Those who ski most frequently tend to feel their participation affects them most. A similar pattern exists with the view of pain as imminent in prolonged sports participation. First, those who accept pain and injury as imminent perceive strong effects on themselves. Second, those who do not accept pain and injury as imminent do not perceive great effects on themselves from skiing. The latter collectivity may be those who cross country ski infrequently. Furthermore, a secondary set of cross country skiers associate pain with athletic effort but do not perceive skiing as affecting them a great deal.

Most of the individual pain variables correlate with the skiers' perceptions of the effects of their participation on their lifestyles, as well. (See Table 13.) In the case of associating pain with athletic effort, downhill skiers who perceive strong effects on their lifestyles tend to feel more strongly than similar cross country skiers that pain indicates good athletic effort.

Runners and Cyclists

The correlation between acceptance of pain and injury as normal and the perceived effect of sports participation on the individual is substantial among neither the runners nor the cyclists. Those runners and cyclists strongly accepting pain and injury as normal in sports perceive the effects of athletic participation on themselves similarly to

those who do not. The same holds for the cyclists and runners who associate pain with athletic effort. Those cyclists, however, who feel cycling affects them as individuals a great deal also somewhat accept that injury is imminent in prolonged sports participation.

The results of correlating these variables with their perceptions of the effects of sports on their lifestyles is somewhat similar. Those cyclists who feel that cycling greatly affects their lifestyles tend to feel that pain has little to do with athletic effort, unlike those who felt it greatly affects themselves. But the former tend to believe that continued participation will eventually lead to injury, unlike the latter. Finally, those cyclists, as well as those downhill and cross country skiers who perceive their participation greatly affecting their lifestyles tend to strongly desire to continue participating despite serious risks. The correlation is more moderate for runners than the other three collectivities, however.

Pain Attitudes and Enjoyment of Sports

Another variable may have some interplay with attitudes about sports pain and injury: the extent to which the individual enjoys his sport.

For the downhill skiers, cross country skiers, and cyclists, enjoyment substantially correlates with the belief that prolonged participation will result in pain or injury. (See Table 14.) However, the acceptance of pain as a normal part of sports does not substantially correlate with enjoyment among the cyclists, as it does among the skiers. Cyclists do not share the feeling that pain is normal in sports despite the fact that they enjoy their sport about as much as the skiers.

The downhill and cross country skiers' associations of pain with athletic effort also correlate with enjoyment. The downhill skiers who enjoy their sport very much tend also to associate pain with good athletic effort. The cross country skiers who strongly associate pain with good athletic effort tend to enjoy their sport moderately to strongly.

TABLE 14

Tau-b Correlations of Level of Enjoyment of Athletic Participation with the "Pain Attitudes" Factor and the Separate Pain Variables

	XC Skiers (n=525)	DH Skiers (n=798)	Cyclists (n=260)	Runners (n=112)
"Pain Attitudes" Factor	-.26***	-.07*	-.02	.04
<u>Separate Variables:</u>				
"Pain is just part of the game."	-.32***	-.11***	-.09	.02
"If you participate long enough, you're bound to get hurt."	-.14***	-.06*	-.21**	-.01
"If you don't hurt sometimes, you're not trying hard enough."	.07*	.08**	-.13	.03
"If I thought I could get hurt badly, I'd stop."	-.21***	-.07*	.05	.09*
*p < .05				
**p < .01				
***p < .001				

The bicyclists are the only collectivity wherein the desire to continue sports despite serious pain risks does not substantially correlate with the level of enjoyment.

Hypothesis 5

The fifth hypothesis states: Athletes will accept the pain attitudes of their athletic collectivity to the degree they participate in the given activity of that collectivity. Level of participation is, therefore, positively correlated with the individual's acceptance of pain and injury. According to Cheek and Burch (1967, pp. 127-30), individuals are "conditioned" to see, think, and act through social transactions among individuals. As such, social groupings share similar patterns of common useage and definition of the situation. Matters of taste and patterns of "ordinary occurrences" are substantially learned as an aspect of participation in the group(ing). Matters of taste and observations of "normality" enable individuals to perceive the special nature of the affective ties of those with whom they are "bonded." In the case of the athlete, the individual who participates (independent variable) most frequently in the given activity is most likely to have the greatest opportunity to absorb the normative values of that social grouping, in this case those attitudes regarding pain which are accepted by the larger athletic grouping (dependent variable).

Correlation: Pain with Level of Participation

The acceptance of pain as normal in sports substantially correlates with level of participation among the cross country skiers. (See Table 15.) I discovered through my interviews, however, that two sets of

skiers exist within this sample. Both those who ski most and least similarly feel that pain is a normal part of sports participation.

The downhill skier, cross country skier, and cyclist collectivities show substantial correlations between participation and the belief that continued participation will lead to injury. Again, the cross country skiers split into two collectivities: both those who ski most and least feel most strongly that continued participation leads to injury. Among the cyclists, those who participate most tend to hold this belief moderately.

TABLE 15

Tau-b Correlations of "Pain Attitudes"
with Level of Participation

	XC Skiers (n=525)	DH Skiers (n=798)	Cyclists (n=260)	Runners (n=112)
<u>Pain Variables:</u>				
"Pain is just part of the game."	-.23***	.04	-.07	-.08
"If you participate long enough, you're bound to get hurt."	-.17***	-.12***	-.23**	-.01
"If you don't hurt sometimes, you're not trying hard enough."	-.08*	.06*	-.14*	-.04
"If I thought I could get hurt badly, I'd stop."	-.13***	.04	-.03	.05
*p < .05				
**p < .01				
***p < .001				

These same collectivities show substantial correlations of participation with associating pain with athletic effort. Among the

downhill skiers, this correlation is strongest for those who ski between eight and fifty days annually. Again, for the cross country skiers, both those who ski most and least associate pain with athletic effort. This is another example of how all the cross country skiers perceive pain as inherent to their sport. Among the cyclists, those who cycle very frequently only moderately associate pain with athletic effort.

The cross country skiers show a substantial correlation between participation and the desire to stop skiing in the face of serious personal injury. Those who ski infrequently would stop if they felt they could be seriously hurt. Those who ski most feel similarly, although they are less likely to quit. This indicates that, although the cross country skiers recognize some pain as inherent to their sport, they do not seem to feel it is dangerous enough to cause serious injury.

Hypothesis 5, then, is confirmed for the downhill skiers. It is somewhat confirmed for the cross country skiers: a secondary collectivity of cross country skiers who ski infrequently holds similar pain attitudes with those who ski most. Given this, I question the role of participation in forming the pain attitudes among the cross country skiers. There is some evidence of a correlation between associating pain with effort and level of participation among the cyclists. But given that they do not seem to perceive pain as inherent to their sport, I feel the hypothesis is rejected for them. Finally, the hypothesis is rejected among the runners, since there are no substantial correlations between level of participation and any of the pain variables.

Hypotheses 6 and 7

The sixth hypothesis states: The effect athletes perceive their

sport has on their lifestyles positively correlates with level of participation. The seventh hypothesis states: The effect athletes perceive their sport has on themselves positively correlates with level of participation. Olmsted and Hare (1978) report that the extent to which an individual participates in a group(ing) is positively associated with the effect the group has on that individual's attitudes and behavior. The group tends to impose on it's members attitudinal structures which permeate the individual in a "larger sense." That is, to the extent that the athlete participates in the sports activity (independent variable), that individual will experience effects of this participation in a "greater sense," including those effects experienced on himself (dependent variable, Hypothesis 7) and on his lifestyle (dependent variable, Hypothesis 6).

Hypothesis 6 is confirmed for the runners. Hypothesis 7 is confirmed for the cross country and downhill skiers.

When all the athletes are considered together, there is no substantial correlation between the level of participation and the perceived effect of athletic participation on the athlete's lifestyle. (See Table 16, below.) However, when considering the four athletic collectivities separately, a slightly substantial correlation appears among the runners. Runners perceive "their sport" to influence their lifestyles according to how frequently they run. Those individuals who run most are most affected in terms of their lifestyle.

I found a substantial correlation between participation and the athletes' perceptions of the effects of sports on themselves among all athletes considered together, and among the cross country and downhill

skiers. (See Table 17.) The skiers, rather than the runners and cyclists, find their sport affects them as individuals to the extent they participate. That is, those who ski more frequently feel more affected.

Table 16

Tau-b Correlations of Level of Participation with Perceived Effect of Athletic Participation on the Athlete's Lifestyle

	All (n=1695)	XC Skiers (n=525)	DH Skiers (n=798)	Cyclists (n=260)	Runners (n=112)
Tau-b	.01	-.04	.00	-.01	.12*

*p < .05

Table 17

Tau-b Correlations of Level of Participation with the Athlete's Perception of the Effect of Athletic Participation on Him/Herself

	All (n=1695)	XC Skiers (n=525)	DH Skiers (n=798)	Cyclists (n=260)	Runners (n=112)
Tau-b	-.09	-.21*	-.11*	-.03	.06

*p < .001

It is interesting to note that the correlation between participation and lifestyle effects applies to fewer collectivities than that between participation and effects on the individual. Specifically, the skiers feel their sport affects themselves, as individuals, to the extent they

ski, but not their lifestyles.

Hypothesis 8

The eighth hypothesis states: Athletes' enjoyment of a given sport positively correlates with their level of participation in that sport. Edwards (1973) stated that sports participation, for most, produces no material benefits. However, there is no shortage of willing participants. Athletes enjoy sports as "an end in itself," thus they enjoy the activity for the sake of the activity alone. Athletes may also enjoy sports participation as a "means to an end," such as in the case of the athlete who participates in his sport for health benefits (cardiac rehabilitation). In either case, the athlete benefits from the participation. Ausubel (1965, pp.58-86) noted that repeated encounters with materials and experiences increases the meaningfulness of the given activity for the individual. This meaningfulness may be interpreted as a kind of "enjoyment" or positive feelings about the respective participation. In the case of the athlete, the frequency of participation (independent variable) affects the enjoyment of the sports activity (dependent variable), or the more frequently the athlete participates in his sports activity, the more he will experience enjoyment as a result of this participation.

This hypothesis is confirmed for the downhill and cross country skiers, and the cyclists. It is not confirmed for the runners. (See Table 18.) Those skiers and cyclists who participate most frequently also tend to enjoy their sport most. Conversely, those skiers and cyclists who participate least tend to enjoy their sport relatively less.

Table 18

Tau-b Correlations of Level of Participation with
Enjoyment of the Athlete's Sport

	XC Skiers (n=525)	DH Skiers (n=798)	Cyclists (n=260)	Runners (n=112)
Tau-b	.29**	.23**	.21*	.07

*p < .01
**p < .001

This is not so for the runners. Since they run more for health reasons, they may enjoy resulting physical benefits more than the activity of the sport itself. I confirmed this in my interviews with some runners. The other athletes tended to participate in their sports for participation itself, rather than as a means to an end.

Hypothesis 9

The ninth hypothesis states: There is a positive correlation between level of participation in a given sport and the level of the participant's self-esteem. Edwards (1973, pp.55-61) noted that sports demands meticulous preparations on the part of the participant. This preparation may have substantial input into the determination of the outcome of the individual's sporting event (or the team's sporting event). The athlete may also seek self-discovery as he or she utilized personal resources to efficiently defeat the opposition, or to improve his position within the sporting activity. If the athlete is "prepared" and/or performs well in his sports activity, he is considered by the

sports collectivity as "successful" in his endeavor. The individual's range of "successful" performances are determined by the surrounding public, and these ranges may vary for different individuals. (The sports public may not expect as high a level of performance from an elderly individual, for example, as compared with a strong, healthy young adult.) Since "being successful" is, by definition, a positive attribute in our society, the "success" one achieves through athletic participation may bolster self-opinion, and promote higher levels of self-regard.

Rogers (1967) postulated a basic, learned need for positive regard from others -- that is a need for warmth, liking, respect, sympathy, and acceptance -- and a need for positive self-regard which is related to or dependent on positive regard from others. Positive self-regard, for Rogers, is synonymous with self-esteem. To the extent that sports participant participates (independent variable) in the athletic given activity, he has the opportunity to gain positive self-esteem (dependent variable) as a result of positive regard from others due to his athletic participation.

Furthermore, Sherwood (1969, pp.85-91) indicated that the aspirations and goals which one sets for himself are derived from a "referent public," or reference group. This reference group sets goals towards which the individual may aspire to reach. The self-concept of the individual is seen with reference to a "totality of roles" within which the individual lives, and not just one role which the individual plays at a given time. If the referent public sets goals, and these goals are met by athletic participation, then the individual may tend to have a higher opinion of himself. The more frequently the individual

participates in a given athletic activity, the more frequently he has the opportunity to experience "success" through this participation. Thus increased levels of participation in a given sports activity may result in higher levels of self-esteem in the individual participant.

Overall, the runners tend to have high opinions of themselves. More than 99 percent agreed that they had a number of good qualities. (See Table 19, below.) This compares with 92 percent of the downhill skiers, 95 percent of the cyclists, and only 73 percent of the cross country skiers. Most downhill skiers (84 percent) "felt sure of themselves" when people disagreed with them, compared with 81 percent of the cyclists, 79 percent of the cross country skiers, and 71 percent of the runners. Cyclists were most satisfied with themselves, followed by both runners and downhill skiers, and cross country skiers. While all the individual athletes had different self-esteem profiles, the four collectivities each demonstrated unique patterns of self-esteem, based on these variables.

The self-esteem factor essentially measures positive feelings the athlete holds toward himself, especially concerning capability in everyday activities. Self-esteem substantially correlates with level of participation when the athletes are viewed collectively. Those athletes who participate most in their sports tend to rank moderate to high on the self-esteem factor.

TABLE 19

Self-esteem Characteristics of the Four Athletic Collectivities

	XC Skiers (n=525)	DH Skiers (n=798)	Cyclists (n=260)	Runners (n=112)
"I am able to do things as well as most other people."	80%	94%	95%	93%
"I feel I have a number of good qualities."	73	92	95	99
"I certainly feel useless at times."	27	22	45	40
"I nearly always feel sure of myself, even when people disagree with me."	79	84	81	71
Self-esteem Score:				
Mean*	2.48	2.76	2.86	2.52
Std. dv.	.52	.48	.47	.50
Tau-b correlation with level of participation	.11***	.17****	.20**	.03
*Values range from 1 to 4: Lower values = higher scores.				
**p < .05				
***p < .01				
****p < .001				

When considering the athletes in their respective collectivities, the downhill skiers, cross country skiers, and cyclists all demonstrate this positive correlation substantially. The runners do not. This means that the runners who run most frequently do not tend to hold themselves in substantially higher regard than those who run less often.

Table 20
Mean Scores on the "Self-concept" Factors

	XC Skiers (n=525)	DH Skiers (n=798)	Cyclists (n=260)	Runners (n=112)
Self-confidence:				
Mean*	2.73	2.92	2.60	2.83
Std. dv.	.47	.27	.20	.45
Relations with Others:				
Mean*	2.47	2.50	2.28	2.49
Std. dv.	.50	.51	.45	.54
Self-acceptance:				
Mean*	2.80	2.81	2.84	2.86
Std. dv.	.49	.51	.45	.40
Youth:				
Mean*	1.54	2.00	1.93	1.84
Std. dv.	.98	.62	.65	.87

*Values range from 1 to 4: Lower values = higher scores.

Other Self-concept Factors

The way the individual athlete views himself is multi-dimensional. We shall consider this multi-dimensionality under two headings: self-concept and locus of control. Self-concept includes: self-esteem, self-acceptance, sense of youthfulness, self-confidence, and relations with others. Locus of control includes fate control and luck. Since self-esteem is but one of the composite variables in the "self-concept" group of social-psychological variables (see Chapter IV), I examine all aspects of the self-concept and then test their correlations with participation.

The "self-confidence" factor measures the degree to which an individual likes himself and feels competent and self-assured. When

considering all athletes, self-confidence slightly correlates with degree of participation. Those athletes who participate most in their sport tend to rank from moderate to high in self-confidence. Those who have relatively higher or lower levels of self-confidence tend to participate no more or less than those who have moderately high levels of self-confidence.

Table 21
Tau-b Correlations of Level of Participation
with the "Self-concept" Factors

	XC		DH		
	All	Skiers	Skiers	Cyclists	Runners
	(n=1698)	(n=525)	(n=798)	(n=260)	(n=112)
Self-confidence	-.09**	-.11**	-.10***	.06	.04
Relations with					
Others	.05	.15***	-.05	-.06	.05
Self-acceptance	-.07	-.06	-.16***	.15	.09
Youth	.09*	.17***	.07*	-.12	.02

*p < .05
**p < .01
***p < .001

Self-confidence and the degree of participation substantially correlate among both the downhill and cross country skiers. Thus, increased participation by the cyclists and runners will not tend to result in a substantial increase in self-confidence.

The "Relations with Others" factor substantially correlates with level of participation for Cross country skiers. On a whole, then, those cross country skiers who participate most often in their sport also most perceive themselves as tolerant of, skillful with, and friendly towards others. When taking the athletes in their four collectivities, only the cross country skiers exhibit a substantial relationship between positive inter-personal skills and level of participation.

The "self-acceptance" factor measures the degree to which an individual accepts himself as he currently is. Again, for all the athletes considered collectively, self-acceptance substantially correlates with level of participation. Both those ranking highest and lowest on self-acceptance tend to participate in their sport less frequently than those who rank moderately high on self-acceptance. This correlation is substantial only for the downhill skiers, when the specific athletic collectivities are examined.

The "youth" factor measures the respondent's desire to be younger. Collectively, the desire to be younger substantially correlates with level of participation: Those athletes who desire to be younger tend to participate in their sports most frequently. When considering the separate athletic collectivities, the downhill and cross country skiers demonstrate substantial correlations between desire for youth and participation. Those who ski most tend to be the ones most wanting to be

younger.²⁰ Conversely, the frequency at which runners and cyclists participate seems to have little or nothing to do with their desire for youth.

Locus of Control

I determined "Locus of Control" through the "Fate Control" and "Luck" factors. Fate control measures the extent the respondent feels in control of his life and the direction of his life. Luck measures the degree the respondent perceives himself having good fortune. This includes feelings of fate the individual does not directly control.

Table 22

Mean Scores on the "Locus of Control" Factors
For the Four Athletic Collectivities

	XC Skiers (n=525)	DH Skiers (n=798)	Cyclists (n=260)	Runners (n=112)
Fate Control:				
Mean*	2.57	2.87	2.89	2.78
Std. dv.	.50	.36	.43	.45
Luck:				
Mean*	1.83	1.12	1.51	.92
Std. dv.	.54	.39	.54	.35

*Values range from 1 to 4: Lower values = higher scores.

Fate control and level of participation substantiallyly correlate among the cyclists. This indicates that those who cycle most often also

²⁰In bivariate analyses, it was found that no substantial correlation occurred between "age" and "frequency of participation."

tend to feel "in control" of their own direction and destiny. As with fate control, substantial correlation exists between perceptions of luck and level of participation when considering the cross country skiers. Thus, those cross country skiers who ski most often feel that they are the "luckiest," and have much good fortune.

Table 23

Tau-b Correlations of Level of Participation
with the "Locus of Control" Factors

	XC Skiers	DH Skiers	Cyclists	Runners
Fate Control	.06	.03	.21*	.00
Luck	.14***	.02	.09	.03

*p < .05
**p < .001

Summary

To summarize, level of participation substantially correlates with self-esteem among the downhill skiers, cross country skiers, and cyclists. Since self-esteem is the main concern of the hypothesis, it is supported for these collectivities and rejected for the runners. However, the examination of the different elements of self-concept besides self-esteem has revealed some of the differences between the four collectivities. The runners demonstrated no substantial correlations between level of participation and any of the self-concept elements. Therefore, we may say that the self-concept of the individual runner is

not correlated with any individual self-concept attribute, or with self-esteem to be more specific.

Among the cyclists, level of participation substantially correlates with fate control, as well as self-esteem. Thus, those cyclists who cycle most often tend to like themselves most and have high levels of self-regard. They also tend to feel most "in control" of their lives.

The downhill skiers demonstrated substantial correlations between level of participation and self-confidence, self-acceptance, and the desire for youth, as well as self-esteem. To be more specific, those who ski most often tend to have high levels of self-regard, accept themselves as they are, think of themselves as self confident, feel moral and honest, and want to be younger.

The cross country skiers demonstrated substantial correlations between level of participation and self-confidence, positive relations with others, feelings of luck, and the desire for youth, as well as self-esteem.

Summary

Since one of the basic tasks of this research is to test whether athletic collectivities differ according to social-psychological characteristics and may therefore be distinguished from one another, I summarize some of their similarities and differences.

Socioeconomic characteristics shed some light on differences between athletic collectivities. Cyclists have the highest percentage of male participants (78 percent), and are most likely to be married. Most have been reared in cities and suburbs. They tend to be the youngest of the four athletic collectivities. Their mean income is \$32,000 annually,

near that of the downhill skiers, but well under the cross country skiers and well above the runners. Although they have the lowest mean income (\$19,000)²¹, the runners have achieved the highest levels of education. Most of the runners grew up in rural areas or small towns. About two-thirds are male, and just over one-half are married. Of the four athletic collectivities, the runners tend to be the oldest. The downhill skiers report having the highest incomes (\$32,500), and were least likely to have achieved higher levels of education. They are the most racially heterogenous collectivity; only 88 percent are white. The cross country skiers are the youngest (24 years) of all four collectivities, but have the highest incomes.²² They were likely to have attended some college, but only 11 percent have earned graduate or professional degrees. (Perhaps this is a function of their relatively young age.) Only one-third are married (again, perhaps due to age), and similar to downhill skiers, about six in ten are male. Virtually all cross country skiers (99+ percent) are white. The cross country skiers earn the highest incomes of all four athletic collectivities.

Social-Psychological Characteristics

Experiential Variables

Although all of the athletes were likely to have been introduced to their sport by their families, cross country skiers (91 percent) were

²¹Impressionistic evidence from interviews suggest that runners come from more wealthy families than is evidenced by their mean annual incomes.

²²Many of the cross country skiers reported family incomes (as opposed to personal income), so even though they themselves had much lower incomes, their reported incomes in this research are high. This information was discovered through interviews.

most likely to have had familial influence. Furthermore, most of the skiers and cyclists had coaching in their sport. Their families had primary responsibility for instructing the athlete in the techniques of the sport, as well. Thus the cross country skiers', downhill skiers', and cyclists' families played key roles in their early involvements in their sports. Only 14 percent of the runners have had coaches help in the development of running techniques. They tend to have learned running themselves. Perhaps this is because of the nature of running. It is a natural gait and therefore requires less formal training in its initial stages. Since the average annual incomes of runners is decidedly lower than the other economic collectivities', the lack of coaching may reflect economic circumstances as well.

The downhill skiers and cyclists are most likely to think of their sports as enjoyable. In interviews, I learned that downhill skiers enjoy the "ambience of skiing;" that is, they enjoy the social benefits of skiing. These benefits include meeting other skiers at lunch, talking on the ski lifts, enjoying a drink after skiing, and perhaps shopping in the ski area. The cyclists simply stated that they enjoy being with other cyclists, as well as the cycling experience itself. While about half of all the runners claimed that running is "most enjoyable," the other half saw running as a way to keep fit or support another sport. Fewer than one-third of the cross country skiers felt cross country skiing was enjoyable. In my interviews with them, most cross country skiers stated that skiing is "hard work which is rewarding," but not necessarily "enjoyable."

Cohesion

Overall, the cyclists exhibited the highest levels of athletic collectivity cohesion. That is, they were most likely to feel they had commonalities with their fellow same-sport athletes. This is contrary to what one would expect, given the leisure locale of cycling, which is varied and not confined to specific terrain (as is in the case of downhill skiing and cross country skiing). In interviews, I learned that the cyclists frequently cycled, but seldom participated in other sports. Since they spent their leisure time as cyclists, rather than also as runners, skiers, sailors, etc., they had more homogeneous exposure to their co-athletic groupings (cyclists) than other athletes. Furthermore, since many cycled with others (at least some of the time), their exposure to other cyclists was frequent. This frequent exposure perhaps enhanced their feelings of commonality with other cyclists. The cyclists were also the most likely to feel that their sport was enjoyable.

Cyclists experienced stronger feelings of commonalities with other cyclists than did downhill skiers. Perhaps this is due to the downhill skiers' participation in other sports, such as cross country skiing, cycling, running, tennis, golf, and swimming. They participate frequently in many sports; hence those who ski most frequently were no more likely to feel similarities with other skiers than were those who skied less frequently. Through interviews, it was determined that "serious cyclists" as many cyclists referred to themselves, participated primarily in cycling. Any other sports participation was done in order to strengthen the individual in order to become a more proficient cyclist (activities such as running, weight lifting, etc. were

mentioned). Essentially, cyclists felt that they belonged to a "tightly-knit group" of cyclists.

Runners also felt less strongly about having commonalities with other runners. Those who ran most frequently were likely to feel commonalities with other runners. Most runners do not participate frequently in other sports, except for cycling and swimming. This participation may be related to triathlon participation, in which athletes run, swim and cycle.

Lastly, the cross country skiers were least likely to feel commonalities between themselves and fellow cross country skiers. In interviews, I learned that cross country skiers were least likely to participate with others. If they did, they still viewed it as skiing alone, due to the nature of the sport. The lack of interaction and contact between skiers during skiing may produce fewer feelings of commonality. The cross country skiers enjoy many sports, such as downhill skiing, running, golf, swimming, and hiking, and may therefore be exposed to many different types of athletes. Only if the cross country skier skied frequently (over twenty-one days annually) did he feel strongly that there existed feelings of commonality between himself and other cross country skiers.

Participation and Commitment

The cyclists tend to participate most often in their sport, followed by the runners, downhill skiers, and finally the cross country

skiers.²³ The cyclists generally find little time for other sports, whereas the other athletes have varying interests in several athletic activities. Perhaps this is the reason that not being able to cycle would greatly affect the cyclists as individuals, and affect their lifestyles almost as much. The runners, downhill skiers, and then the cross country skiers felt that their sports affect them as individuals, but not as strongly as the cyclists. Since these athletes participated in various sports, it is not surprising that in interviews, the runners, cross country skiers, and downhill skiers admitted that they would just find another sport if they could not participate in theirs.

Next to the cyclists, the downhill skiers felt that not skiing would affect their lifestyles a great deal. This is not surprising, since downhill skiers seem to picture skiing as a total social experience, including apres skiing activities and talking with friends about skiing long after a trip is over. The absence of the sport would affect the runner's or cross country skier's lifestyle less markedly than the cyclist's or the downhill skier's. Since runners and cross country skiers are likely to practice their sport alone, they may not experience the camaraderie and enjoyment shared with others, as both cyclists and downhill skiers. This may be the reason that running and cross country skiing seems to affect the lifestyles of the athlete less dramatically than cycling and downhill skiing.

Commitment by the athlete to participate in her sport in spite of pain may be one interesting way to view commitment of the individual to

²³Of course, in running and cycling the athlete has a better chance of participation year-round. In order to cross country or downhill ski, one must find snow covered terrain.

her sport. While both cyclists and runners state that they would be willing to endure more pain than they have experienced, the reverse is true of the downhill and cross country skiers. About one-fourth (27 percent) of the cyclists have endured "moderate" or greater levels of pain as a result of cycling. But nearly half (43 percent) would be willing to endure moderate pain. The runners feel similarly. This may be due to the way runners and cyclists perceive pain. Discomfort in cycling is, according to bicycling books and articles, largely due to equipment malfunction or misfit. Muscle strain and taxation is normal, and should be expected in cycling. Running books and articles tend to view pain as normal, and speak of "hitting the wall" -- taxing oneself to a point where one actually feels euphoric after having experienced total exhaustion or taxation of the body and mind. Running articles also constantly mention "running to a point of aerobic capacity minus 20 percent." This concept brings to mind a state where the individual is taxed to a level where pain may indeed be present. In both running and cycling, pain is not perceived as bodily discomfort, but instead as part of the given activity which is inherent in the sport, and therefore not really "bad."

For downhill and cross country skiers, another experience is more prevalent. (See Table 10.) Well over half (60 percent) of all cross country skiers have experienced moderate pain while skiing. Only 15 percent stated they are willing to do so! When queried, cross country skiers stated that skiing was "hard work, and enjoyable, but not always painless." Many skiers pointed out that the benefits well outweighed the cost of pain. The downhill skiers echoed this belief. An astounding 77

percent affirmed that they had experienced at least moderate levels of pain, and only 35 percent did so willingly. Like their cross country counterparts, downhill skiers noted that the pain involved in downhill skiing was well worth their tolerance, since downhill skiing was so rewarding and contributed to them as individuals, as well as their lifestyles. In fact, during interviews, many skiers revealed they were proud of overcoming pain and injuries which occurred as a result of skiing. In an emergency room in a Colorado ski area, it was determined that skiers who were seriously injured (having suffered broken bones and cuts requiring stitches, for example) seemed at least somewhat eager to talk of "how it all happened," and readily exchanged information with one another and with the friends of those injured. Injuries and pain were "battle wounds" and were considered praiseworthy.

Experiences with pain in sports may be linked with views of pain. (See Table 10). The downhill skiers are most likely (92 percent) to agree that pain is a normal part of sports. About 83 percent of the cross country skiers, 75 percent of the cyclists, and 74 percent of the runners concur. Most athletes agree that participating in a sport may result in pain or injury. Furthermore, over three-fourths of both the cross country (78 percent) and downhill (79 percent) skiers feel that they would not quit skiing if they thought they could be seriously hurt. The skiers admitted that they could get hurt, but that the enjoyment they experienced far outweighed the risk. Some skiers who had been seriously hurt were admired by others for overcoming their injuries and skiing again. Neither the runners nor the cyclists were as anxious to continue their sports if they thought they could be seriously injured. Only 33

percent of the runners and cyclists would be willing to do so. Since relatively fewer cyclists and runners were likely to consider pain as a normal part of sports, this is not surprising. Runners and cyclists are intent on reducing pain and injuries, and this is readily reflected in numerous books and articles which educate runners and cyclists in ways to reduce or eliminate injuries and/or pain.

Self-concept

Runners tend to have high opinions of themselves. More than 99 percent agreed that they had a number of good qualities. Comparatively, 92 percent of the downhill skiers, 95 percent of the cyclists, and only 73 percent of the cross country skiers felt similarly. Only 88 percent of the cross country skiers indicated that they were "satisfied with themselves," compared to 94 percent of the cyclists, 91 percent of the runners, and 91 percent of the downhill skiers. One might speculate about the slightly lower self-opinions of the cross country skiers. The cross country have the highest incomes of the four athletic collectivities. I learned through interviews that they are the most likely to own their businesses, and they described themselves as critical, hard-working, and driven to perfection. When asked if they often seek perfection in their activities (including work), 94 percent agreed that they did. Relatively smaller percentages of the downhill skiers (76 percent), runners (78 percent), and cyclists (79 percent) agreed.

Beliefs about "locus of control" revealed some very different attributes between the collectivities. While only 18 percent and 20 percent of the downhill skiers and cross country skiers (respectively)

felt they would rather "decide things when they come up than always trying to plan ahead," about half of the runners (41 percent) and cyclists (53 percent) felt similarly. Thus runners and cyclists may be more "spontaneous" than the skiers. Cyclists and runners tend to be older and slightly less affluent than the skiers. "Planning ahead" may be a function of age and/or affluence. Those with higher incomes may be more deliberate planners. Thus, there are many similarities and differences between the four athletic collectivities when compared on the bases of socioeconomic characteristics and social-psychological variables. The next chapter investigates which type or types of variables best distinguish between them.

CHAPTER VI

DISCRIMINANT ANALYSES: DISTINGUISHING CHARACTERISTICS OF ATHLETIC COLLECTIVITIES

One of the primary objectives of this study is to determine the distinguishing characteristics of the four different athletic cohesion of collectivity. Up to this point, I have compared the relations of variables and tested hypotheses within each collectivity. I have compared athletic collectivities on the basis of bivariate analyses, but I have not as yet compared all four athletic collectivities with one another "at once" (by using one statistical analysis which has the capability of comparing four "groups" simultaneously). Since sociological interests are concerned with groupings and the comparison of collectivities, one such concern is applied to athletic groupings in this research. I now address another concern: how to best distinguish between athletic collectivities. I use discriminant analysis to determine which variables or combinations of variables allow one to do this. The variables which best distinguish between the collectivities will be those which allow the most precise prediction of collectivity membership, knowing nothing else. And, as I will demonstrate, those variables turn out to be all of those I have used in the research so far.²⁴

It is important to note that the four collectivities of downhill

²⁴Discriminant analysis will also help determine if the questionnaire has adequately discovered distinguishing characteristics of each athletic group.

skiers, cross country skiers, runners, and cyclists act as one dependent variable which has four categories. Selected combinations of social-psychological variables as well as socioeconomic characteristics are used as independent variables which enable distinguishability between the athletic collectivities. These combinations allow differing extents of correct distinguishability of a given athlete into his respective athletic collectivity. The attempt to distinguish between the athletic collectivities is the main thrust of this chapter. It should be pointed out that sports plays a mediating function in bureaucratic society. Through discriminant function analyses, we will find that social psychological characteristics of athletic collectivities allow distinguishability between collectivities. By virtue of understanding distinguishability of collectivities on different bases (as suggested by patterns of collectivity variable differences), we may further understand what functions sports play in bureaucratic society, and if these functions are similar or different for each collectivity.

Socioeconomic Characteristics

Since sociologists traditionally use socioeconomic and demographic characteristics to compare groups and individuals, I first examine the four athletic collectivities with respect to age, sex, marital status, race, income, and education. The discriminant analysis of these

variables yields three functions²⁵: (1) income and education; (2) race and age; and (3) sex and marital status. Although three functions substantially predict athletic collectivity membership (see Table 24, below), they fail to group athletes into their respective athletic collectivities 54 percent of the time (see Table 25, below). This means that one would have less than a "50/50" chance of correctly grouping all athletes into their sports collectivity using socioeconomic characteristics alone, which is not enough of a "chance prediction" to warrant use. In the samples of the four athletic groupings, one should recognize that the range of socioeconomic characteristics found is not representative of a larger, "universal" sample. For example, I have included young participants (students) who have high levels of family income, and low levels of education. Social class may be higher for these individuals than that which is represented by levels of education. The means used in this research were insufficient for the determination of socioeconomic characteristics of individuals. Since socioeconomic characteristics may not reflect the wider ranges of scores found in a random sample of athletes (throughout the United States), the social and psychological variables may be more "apparently different" in the four groupings whereas socioeconomic characteristics may appear to be relatively similar (and therefore, not a good measure of distinguishability).

Based on socioeconomic and demographic characteristics alone, the cross country skiers are most distinguishable. Using the three

²⁵A function may be compared with a factor in factor analysis. It is a "composite variable" created by the discriminant analysis.

socioeconomic/demographic functions, 64 percent of the cross country skiers would be grouped correctly. The cross country skiers have the highest annual incomes of all four athletic collectivities, the fewest number of married participants, and almost all are white (see Table 5, Chapter V). Only 52 percent of the runners would be correctly grouped. The runners have the lowest annual incomes but the highest levels of education. A smaller 46 percent of the cyclists and only 32 percent of the downhill skiers can be correctly classified based

TABLE 24

Discriminant Analysis of the Socioeconomic and Demographic Variables: Canonical Discriminant Functions Evaluated with Group Centroids

	XC Skiers (n=525)	DH Skiers (n=798)	Cyclists (n=260)	Runners (n=112)
Function 1**: Income and Education	-.77065	.18931	.46475	.77479
Function 2**: Race and Age	-.07624	.14430	-.18249	-.20092
Function 3*: Sex and Marital Status	.01465	-.00102	-.32847	.11077

*p < .01
**p < .001

on the socioeconomic functions. While over half of the cyclists were married, and over three-fourths are males, as a collectivity they lie between the cross country skiers and runners in distinguishability on the basis of socioeconomic characteristics. Although cross country skiers are relatively more distinguishable, socioeconomic characteristics alone do

not provide sufficient bases for classification of the four athletic collectivities.

TABLE 25

Percent Accurate Prediction of Group Membership by Discriminant Analysis, according to Variable or Variable Set

	All (n=1695)	XC Skiers (n=525)	DH Skiers (n=798)	Cyclists (n=260)	Runners (n=112)
<u>Variables:</u>					
Socioeconomic & Demographic Characteristics	46%	64%	32%	46%	52%
Cohesion	49	62	42	61	37
Pain Attitudes	42	68	17	57	59
Self-esteem	51	36	69	36	33
Locus of Control	75	74	77	46	81
All but Socioeconomic & Demographic Characteristics	72	66	64	62	81
All but Level of Participation	71	74	65	61	84
All but Self-esteem & Locus of Control	59	69	50	33	78
All variables used in this research	78	81	73	69	83

In addition to socioeconomic and demographic characteristics, I also examine the following sets of variables to see whether they improve the ability to distinguish between athletic collectivities: cohesion variables; commitment and participation variables, including level of participation, pain attitudes and the perceived effects of athletic

participation on self and lifestyle; and self-concept variables, including the locus of control and self-esteem variables. I will examine several combinations of these variables to determine which sets best distinguish between collectivities.

Cohesion Variables

The three cohesion variables are: first, the feelings of similarity between athletes who participate in the same sport; second, the feelings that athletes have something in common with all other same sport athletes; and, third, the feeling that athletes generally look, feel, and are healthier than non-athletes. These three variables form three functions, the first and second of which substantially distinguish between athletic collectivities (see Table 26, below). These functions accurately distinguish between the collectivities about 49 percent of the time (see Table 25). A look at canonical discriminant function analyses evaluated at group centroids indicates that Function 1 allows discrimination for cross country skiers, and fails discrimination for cyclists downhill skiers, and runners. Functions 2 and 3 add discrimination for downhill skiers. Function 3 allows discrimination for runners.

The cyclists and the cross country skiers are most distinguishable on the basis of the cohesion functions (see Table 25, above). This is evident in the patterns of responses to questionnaire questions, and is reported in Table 26. (Please note the differences in pattern of response for the cross country skiers, and the similarity in responses of the cyclists.) One could accurately distinguish just over 60 percent of each collectivity from the others based solely on cohesion characteristics. Since the cyclists show the strongest feelings of

commonality with other cyclists (see Table 7, Chapter V), and the cross country skiers show relatively the lowest levels of perceived

TABLE 26

Discriminant Analysis of the Cohesion Variables:
Canonical Discriminant Functions Evaluated
with Group Centroids

	XC Skiers (n=525)	DH Skiers (n=798)	Cyclists (n=260)	Runners (n=112)
Function 1*: The feeling that athletes share something in common with other same-sport athletes	1.64123	.46496	.31397	-.17647
Function 2*: The feeling that athletes look and feel better than non- athletes	.17221	1.28546	.35923	-.19807
Function 3: The feelings of similarity between same-sport athletes	.60716	.70474	.34458	.41579

*p < .001

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commonality with other skiers, these collectivities are most distinguishable. Runners and downhill skiers fall between the cyclists and cross country skiers, and are therefore less distinguishable based on cohesion.

Pain Attitudes

From the pain attitude variables three discriminant functions form: (1) the belief that pain indicates athletic effort (2) the belief that injury is inevitable in athletic participation, and (3) the beliefs

TABLE 27

Discriminant Analysis of the Pain Attitude Variables:
 Canonical Discriminant Functions Evaluated
 with Group Centroids

	XC Skiers (n=525)	DH Skiers (n=798)	Cyclists (n=260)	Runners (n=112)
Function 1*: The belief that pain indicates athletic effort	-.47165	-.15805	.85814	1.02650
Function 2*: The belief that injury is inevitable in athletic participation	.18846	-.15188	-.27569	.19512
Function 3*: The beliefs that pain is a normal part of sports; and that the athlete would stop participating because of probable injury	.06243	-.05815	.30007	-.07465

*p < .001

that pain is a normal part of sports and that the athlete would stop participating in the face of probable injury. All three functions substantially distinguish between the collectivities (see Table 27). A look at discriminant function analyses indicates that Function 1 permits good discrimination for cyclists and runners, and fairly good discrimination for cross country skiers. Function 2 slightly adds to the discrimination for cyclists.

Overall, using pain attitudes, 42 percent of all athletes could be correctly classified or distinguished (see Table 25). A relatively high

68 percent of the cross country skiers would be correctly classified. A relatively fewer 58 percent of runners and 57 percent of cyclists would also be correctly classified. But, only 17 percent of the downhill skiers would be correctly classified if "pain attitudes" were the only criteria.

It is pertinent to remember that there is a marked difference between the skiers, and the runners and cyclists in pain attitudes. The downhill and cross country skiers are more likely to think of pain and possible injuries as a normal part of sports participation (see Table 10, Chapter V). While 85 percent of the cross country skiers and 70 percent of the downhill skiers feel that pain is an indication of athletic effort, only 39 percent of the runners and 25 percent of the cyclists felt similarly. The relatively greater distinguishability of the cross country skiers based on pain attitudes is most likely due to their high level of agreement with this as well as other pain attitudes. Discriminant analysis, however, shows that although "pain attitudes" distinguish both the cross country and downhill skiers, they alone do not provide sufficient information to correctly distinguish among all the athletes.

The Self-concept Variables

Since I have already divided the notion of self-concept into two areas, "self-esteem" and "locus of control," I deal with these separately.

The Self-esteem Variables

The self-esteem variables²⁶ form three functions: (1) the beliefs that the individual possesses a number of good qualities, and desires to not be someone else; (2) the beliefs that the individual can do things as well as others, and does not feel useless at times; and (3) the beliefs that the individual feels sure of himself when others disagree, is satisfied with himself, and he disagrees that there are a lot of things about himself he would like to change. Only the first two are substantial and necessary in the analysis (see Table 28, below). A look at canonical discriminant functions evaluated at group centroids indicates that Function 1 allows fairly good discrimination for cyclists and runners. Function 2 allows one to discriminate the cross country and downhill skiers. Function 3 adds to the prediction for cyclists only. Considering the self-esteem variables, one can accurately classify athletes into the proper athletic collectivity 51 percent of the time (see Table 24). While a relatively high 69 percent of the downhill skiers would be correctly classified using the "self-esteem" variables, only 33 percent of the runners, 36 percent of the cross country skiers, and 36 percent of the cyclists would also be correctly classified.

This is most likely due to the downhill skiers' high level of agreement with the statement, "I feel that I have a number of good qualities," and an even higher level of agreement that "I am able to do things as well as most other people" (see Table 18, Chapter V).

²⁶Although I use the term "self-esteem" here, I refer to the group of variables which I termed "self-concept" in the previous chapter: self-esteem, self-acceptance, self-confidence, and relationships with others. I do this only for the sake of clarity, since I am treating "locus of control," which I claim is part of self-concept, separately from self-esteem.

Relatively higher levels of agreement with the latter than with the former are also apparent in the cross country skiers. But the percentage of cross country skiers who agree with both statements is much lower than

TABLE 28

Discriminant Analysis of the Self-esteem Variables:
Canonical Discriminant Functions Evaluated
with Group Centroids

	XC Skiers (n=525)	DH Skiers (n=798)	Cyclists (n=260)	Runners (n=112)
Function 1*: The beliefs that individual possesses good qualities; and desires not to be someone else ²⁷	.39669	.14378	-.85940	-.88277
Function 2*: The beliefs that the individual can do things as well as others; and does not feel useless at times	.35483	-.29240	.12561	.12542
Function 3: The beliefs that the individual feels sure of him/herself when others disagree; is satisfied with him/herself; and that there are not a lot of things about her/him- self s/he would change	.00054	.00018	-.22380	.07964

*p < .001

that of the downhill skiers. While equally high percentages of the cyclists agree with both statements, almost all (99 percent) of the

²⁷This item was recoded to reverse it from "desiring to be someone else."

runners feel that they have a number of good qualities, but slightly fewer feel that they do most things as well as other people. The patterns of agreement with both statements are most apparent in the downhill skier population, and since these two variables contribute to the primary discriminant function for "self-esteem variables," the downhill skier population may be most distinguishable as a result.

In the case of the downhill skiers, having "self-esteem" variable input is beneficial, but it is far less valuable in the case of the other athletic collectivities. The information gained solely from the "self-esteem" variables, therefore, is not sufficient to correctly distinguish between athletic collectivities.

The Locus of Control Variables

The locus of control variables form three functions: (1) the beliefs that individuals can influence the things that happen to them, and that planning ahead is useful; (2) the beliefs that the individual experiences more good luck than bad, and is usually able to make important decisions; and (3) the beliefs that the individual's life will work out as he/she desires, the individual controls his/her fate, possesses more will power than most, and prefers to make decisions when needed versus planning ahead. All three functions are substantial, and therefore all are necessary to best predict collectivity membership (see Table 29, below). Overall, using "locus of control" variables, it is possible to correctly classify athletes into proper collectivities 75 percent of the time (see Table 24). A very high 81 percent of the runners would be correctly classified using these variables, as would 73

percent of the cross country skiers, and 77 percent of the downhill skiers. But only 46 percent of the cyclists would be correctly classified.

TABLE 29

Discriminant Analysis of the Locus of Control Variables:
Canonical Discriminant Functions Evaluated
with Group Centroids

	XC Skiers (n=525)	DH Skiers (n=798)	Cyclists (n=260)	Runners (n=112)
Function 1*: The beliefs that the individual can influence things that happen to them; and that planning ahead is useful	-1.25509	.71159	-.98904	.74802
Function 2*: The beliefs that the individual has more good luck than bad; and is usually able to make important decisions	-.03070	-.37002	.21822	1.06191
Function 3*: The beliefs that the individual's life will work out as he/she desires; the individual controls his/her fate; possesses more will power than most; and prefers to make decisions needed versus planning ahead	.16911	-.00939	-.94733	.07775

*p < .001

A look at canonical discriminant functions evaluated at group centroids indicates that Function 1 allows fairly good discrimination for all the athletic collectivities. Function 2 allows one to discriminate

the runners only. Function 3 allows best predictions for the cyclists. All three functions allow good prediction capabilities for all collectivities except the cyclists. Runners, 81 percent of whom strongly disagree with the statement "there's not much use in my planning ahead, since there's usually something that makes me change my plans," show higher levels of "plan ahead" than the other athletic collectivities (see Table 29, above). Just over three-fourths (78 percent and 76 percent, respectively) of the cross country and downhill skiers feel similarly, but only 65 percent of all cyclists believe in "planning ahead." Only 8 percent of the downhill skiers and 10 percent of the cross country skiers agree with the statement "most people have little influence over things that happen to them." A slightly higher 13 percent of both cyclists and runners also agree. The downhill skiers' relatively higher levels of agreement that "most people have little influence over things that happen to them," and lower levels of "plan ahead," as compared with more intermediary positions of other athletic collectivities, may permit distinguishability on the basis of Function 1. While only 8 percent of the runners felt that they were the kind of person who has more bad luck than good, other collectivities of athletes showed a proportionately higher level of agreement that "I seem to be the kind of person who has more bad luck than good." That is, about 35 percent of the cross country skiers, 14 percent of the downhill skiers, and 33 percent of the runners felt that they were the kind of person who has more bad luck than good.

Function 3 allows one to best distinguish cyclists. Cyclists, who have relatively high levels of the feeling that they are largely masters of their own fate, also exhibit highest levels of feelings that they

seldom have trouble making up their minds on big decisions. In conjunction with these feelings, they distinguish themselves from other athletic collectivities as a result of their relatively pessimistic view that "I have always felt pretty sure that my life would work out the way I wanted it to," where only 53 percent felt that this was the case.²⁸

Multiple Variables

Considering the self-concept factors ("self-esteem," "self-acceptance," "self-confidence," "relations with others," "locus of control," "luck," and "youth"), the "pain attitudes" factor, the "cohesion" factor, the perceived effects of participation on self and lifestyle, training, level of participation, and socioeconomic and demographic characteristics (age, sex, race, income, education, and marital status) together, one can correctly predict collectivity membership 78 percent of the time²⁹ (see Table 24). Three functions formed from these variables: (1) the "pain attitudes," "self-esteem," "relations with others," and "cohesion" factors, and level of participation, income, education, age, race, and marital status;

²⁸It must be noted that with discriminant function analysis, the combinations of variables used in functions allow statistical analyses on the basis of patterns of responses, or combinations of "high/low" responses to various variables.

²⁹Because level of participation, perceived effect of participation on the self, and perceived effect of participation on lifestyle are single variables, they cannot be used in discriminant function analyses separately as can the other variables. But since I've used them in this research, I will include them with the discriminant function analysis which considers all the variables at once.

TABLE 30

Discriminant Analysis of All the Variables used in this Research:
 Canonical Discriminant Functions Evaluated
 with Group Centroids

	XC Skiers (n=525)	DH Skiers (n=798)	Cyclists (n=260)	Runners (n=112)
Function 1*: "Pain Attitudes;" "Self- esteem;" "Relations with others;" "Cohesion;" Level of participation; income; education; race; age; and marital status	-1.27465	.47185	.42326	1.82380
Function 2*: "Self-acceptance;" and training.	.27353	-1.4305	.66805	.72424
Function 3*: "Luck;" "Locus of control;" "Self- confidence;" "Youth;" perceived effects of athletic participation on self and lifestyle; and sex	.11592	-.03222	-1.44261	.28634

*p < .001

(2) training and the "self-acceptance" factor; (3) the "luck," "locus of control," "self-confidence," and "youth" factors, as well as the perceived effects of participation on self and lifestyle, and sex. All three functions are necessary to best distinguish between the four collectivities (see Table 30, below). Taken together, these functions provide a profile from which one can accurately determine collectivity

membership 78 percent of the time. (See Table 25.)³⁰

One may ask if it is necessary to utilize all the variables to best distinguish between the athletic collectivities. I performed additional discriminant analyses, deleting one or more variable or variable sets, to determine the impact this might have on distinguishing between collectivities. Without certain sets of variables, the capability of accurately predicting collectivity membership becomes more limited. For example, using all but the socioeconomic and demographic variables, one can accurately predict collectivity membership 61 percent of the time (see Table 24). Without knowing level of participation, one can accurately distinguish between collectivities only 71 percent of the time. Not having the "self-concept" factors limits predictions for accurate collectivity membership to only 59 percent of the time.

The functional analyses suggest that all the variables and variable sets I used in this research are necessary to most accurately distinguish between athletic collectivities. Each accounts for a substantially distinguishable characteristic of one or more athletic collectivity. These sets of variables include, but are not best represented by, socioeconomic and demographic characteristics. This is a substantial

³⁰This also indicates that, while dealing with many influences which determine the likelihood of athletic group membership, the questionnaire I used in this research allows considerable insight into the differences between athletic groups. Seventy-eight percent of the time, those questions with which I have primarily dealt allow accurate predictions of the athletes into correct athletic groups. The instrument could, at least theoretically, be improved by adding variables so that one could make accurate predictions of athletic group membership 100% of the time. As is, however, the questionnaire should be considered a useful instrument for distinguishing between the athletic groups studied in this research. It provides sets of variables which allow us to distinguish between athletic groups.

discovery since socioeconomic and demographic variables alone traditionally have been used in the social sciences to predict collectivity membership. The most profound variables for distinguishing the athletic collectivities from each other are those subsumed by the two "locus of control" factors. The least valuable are those of the "pain attitudes" factor, although all three factors afford high levels of accurate predictions for specific athletic collectivities. By examining canonical discriminant functions evaluated with group centroids, I determine that Function 1 allows best collectivity predictions for runners and cross country skiers, Function 2 for the downhill skiers, and Function 3 for the cyclists. The runners are most distinguished when considering all the variables except level of participation. The downhill skiers are most distinguished by using only "locus of control." The cross country skiers and cyclists are most distinguished using all of the variables contained in this research.

Since I have shown that there are marked differences between athletic collectivities, and athletic collectivities can actually be distinguished on the basis of these differences, I now draw some conclusions.

CHAPTER VII

CONCLUSION

The interests in sociology as a scientific discipline emerged at the end of the nineteenth century given the nature of the rapid social change in modern society and resultant impact of this change on society. Since the industrial revolution there have been a number of sociocultural changes dependent on the new economic realities. Thus, for example, with the increase in earning power together with a shorter work week and technological innovation, people have had more time and money to pursue such diverse interests as the productions made by mass culture: radio, movies, television, and participation in sports as either spectators or participants. This study is concerned with the social and psychological influences sports participation has on individuals.

Historically, social theorists such as Marx, Weber, Durkheim, and Shils concerned themselves with the social consequences of these major changes, especially due to the emergence of industrialization and the flourishing of capitalism. Marx described the predominance of material conditions over culture in his preface to A Contribution to the Critique of Political Economy (Dobb, 1971). The culture and all other systems including political, educational, and social systems depended on a material base. Changes in the material base (such as those experienced during the industrial revolution) produce cultural changes (such as an emphasis on sports participation during leisure time). In America, the

industrialized society has seen a marked increase in affluent classes with disposable incomes -- incomes which may be directed toward sports and sports-related activities. Further, for Marx, capitalism creates alienation, loss of self and estrangement from others.

Weber thought that industrialization also brought new problems to society and individuals. He saw bureaucracies as an inevitable consequence of rationalization. Bureaucracies, he pointed out, were extremely rational in nature but systematically applied impersonal and specific rules and procedures to obtain efficient coordination within modern organizations. Thus human life was made gray and drab, predictable and matter of fact. Modern man was locked in the iron cage of rationalized society. Individuals needed to break out of the the "iron cage" of the bureaucratic society, and games (as developed under feudalism) could play such a role. Initially, Weber noted that "games" had long been important social activities in feudal society, and studied feudalism to explore these activities (Gerth and Mills, 1958). The feudal system used games to inculcate primary abilities and qualities of character. The game was more than just a pastime; it was a natural medium in which physical and psychological capabilities of the human being became supple. The practice of "games" needed resurrecting in an updated form, applicable to the needs of the individual living in the modern, bureaucratic society. The Weberian concept of games as a vehicle for physical and psychological aptitude beyond the workday bureaucratic role is most interesting, since sports bridges socioeconomic as well as work-related role gaps in modern society. Both rich and poor, black and white, male and female athletes share similar experiences through sports

participation. These individuals experience "victories" of achievement in their sport, allowing them, according to Weber, more "supple" physical and psychological capabilities, despite living in a bureaucratized society.

In simple, traditional societies, people shared similar attitudes and values. They had similar life experiences. Durkheim called this common identity "mechanical solidarity." In industrial societies, workers experience job specialization. The diversity of jobs requires a recognition by workers that they need one another to survive, as in the case of the organism where all the specialized parts are different but needed for the survival of the organism. Durkheim believed that complex societies are bound together by "organic solidarity," or the reciprocal needs of people. While functional needs of individuals may be met via "organic solidarity," social and emotional needs may not. Durkheim was very concerned with the individual's need for solidarity. This solidarity or degrees of common definition of the situation may be a function of groups or organizational subcultures. In his Division of Labor in Society, Durkheim states that each group (organization) has a "culture." "Culture" defines rules which provide social roles for individuals. There are distinct cultural differences. If sports organizations have culture, they actually provide rules and roles for their participants. According to Durkheim, primary groups are sources of nurturance and stability for individuals living in modern industrialized, and often "fragmented" societies. Cohesion within sports collectivities and subsequent involvement in these normative systems provide individual athletes a framework of stability and security. Durkheim hoped that the

occupational groupings of the modern industrial society would become cohesive groupings through which the individual maintained social solidarity or what some social scientists have called relevant mediating groupings.

Shils noted that there was a new nature of social life that emerged from feudal society to take shape in modern industrial society. An expansion of feudal society's small elite class and large peasantry to modern industrial society's larger, more affluent classes had economic implications. In modern industrial society, Shils pointed out that there exists a larger "elite" class of individuals who have disposable incomes and patterned leisure time enabling them temporal and financial means for athletic participation. Thus the kinds of people who have the necessary resources of time, money, or both has been greatly extended during the past one hundred years.

Through my research, we see that sports play a mediating function in modern, bureaucratic society. By using the discriminant function analysis, we found that social psychological characteristics of athletic collectivities permit distinguishability between collectivities. The discriminant function analyses reveal differences in social psychological variables by which we have accurately distinguished between collectivities approximately 80 percent of the time.³² Furthermore, the differences between collectivities become more apparent when viewed through the social psychological variables I have considered.

³²It should be noted that some of the distinguishability between athletic collectivities by using social psychological variables may be due to the "preselected" and somewhat similar socioeconomic characteristics between athletic collectivities.

Durkheim (1933, p.14) asserts that culture (athletic subculture, in our case) is a phenomenon of subgroups and the interaction of human beings. Social solidarity is the degree to which members of a grouping share a common definition of the situation. If social psychological characteristics of athletic collectivities permit distinguishability between the four collectivities, then we may look towards the discovery of "athletic culture," and the more precise characteristics of many athletic collectivities. Socialization is internalization and socialization is playfully interacting with other people. For individual "members," athletic "subcultures" provide the bases of socialization beyond the bureaucratic work-related cultures. As social scientists, we need to explore the "match" between individual needs and athletic collectivity characteristics. Whether an individual who has given social psychological characteristics gravitates towards a specific athletic activity, or the athletic collectivity socializes individual participants to act and react in given ways (or a combination of both), we, as social scientists must, to our best abilities understand this phenomenon. Furthermore, since leisure activities, especially sports participation has become accessible to most of the American population, the degree to which social psychological characteristics of sports participants becomes visible and a viable means of collectivity identity, a phenomenon second, perhaps, only to "work world influences" is occurring in our society. As social scientists, such a massive, important occurrence is certainly fertile grounds for better understanding of collectivities and individuals.

For example, one may wish to consider athletic participation in a

"subcultural" context. According to Shils (1957, pp.103-145), values are critical independent variables in accounting for differences within our diverse modern society. In industrial society, the number of shared values are few, and sports and athletics provide vehicles for extensive common values among those who participate in a given activity. We have seen that the four collectivities of athletes exhibit different "common values," and all collectivities in this research show enhanced feelings of cohesiveness accompanying frequent participation. An example of different common values may be seen in the way in which different collectivities see pain. Pain and injury as a result of sports participation for downhill skiers, is inevitable, and a challenge for the individual to overcome. For cross country skiers, pain is a signal that the body is working hard -- perhaps beyond its limits. Runners see pain and pleasure as a "mixed media" in which one runs. Cyclists view pain as a function of equipment misfit or failure. Such values are common within athletic commonalities, and permit distinguishability between them.

Since subcultures define rules which provide roles, which in turn dictate relationships between individuals, athletes find their roles defined by the athletic collectivity. Living in an efficient, specialized, bureaucratic society (Weber), where work positions are ranked in importance in hierarchical fashion, the role of "athlete" permits an additional environment for the individual in which she can find athletic solidarity (Durkheim), perform, and hopefully succeed at one level or another.

The concern with leisure time activities speaks to some of the

issues raised by Marx, Weber, Durkheim, and Shils.³³ In short, work in a capitalistic society involves alienation of individuals from one another. Meaningful social relations and a means of self-determination are achieved through sports participation. For athletes, roles are defined and role-relevant behavior is based on athletic participation. Again, many work world differences between individuals are "bridged" because of athletic participation. Furthermore, sports participation provides athletes with primary group needs, such as nurturance, cohesiveness and support. The impact of sports on our society becomes very evident when one examines the skyrocketing annual expenditures on sports and related interests. What previous research has not made clear is the impact that sports participation has on the athlete. My research not only considers how sports influences individuals, but also whether different sports collectivities can be distinguished from one another on the basis of social and psychological differences.

As noted in the review of the literature, certain salient aspects in sports participation may include cohesion, commitment, and self concept of the athletic participant. This research examines the relationships between cohesiveness, frequency of participation, experience of lessons, pain perception, and self-concept of athletes within the collectivities downhill skiers, cross country skiers, runners and cyclists. If sports collectivities have distinct "cultures," and individuals within them inhibit distinct social psychological characteristics, the sports collectivity may be distinguishable on the

³³This dissertation does not attempt to critique political or economic theory.

basis of social and psychological characteristics of participants.

With these thoughts in mind, I review findings of this research on four athletic collectivities in an effort to summarize the effects sports has on individual participants -- their lifestyles, their thoughts about sports and other athletes, the extent of their participation, and their self-concepts.

From this research, I draw two basic conclusions. (1) Athletic collectivities exhibit differences (between collectivities) with regard to extent of participation, pain attitudes, feelings of grouping cohesiveness, aspects of self-conception, distinctive identities (collectivity Participation), as well as socioeconomic class. (2) By using these variables (or combinations thereof), it is possible to distinguish between athletic collectivities on the basis of social-psychological characteristics.

Athletic Collectivity Differences: Findings from the Tests of Hypotheses

Through the tests of hypotheses, one is able to more clearly understand the concepts of cohesiveness, pain attitudes, the effects participation is perceived to have on the individual's lifestyle and on the individual, the self-concept of the individual, and the level of participation of the athletes. The way in which each athletic collectivity views "their sport" and the ways in which individual participants view issues involved in sports participation (as was measured by variables in this research) yield much insight into the similarities and differences among sports collectivities, as well as the dynamics and interplay of issues concerned with sports participation.

The tests of the hypotheses further demonstrated that there are decided differences between athletic collectivities. These differences exist in terms of cohesion, commitment (measured via pain perception and extent of participation), and self-concept.

Cohesion

Denisoff and Wahrman (1978) have suggested that as a result of contemporary society's patterns of "organic solidarity," individuals need participatory and solidarity groupings to survive. Athletic collectivity membership meets this need, at least in part. Sports participation furthermore bridges the gaps found between those who occupy specialized positions -- allowing athletes feelings of commonality despite other differences in individual characteristics and lifestyles.

To expand this concept, Greg Stone (in Cheek and Burch, 1976) noted that sports provides a "coin of communication" among people who are otherwise dissimilar. Athletes who participate in the same sport may show greater variability in demographic and socioeconomic dimensions. They also show greater similarity of feelings regarding sports participation. They feel that this participation affects themselves (as individuals) and their lifestyle. They feel "commonalities" with other athletes who participate in their sport. Sports allows them a socially acceptable, expressive outlet which encourages communication between individuals on the basis of sports-related similarities.

In the athletic activities I examined, athletic group cohesion was enhanced by athletic activities. In the case of downhill skiers, those who experienced instructions in skiing were likely to feel "commonalities" with other skiers, while cross country skiers, cyclists,

and runners who participated most frequently in their sport tended to feel greater "commonality" with other same sport athletes.

One may question why instructions yield higher levels of cohesion for downhill skiers, than for cross country skiers, cyclists, and runners. In different sports, there are varied amounts of instructions necessary to perform with "marginal proficiency." Downhill skiing requires more lessons than other sports to become proficient enough to actually ski. Cross country skiing is akin to running or walking on skis, and bicycling can be learned in a relatively short period of time. Running is a natural gait. Lewin (1935) noted that the group's boundaries may be directly related to the "we" feeling in a collectivity, or the collectivity's cohesiveness. Cohesive collectivities tend to exhibit distinction between members and non-members. Cohesive collectivities with well-defined boundaries are difficult to enter, but there is greater value attached to belonging to it. Lessons create boundaries for the downhill skier. Those who have taken lessons and have learned to ski are recognized as skiers by other skiers. There are different levels of proficiency recognized by skiers: beginner, intermediate, and advanced.

Such distinctions do not appear among the cyclists, and are far less distinctive categorizations in cross country skiers. The runners, cyclists, and cross country skiers tend to feel "more a part of their sports collectivity" as a result of increased participation. Higher collectivity status is a result of increased frequency and/or duration in their sports participation. Homans (1950) notes that stimuli which make up an individual's status include the kinds of rewards that individual

receives. He states that activities and rewards are closely related to the participant's status in the social organization. In the case of the downhill skier, performing an activity an untrained person can't afford her a higher status and greater reward from those individuals who recognize this skill. In the case of the other athletes -- namely cross country skiers, cyclists, and runners, those who participate most frequently (or participate for long periods of time, i.e. long distances) receive highest status.³⁴ Cross country skiers, cyclists and runners draw distinctions between "like me/not like me" on the basis of participation.

In summary, cohesion for the downhill skiers is a function of lessons: for the cross country skiers, runners, and cyclists, cohesion is a function of participation. In the case of all athletic activities, the more frequent the participation or instructions (which assume participation), the more the individual athlete participated in the sport, and the more he or she felt part of the collectivity of other athletes. In interviews, I determined that athletic participants noted differences in the way they thought, felt, and acted before being introduced to their sport and after. They tended to feel very much a part of their athletic collectivity and saw marked changes in themselves as individuals and their lifestyles. These changes were attributed by those interviewed as a result of sports participation.

Perception of Pain and Commitment

The nature of pain and injuries and their relationship to sports

³⁴I learned this through my interviews with the athletes.

participation is an interesting one. Insofar as sports activities may be strenuous, dangerous, or both, sports are governed by sets of expectations imposed on athletes by the athletic collectivity, so the individual sees himself as obligated to conform to the collectivity's norms. Olmsted and Hare (1978, pp. 65-81) point out that the extent to which the individual participates in a group is positively associated with the effect the group has on his attitudes and behaviors. Collectivities tend to impose "normative values, behavioral, and attitudinal structures" on their members. Social groups are made up of individuals who are recognized by others as members and who acknowledge this shared definition. Athletes who participate frequently in their sport realize their role as an athlete may include specific norms which have evolved through the athletic collectivity's expectations of individual athletes.

In the case of downhill and cross country skiers, one such norm is the acceptance of pain as a normal characteristic of sports. But downhill and cross country skiers really view pain differently. Downhill skiers accept pain as normal characteristics of sports participation. They believe that continued skiing can result in pain and injury. They link pain with athletic effort. They have no desire to stop participation despite a real risk of serious injury. Much of the media related to downhill skiing promotes skiing as challenging, dangerous, and risky. Horst Abraham (1983, pp. 1-21) a prominent ski-author and teacher, explains that pain is part of the challenge of downhill skiing. He reminds his readers that Americans enjoy participating (or watching) activities which push the body to "it's upper limits." Pain has a

"macho" aura about it since improvement and "meeting challenges" comes with pain. In interviews with downhill skiers, I asked if they had ever been in pain or injured as a result of skiing. Almost without exception, those who had been injured saw their injuries as "badges of courage." One man told me he had broken his leg in sixteen places, and he proudly noted that he skied the next season! Orthopedic leg braces (to aid prior injuries) are worn with pride on the outside of one's ski pants -- so the entire world can take note. Most skiers fully agreed that sooner or later, one generally suffers an injury as a result of skiing.

Cross country skiers have an entirely different perspective of pain and injuries, even though, like the downhill skiers, pain variables were substantially correlated with athletic participation. Of skiers that feel that pain is a normal part of sports participation, we find two distinct subgroups: those who feel their participation affects them and those who do not. Those who feel that participation affects them greatly tend to ski most frequently.

A closer look at the cross country skier as portrayed by interviews and books about sports participation yields further insight. Michael Brady (1982), a cross country competitor, stresses that pain is the body's signal that something is wrong. One should never, he cautions, ignore these signals. Most cross country skier magazines view pain similarly. In interviews, both those who felt that participation affects them greatly and those who did not viewed pain as "part of sports participation," but not a good part. Those who skied most frequently and felt that skiing affected their lifestyle tended to feel "uneasy" with pain and/or injuries. They realized that they could and probably would

experience some pain from cross country skiing, but they did not like the idea. They in no way alluded to a "macho" relationship between pain and athletic performance. They simply felt that occasionally pain was a "price one needed to pay" to be able to cross country ski. Others who felt skiing did not radically affect their lifestyles, and who tended to ski less frequently, saw pain as an "unfortunate part of skiing."

Cyclists and runners view pain differently. Cyclists and runners who view pain as a normal part of sports participation also perceive the effects of their sport on themselves very similarly to those who do not view pain as "normal" in sports participation. In other words, unlike the cross country skiers, those runners and cyclists who perceive personal effects due to their sport are not more likely to accept pain than those who do not perceive personal effects. Cyclists feel that if you participate in cycling long enough, you're bound to get hurt. Furthermore, cyclists tend to link pain with athletic effort. Tim Wilhelm (1980, pp. 79-8), a cyclist and author, notes that the body and bicycle should work as a unit. Pain in the body may be traced to improper adjustment of the bicycle. Injuries and pain are rarely mentioned in most cycling literature. In interviews, cyclists who cycled frequently and infrequently noted that although they had experienced pain in cycling, it was not really necessary. Cycling was viewed as dangerous (because of chances of falling), but more specifically, it was viewed as physical, exhilarating, and fun.

There is no correlation at all between level of participation and any of the pain variables for runners. This may be because of their unique perceptions of pain. It is a challenge to conquer. Jim Fixx

(1977, pp. 21-29) stated that it is possible to run without pain, but it is not possible to improve. When confronted with pain, the body wants to stop. Fixx notes that it is the mind that instructs the body to "push on." There is, therefore, an intimate relationship between pleasure and pain in running. Interviews with runners affirmed this. Most felt combined pain and pleasure -- usually intermixed -- while running. They felt that part of the challenge of running and the subsequent benefits were associated with meeting this challenge. Injuries were not seen as "badges of courage" (as in the case of downhill skiers), but results of clumsy or unfortunate happenings. Runners did not boast of their injuries.

To summarize, downhill and cross country skiers who view pain as "part of the game in most sports" are the same individuals who see themselves and their lifestyles altered by their sport. While downhill skiers view pain and injuries as challenges to overcome, yielding "badges of courage," cross country skiers are more likely to view pain and injuries as "necessary evils" of skiing. Most cyclists do not equate their "cycling efforts" with pain, although those who cycle frequently tend to feel more strongly that pain and athletic efforts are interrelated. Pain is equated with "signals" that should be checked-- especially as related to equipment malfunction or misfit. Runners do not generally distinguish readily between pain and pleasure. Since they sense both while running, and this sensation is a mixed painful/pleasurable sensation, they do not dwell on the issue of pain in running.

Commitment: Extent of Participation and
Effects on Individuals, Individual Lifestyles

The impact sports has on athletes varies in form and intensity from sport to sport. Again Olmsted and Hare's (1978) notion that the extent to which an individual participates in a group is positively associated with the effect the group has on the individual's attitudes and behavior is exemplified by athletes -- but in distinctive fashions.

For both downhill and cross country skiers, increased participation yields both higher levels of enjoyment, as well as, stronger feelings that skiing affects them greatly. In both cases, skiing does not substantially affect their lifestyles. For skiers, a sense of self-indulgence is achieved through skiing. This became apparent during interviews. The idea that "skiing is for me -- for my own self" was apparent when I prodded their thoughts regarding the benefits of skiing. Increased participation also increases proficiency for skiers. Increased proficiency results in pleasure and increased enjoyment of the sport.

In the case of the cyclists, increased participation is not perceived to affect the individual's lifestyle. Increased participation is however substantially correlated with increased enjoyment in cycling. Most cyclists agreed that if they could not cycle, they would find another sport. Even though they enjoyed cycling, many stated that there were many sports that they could enjoy. They did, however, enjoy being able to cycle as much as they were able.

Runners exposed another "athletic attitude." For runners, increased participation only substantially affected their lifestyles-- not themselves or their level of enjoyment. Runners run to stay fit, be

healthy, and enjoy this "feeling of fitness." Increased running translated to less time with family and friends. Since leisure time is finite, increases in running time cut into other activities. Not being able to run results in more unspecified leisure time. Most runners felt that if they could not run, they would seek other aerobic exercise to stay fit and feel good.

To summarize, Olmsted and Hare's notions of how the group may affect the individual athlete occurs through different mechanisms in different athletic activities. Both downhill and cross country skiers note higher levels of enjoyment and further impact on themselves through increased participation. Runners feel only changes in their lifestyles, and cyclists only experience enhanced enjoyment as a result of increased participation.

Participation and commitment in athletic groups can be seen as having rewards for its participants. Homans (1961) asserts that if an interaction (such as that experienced in an athletic collectivity) yields satisfying outcomes, it will be repeated. If it yields unsatisfying outcomes, it results in a psychological loss. The individual athlete is assumed to want to maximize his profits and minimize his losses. If participation yields a reward, he will tend to continue participating. In the cases of downhill skiers, cross country skiers, and cyclists, increased participation was associated with higher levels of sports enjoyment. Perhaps this is so because these athletes are likely to participate with and get feedback from other athletes. Runners tend to run alone, and so increased participation yields may not lend itself to increased positive feedback, and subsequently higher levels of enjoyment

in running.

Self-Concept

Homans (1961) points out that performing an activity unable to be performed by "untrained" others yields a higher status from those who recognize this skill. This taken with Cooley, Sherwood, Lopata, and Edward's theories better explain the substantial correlation between increased participation and higher levels of self-esteem in the case of downhill skiers, cross country skiers, and cyclists. Cooley's (1902) "looking glass self" theory affirms that we see ourselves as others see us. A "learning athlete," "progressing athlete," or "proficient or active (as in the case of the runner) athlete," gains positive feedback from others regarding his sports participation. Sherwood (1962) notes that reference collectivities, such as athletic collectivities, provide goals toward which the individual may aspire. Sherwood sees the self-concept in terms of a "totality of roles" within which the individual lives. Taking the concept of role a bit further, Lopata (1980, pp. vii-ix) states that social roles are dependent on understanding a complex system within the social circle. For individuals, social roles are generally embedded within "interdependent sets" which form respective social roles. Changes in a given social role therefore, result in changes in other social roles. Changes in the role of "the athlete" may result in changes in other social roles. Finally Edwards (1973, pp. 56-61) notes that sports demands meticulous preparations on the part of the participants. If the athlete is "prepared" and performs well, then she is successful to the extent that the surrounding public sees these efforts as successful. Although this allows a range of "successful"

efforts, "success," by definition is a positive attribute, and bolsters self-esteem.

In the cases of the downhill skier, cross country skiers, and cyclists, increased participation is substantially correlated with increased self-esteem. For runners, this is not the case. Downhill skiers, cross country skiers, and cyclists are more likely to participate in "their sport" with others. Runners tend to run alone. It is likely that success in an athletic activity as viewed by athletic peers and reflexively observed by the athlete himself (by opinions of others)--gives the athlete positive feelings about himself. Since social roles are "interwoven" (Lopata), the role of the "successful athlete" may furnish the individual with a more far-reaching generalized positive picture of himself. Thus, if runners participated together and/or received positive feedback from one another regarding their participation, runners may experience better feelings about themselves. Downhill skiers, cross country skiers, and cyclists also have the opportunity to more "visibly" improve their activities by increased participation. Increased levels of "success" certainly yield positive input from the individual whereas "proficient running" is a relatively nebulous concept, "proficient skiing or cycling" is more readily observed and defined. Downhill skiers, cross country skiers, and cyclists have a better opportunity to "improve" their techniques, and gain positive input, when compared with runners.

Discriminant Function Analysis: Distinguishable Characteristics Between Athletic Collectivities

In previous research, there has been little or no effort to study

social and psychological characteristics of athletic collectivities. Until this time there has been no research on the distinguishability of athletic collectivities on the basis of social psychological characteristics of individual collectivity members. My research indicates that the four athletic collectivities of downhill skiers, cross country skiers, cyclists, and runners are distinguishable on the basis of differences in social and psychological variables: pain attitudes, cohesion, self-esteem, locus of control, and extent of participation, as well as socioeconomic characteristics. By virtue of understanding differences in and distinguishability between collectivities, as suggested by patterns of variable differences, we may further understand what functions sports play in bureaucratic society, how each sport serves the individual participant, and if the functions sports play are similar or different for the collectivities studied here.

In the previous chapter, I demonstrated that when considering the four athletic collectivities one could best distinguish between collectivities on the basis of "locus of control" variables. While only about 18 percent and 20 percent of downhill skiers and cross country skiers (respectively) felt that they would rather "decide things when they come up than always trying to plan ahead," about half of the runners (41 percent) and cyclists (53 percent) felt similarly. Thus runners and cyclists may be more spontaneous than downhill or cross country skiers. Cyclists and runners tend to be relatively older and slightly less affluent than the somewhat younger and relatively more affluent downhill and cross country skiers. "Planning ahead" may be related to age and/or income. It may also be a function of the given activity, since a skier

must plan ahead to go skiing, whereas, not as much planning is generally involved in running or cycling.

One could least accurately distinguish between athletic collectivities by looking at pain attitudes. Using only "pain attitudes," about 42 percent of all athletes would be correctly classified. Of this, 6 percent of the cross country skiers, but only 17 percent of the downhill skiers, would be correctly classified into their sport. As was discussed previously in this chapter, attitudes toward pain and injuries vary from sport to sport. Downhill skiers are most likely to feel that pain is part of sports participation, and that one could get hurt eventually if one skis long enough. Cross country skiers generally have a similar profile. The interpretations of these feelings, which were exposed in my interviews of athletes, is totally missing from the discriminant analysis. Only the runners, who tend not to feel that pain is part of sports and that one does not necessarily get hurt when participating over a period of time, are distinguishable on this dimension.

Considering cohesion, cyclists and cross country skiers are most distinguishable. Since cyclists exhibit the highest levels of perceived commonality with other cyclists, and cross country skiers exhibit the lowest levels, these collectivities are most distinguishable. Runners and downhill skiers hold intermediate positions.

Using self-esteem variables, downhill skiers are most distinguishable. This is again due to the pattern of agreement among downhill skiers. Downhill skiers are likely to agree that "I feel that I have a number of good qualities." They are even more likely to agree

with the statement that "I feel that I do things as well as most other people." Relatively higher levels of "do well" as compared with "good qualities" are also apparent in cross country skiers, but overall a lower percent agree with both statements. While equally high percentages of cyclists agree with both statements, virtually all (99 percent) of the runners think they have a number of good qualities, but slightly fewer runners feel certain that they do things as well as most others. The patterns of agreement with both statements are most apparent in the downhill skiers. In their case, "self-esteem" variable input allows us to more accurately distinguish downhill skiers from all other athletes. In the case of other athletic collectivities, self-esteem is not sufficient to correctly distinguish between athletic collectivities.

By using all these variables, it is possible to predict athletic collectivity membership 78 percent of the time. Again patterns of responses are key in distinguishing athletic collectivities. Cross Country Skiers are generally single, White, young, and have the highest incomes. They are least likely to agree to stop skiing if they thought they would get hurt badly. Runners have lowest incomes, highest levels of education, and are relatively old. (Level of education may be a function of age.) Runners are most likely to agree to "stop running" if they thought they would get hurt badly. They are also most likely to agree that there is not much use in planning ahead. Downhill skiers have had many more instructions as compared with other athletic collectivities. They also tend to have high levels of self-acceptance. Cyclists are generally males who have no desire to be younger. They are neither the oldest or youngest of athletic collectivities. Cyclists tend to be

somewhat more pessimistic about their control of their own destiny and direction.

The discriminant function analysis allows us to demonstrate that social and psychological variable patterns (high/low scores) which differ between collectivities indicate some apparent distinguishability between athletic collectivities. Although the single type of variables which allows most accurate collectivity distinguishability is "locus of control," it is clear the variables in this research allow us more accurate classification of athletes into their respective collectivities. Since sports seems to play a "mediating function" in American bureaucratic society, the distinguishability between athletic collectivities permits us to see how these athletic collectivities differ, and the hypotheses permit us a clearer picture as to the particular differences in collectivity attitudes, values, and practices.

Conclusions

I conclude that there are unique social-psychological characteristics of athletic collectivities that become apparent when studied. These different characteristics are more apparent in some collectivities than in others. On the basis of many characteristics, I have demonstrated that these four athletic collectivities may be distinguished from one another. Furthermore, the social psychological characteristics examined by this research provide a finer degree of

distinguishability between athletic collectivities than socioeconomic characteristics.

Implications

Sports has boomed in American society. People of all ages and abilities who have varied interests and incomes seek and find challenge, pleasure, and refuge through participation in sports -- today more than ever before. Parents purchase expensive bicycles for themselves, buying less expensive ones for their children. "Grownups" are no longer barred from their childhood participation in sports. Overweight men and overworked women are invited to take part in sports -- and are applauded by those who already partake or watch participation. The sports industry is growing, and those who participate sing the praises of their sport.

I have demonstrated that four collectivities of athletes are distinguishable on the basis of social psychological characteristics and that such characteristics appear more empirically relevant than socioeconomic or demographic characteristics (at least in my sample). Even in the recent past, sports participants were thought to be distinguished largely by socioeconomic characteristics. It was generally thought that wealthier people might ski, whereas less affluent individuals may run. While this may be the case, a better way to describe athletic collectivities appears to be by the social psychological characteristics of the participants.

There are many and varied implications of this research which apply to current concerns with leisure and extend toward future research. For example, if about 80 percent of the athletes in this research were correctly categorized into their respective collectivities by the use of

social-psychological with socioeconomic data, athletes from other types of athletic collectivities could be studied in a similar fashion. Although other distinguishable characteristics may be discovered, they would only add to a more "complete profile" of athletes-in-general.

To an unprecedented extent, people are becoming concerned with various aspects of health and fitness. One profound indication of this concern is the greater numbers of people involved in sports participation. Obviously, sports plays an important role in modern society. We, as social scientists need to more fully understand the social and psychological aspects of sports participation. How do individuals choose certain sports, e.g what is the "elective affinity" of a particular sports activity? How is the role of the athlete constructed by the individual, by the larger athletic collectivity, and shaped by society? How does athletic involvement affect the individual?

As we have seen, classical sociological theory was concerned with individual meaning and cohesive memberships in modern society. In modern bureaucratic society, individuals were limited in their ability to determine their own destiny and the social bonds that had once held people together became problematic. Individuals were alienated from one another (Marx). Although rational in nature, bureaucracies systematically applied impersonal and specific rules and procedures to obtain efficiency. Modern man was locked in the iron cage of rationalized society (Weber). People needed relevant social groupings through which social solidarity could be realized (Durkheim). The expansion of modern industrial society's more affluent classes (Shils) resulted in disposable incomes and patterned leisure time for the masses.

In the past century, there has been a marked increase in the necessary resources of time, money or both, and as a result, leisure activities including sports activities have flourished. Furthermore, as evidenced by this research, the implications of sports participation extends to social and psychological influences on the participant. The question of what effects sports participation has on the participant is an interesting one. If, for example, the individual can enhance his self-esteem through a particular type of sports participation (matching his social-psychological and socioeconomic profile), then the social scientist would do well to pursue the understanding of this phenomenon. The notion of what type of individual (with a given social and psychological profile) participates in a given sport is most intriguing. As social scientists, we need to search for additional characteristics which will yield a more complete profile of "the athlete."

In addition, it would be very beneficial specifically to know more about how sports participation affects the individual participant. If sports participation allows the individual stress reduction, more positive mental attitudes, better health, a means for social contact (primary group nurturance) and other benefits, social scientists should study these phenomena. Furthermore, social scientists should be aware of negative effects of sports participation such as fear, frustration, and anger. This would permit a more accurate picture of what actually happens to the individual athletic participant and the athletic collectivity. Since sports is reaching more and more people, it is certainly a valid concern for the social scientist to best understand the social world of athletes.

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APPENDIX

Dear Skier,

I am a Ph.D. candidate and an avid skier. I am interested in how skiers view themselves and their sport. Thank-you for your help in my research. Your answers are completely confidential. Good skiing to all of you!!

First, here are some questions about your views of skiing and sports.

1. In terms of proficiency, how would you rate yourself as a SKIER:
 Beginner Intermediate Advanced Professional
2. At what age did you begin skiing? Years old
3. How many years have you skied? Years
4. Do your sisters or brothers ski? Sisters Brothers Both
5. Who was the most instrumental in STARTING you skiing?
 Mother Friends
 Father School teacher or coach
 Brother or sister Other _____
 Other relative
6. Who helped you most in skiing or learning to ski?
 Mother School coach
 Father Club coach
 Brother or sister Friend
 Other relatives Other _____
7. On what skis do you ski? _____ Brand. _____ Length _____
8. Why do you enjoy skiing? (Choose 3 reasons, label 1, 2, 3, 1 = why you enjoy skiing most)
 Scenery Concentration
 Solitude Varying conditions and demands
 Speed Other skiers - good company
 Challenge Other _____
9. What is the main DISADVANTAGE of skiing? (Label: 1, 2, 3, 1 = Biggest Disadvantage:
 Cost Conflict with family
 Possibility of injury Conflict with job
 Being outside Other _____
 Physical exhaustion
10. How enjoyable do you find skiing? (Circle the number that best describes how you feel:
 Not enjoyable at all 1 2 3 4 5 6 7 Extremely enjoyable
11. Have you taken ski lessons? Yes No
12. How many lessons have you taken? (Ski instructions)
 1 to 5 lessons 20 to 40 lessons
 6 to 10 lessons More than 40 lessons
 11 to 15 lessons Have not taken ski lessons
13. Are you currently a member of a ski racing team? Yes No
14. Have you ever been a member of a ski racing team? Yes No
15. If you have been a member of a ski racing team, at what ages did you race? Years to Years Old
16. Have you ever competed in other sports? Yes No

17. If you did compete, at what ages, and in what sports?
 Sport _____ Competed age _____ to age _____
 Sport _____ Competed age _____ to age _____
 Sport _____ Competed age _____ to age _____
18. List in order of importance (1 = most important) for yourself, the three most important sports in which you participate:
 1. _____
 2. _____
 3. _____
19. If you were told that you could NEVER ski again, how much would this effect YOU? (Circle the number that best expresses how you feel.)
 Not at all 1 2 3 4 5 6 7 A tremendous amount
20. If you were told that you could NEVER ski again, how much would this effect your LIFESTYLE?
 Not at all 1 2 3 4 5 6 7 A tremendous amount
21. How sure are you that another skier would stop to help you if you had fallen while skiing?
 Not at all sure 1 2 3 4 5 6 7 Very sure someone would stop
22. How long do you think it takes, on the average, before someone stops to help you if you have fallen while skiing?
 _____ Less than 2 minutes _____ Over 10 minutes
 _____ 2 to 5 minutes _____ Not sure that someone would stop
 _____ 5 to 10 minutes
23. Have you stopped to help another skier who appeared to need help (while skiing)?
 _____ No
 _____ Yes, once or twice
 _____ Yes, a few times
 _____ Yes, many times
 _____ Yes, almost every time I have skied
24. I would be willing to undergo the following, if necessary, to enable me to ski (continue skiing): (Check all that apply)
 _____ A little pain _____ A broken bone
 _____ Moderate pain _____ Surgery
 _____ Severe pain _____ Pulled muscles
 _____ A sprain _____ Stitches (sutures)
25. I HAVE UNDERGONE the following, which were necessary to enable me to ski (continue skiing): (Check all that apply)
 _____ A little pain _____ A broken bone
 _____ Moderate pain _____ Surgery
 _____ Severe pain _____ Pulled muscles
 _____ A sprain _____ Stitches (sutures)
26. If I had my choice of doubling my present income and not being able to ski, -OR- making the same income, and skiing, I'd:
 _____ Double my present income and not ski
 _____ Retain my present income and ski
27. I am willing to ski with: (Check all that apply)
 _____ Beginning skiers _____ Advanced skiers
 _____ Intermediate skiers _____ Expert skiers

28. I am willing to ski with skiers aged: (Check all that apply)
- | | |
|--|--|
| <input type="checkbox"/> 3 - 9 years | <input type="checkbox"/> 51 - 60 years |
| <input type="checkbox"/> 10 - 15 years | <input type="checkbox"/> 61 - 70 years |
| <input type="checkbox"/> 16 - 25 years | <input type="checkbox"/> Over 70 years |
| <input type="checkbox"/> 26 - 35 years | <input type="checkbox"/> All ages (age doesn't matter) |
| <input type="checkbox"/> 36 - 50 years | |
29. What level of skier, do you think, enjoys skiing most? (Check all that apply)
- | | |
|---------------------------------------|---|
| <input type="checkbox"/> Beginner | <input type="checkbox"/> Expert |
| <input type="checkbox"/> Intermediate | <input type="checkbox"/> All skiers enjoy skiing, level is not relevant |
| <input type="checkbox"/> Advanced | |
30. Would you risk injury to yourself to aid another skier?
- I would DEFINITELY risk injury to myself to aid another skier.
- I would PROBABLY risk injury to myself to aid another skier.
- I would PROBABLY NOT risk injury to myself to aid another skier.
- I would DEFINITELY NOT risk injury to myself to aid another skier.
31. Have you risked injury to yourself to aid another skier?
- No, I have not
- Yes, once or twice
- Yes, a few times
- Yes, many times
- Yes, almost every time I have skied.
32. There is a real risk of injury while skiing for: (Check all that apply)
- | | |
|---|---|
| <input type="checkbox"/> Beginning skiers | <input type="checkbox"/> Expert skiers |
| <input type="checkbox"/> Intermediate skiers | <input type="checkbox"/> All skiers |
| <input type="checkbox"/> Advanced/Expert skiers | <input type="checkbox"/> There is NO risk of injury in skiing |
33. To be a good skier, I feel it takes:
- Only good, solid training and practice
- More training and practice than inborn, inherited ability
- More inborn, inherited ability, than training and practice
- Only inborn, inherited ability
34. Do you usually ski with (Number 1, 2, 3 1 = ski with most often)
- | | |
|---|---|
| <input type="checkbox"/> Spouse/mate | <input type="checkbox"/> Alone |
| <input type="checkbox"/> Friend — one particular | <input type="checkbox"/> People I meet while skiing (strangers) |
| <input type="checkbox"/> Friends — several | <input type="checkbox"/> Other |
| <input type="checkbox"/> Family members/relatives | |
35. When you are not skiing, with whom do you spend your LEISURE time?
(Please number in order with whom you spend most time, 1 = most time spent with)
- | | |
|---|---|
| <input type="checkbox"/> Business associates | <input type="checkbox"/> Friends of mate/spouse |
| <input type="checkbox"/> Athletic acquaintances | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Non-athletic (hobby, etc. acquaintances) | |
| <input type="checkbox"/> Relatives | |
36. Socially, I would prefer being with:
- Skiers
- Non-skiers
- Both

37. When you are away from skiing, what percentage of your friends, would you say, are skiers?

- | | |
|-------------------|---------------|
| ___ Less than 10% | ___ 51 to 75% |
| ___ 10 to 25% | ___ 75 to 90% |
| ___ 26 to 50% | ___ over 90% |

38. In your opinion, which of these roles is the most important for you to perform? Which is second most important? Please number their importance for you, 1 = most important, 2 = second most important, etc.

- | | |
|---------------------------|-------------------------------|
| ___ Worker, career person | ___ Member of society |
| ___ Skier | ___ Member of religious group |
| ___ Mate | ___ Friend |
| ___ Family member | ___ Sports enthusiast |

39. Annually, how much does it cost you to ski?

Transportation \$ _____	Equipment \$ _____
Lodging \$ _____	Lift/Trail tickets \$ _____

40. Where do you usually ski? How many days annually?

Place _____	Location (state) _____	Days _____
Place _____	Location (state) _____	Days _____
Place _____	Location (state) _____	Days _____

41. How many days do you spend each year, participating in the following:

How many days did you spend five years ago, participating in the following:

	Currently	Five Years Ago
Alpine skiing	_____	_____
Cross-country skiing	_____	_____
Bicycling	_____	_____
Running	_____	_____
Tennis	_____	_____
Golf	_____	_____
Swimming	_____	_____
Hiking	_____	_____
Backpacking	_____	_____
Fishing	_____	_____
Climbing	_____	_____
Camping	_____	_____
Racquetball	_____	_____
Weight lifting	_____	_____
Canoeing	_____	_____
Sailing	_____	_____
Boating	_____	_____
Wind surfing	_____	_____
Water skiing	_____	_____
Rafting, kayaking	_____	_____
Scuba diving	_____	_____

Here are some statements about the way many individuals feel about themselves and sports. Mark "X" under the column that best describes how you feel.

	Strongly Agree	Agree	Disagree	Strongly Disagree
1. I often wish I were someone else.	_____	_____	_____	_____
2. I wish I were younger.	_____	_____	_____	_____
3. I feel I have a number of good qualities.	_____	_____	_____	_____
4. I am able to do things as well as most other people.	_____	_____	_____	_____
5. There are lots of things about myself I would change if I would.	_____	_____	_____	_____
6. On the whole, I am satisfied with myself.	_____	_____	_____	_____
7. I certainly feel useless at times.	_____	_____	_____	_____
8. I would rather decide things when they come up than always try to plan ahead.	_____	_____	_____	_____
9. I have always felt pretty sure my life would work out the way I wanted it to.	_____	_____	_____	_____
10. I seem to be the kind of person who has more bad luck than good.	_____	_____	_____	_____
11. I never have any trouble making up my mind about important decisions	_____	_____	_____	_____
12. I have always felt that I have more will power than most people have.	_____	_____	_____	_____
13. There's not much use for me to plan ahead because there's usually something that makes me change my plans	_____	_____	_____	_____
14. I nearly always feel sure of myself even when people disagree with me	_____	_____	_____	_____
15. The average person is largely the master of his own fate.	_____	_____	_____	_____
16. Most people have little influence over things that happen to them	_____	_____	_____	_____
17. Pain is just "part of the game" in most sports	_____	_____	_____	_____
18. If you participate in skiing long enough, you're bound to get hurt.	_____	_____	_____	_____
19. If you don't hurt some of the time in sports, you're just not trying hard enough.	_____	_____	_____	_____
20. If I thought I could get hurt badly, I'd stop skiing	_____	_____	_____	_____

	Strongly Agree	Agree	Disagree	Strongly Disagree
21. In my opinion, competition is good for the individual.	_____	_____	_____	_____
22. It's tough to compete and lose, but winning a few times makes losing tolerable.	_____	_____	_____	_____
23. Athletes look, feel, and generally are more healthy than non-athletes.	_____	_____	_____	_____
24. I feel I have something in common with all other skiers.	_____	_____	_____	_____
25. I feel skiers share a special feeling of "similarity" with all other skiers.	_____	_____	_____	_____
26. I would be willing to give up luxuries to be able to afford to ski.	_____	_____	_____	_____
27. Skiers I don't know have given me helpful advice about ski equipment.	_____	_____	_____	_____
28. I would be willing to help another person learn to ski.	_____	_____	_____	_____
29. All skiers are not the same, but on the whole, they are interesting, friendly people.	_____	_____	_____	_____

Below are 25 pairs of words. Circle the number that presents the present picture of yourself

1. Self-confident	1 2 3 4 5 6 7	Lack self-confidence
2. Critical of others	1 2 3 4 5 6 7	Tolerant of others
3. Skillful with others	1 2 3 4 5 6 7	Awkward with others
4. Reserved	1 2 3 4 5 6 7	Talkative
5. Value myself highly	1 2 3 4 5 6 7	Value myself low
6. Participant	1 2 3 4 5 6 7	Non-participant
7. Authoritarian	1 2 3 4 5 6 7	Democratic
8. Competent	1 2 3 4 5 6 7	Incompetent
9. Non-aggressive	1 2 3 4 5 6 7	Aggressive
10. Honest	1 2 3 4 5 6 7	Dishonest
11. Active	1 2 3 4 5 6 7	Passive
12. Likeable	1 2 3 4 5 6 7	Not likeable
13. Competitive	1 2 3 4 5 6 7	Cooperative
14. Insightful about myself	1 2 3 4 5 6 7	Lack insight about myself
15. Follower	1 2 3 4 5 6 7	Leader
16. Timid	1 2 3 4 5 6 7	Bold
17. Moral	1 2 3 4 5 6 7	Immoral
18. Individualistic	1 2 3 4 5 6 7	Conformist
19. Hostile	1 2 3 4 5 6 7	Affectionate
20. Tense	1 2 3 4 5 6 7	Relaxed
21. Unfair	1 2 3 4 5 6 7	Fair
22. Unintelligent	1 2 3 4 5 6 7	Intelligent
23. Liberal	1 2 3 4 5 6 7	Conservative
24. Friendly	1 2 3 4 5 6 7	Unfriendly
25. Independent	1 2 3 4 5 6 7	Dependent

If you are a professional ski instructor or ski patrolman, please answer questions on this page. If you are not a ski instructor or ski patrolman, please skip to next page.

1. Are you a: Ski instructor Ski patrolman
2. Other than ski instructing or ski patrolling, do you have another Winter profession? Yes No
3. If "yes," what is your other profession? Describe?

Title _____

Main Duties _____

Type of Business (Industry) _____
4. During the Summer, what is your profession? Describe.

Title _____

Main Duties _____

Type of Business (Industry) _____
5. What brand of ski do you use for work? _____
6. What length ski do you use for work? _____ cm.
7. What are the ADVANTAGES of your SKI job? (Mark 1, 2, 3; 1 = biggest advantage)

<input type="checkbox"/> Skiing daily	<input type="checkbox"/> Making a good salary
<input type="checkbox"/> Meeting lots of people	<input type="checkbox"/> Other _____
<input type="checkbox"/> Living in the mountains	
8. What is the main DISADVANTAGE of your SKI job? (Mark 1, 2, 3; 1 = biggest disadvantage)

<input type="checkbox"/> Being outside in the elements	<input type="checkbox"/> Possibility of injury
<input type="checkbox"/> Working hard physically	<input type="checkbox"/> Seasonal occupation
<input type="checkbox"/> Low income	<input type="checkbox"/> Other _____
9. What was your former occupation (before ski-job)?

Title _____

Main Duties _____

Type of Business (industry) _____
10. Where was your former occupation held?

<input type="checkbox"/> Northwest	<input type="checkbox"/> South
<input type="checkbox"/> West Coast	<input type="checkbox"/> Northeast
<input type="checkbox"/> Southwest	<input type="checkbox"/> Southeast
<input type="checkbox"/> Midwest	<input type="checkbox"/> Outside USA
<input type="checkbox"/> Rocky Mountains	
11. When did you leave your former job? _____ month, _____ year
12. About what percent of your income do your different jobs represent?

Ski-related job	_____ % annual income
Other winter job	_____ % annual income
Summer job	_____ % annual income
Other income	_____ % annual income

Finally, here are some questions about yourself:

1. Sex: Male Female
2. Age: years old
3. Marital status: Married Never married Widowed
 Living together Separated/Divorced
4. Number of children (if any):
5. What is the educational background of:

	You	Your Mother	Your Father
A. Some high school	<input type="text"/>	<input type="text"/>	<input type="text"/>
B. High school graduate	<input type="text"/>	<input type="text"/>	<input type="text"/>
C. Some trade school	<input type="text"/>	<input type="text"/>	<input type="text"/>
D. Tradeschool graduate	<input type="text"/>	<input type="text"/>	<input type="text"/>
E. Some college	<input type="text"/>	<input type="text"/>	<input type="text"/>
F. College graduate	<input type="text"/>	<input type="text"/>	<input type="text"/>
G. Graduate degree	<input type="text"/>	<input type="text"/>	<input type="text"/>
H. Professional degree	<input type="text"/>	<input type="text"/>	<input type="text"/>
6. What is your annual income?

<input type="checkbox"/> Less than \$10,000	<input type="checkbox"/> \$40,000 to \$54,999
<input type="checkbox"/> \$10,000 to 24,999	<input type="checkbox"/> \$55,000 to \$75,000
<input type="checkbox"/> \$25,000 to \$39,999	<input type="checkbox"/> Over \$75,000
7. What is your religion? None Catholic Protestant Jewish Other
8. What is your religious commitment?
 - Very religious
 - Slightly religious
 - Moderately religious
 - Not at all religious
 - Anti-religious
9. In what part of the USA were you raised?

<input type="checkbox"/> Northeast	<input type="checkbox"/> Midwest	<input type="checkbox"/> West Coast	<input type="checkbox"/> Southwest
<input type="checkbox"/> Southeast	<input type="checkbox"/> Rocky Mountains	<input type="checkbox"/> Outside the USA	<input type="checkbox"/> Northwest
10. Were you reared
 - In a small town or rural area
 - In a moderate city but not suburb
 - In a suburban area
 - In a large city
11. At adolescence what was your total family income?

<input type="checkbox"/> Less than \$10,000	<input type="checkbox"/> \$40,000 to \$54,999
<input type="checkbox"/> \$10,000 to \$24,999	<input type="checkbox"/> \$55,000 to \$75,000
<input type="checkbox"/> \$25,000 to \$34,999	<input type="checkbox"/> Over \$75,000
12. What is your height? Feet. Inches
13. What is your weight? Lbs
14. What is your race? White Black Oriental Hispanic Other
15. What is your occupation?

Title

Main duties

Type of Business (Industry)
16. If it were possible for you to have conversations with three famous individuals, with whom would you choose to have conversations?
 1.
 2.
 3.

APPROVAL SHEET

This dissertation submitted by Ellen Jeanne Meyers has been read and approved by the following committee:

Dr. Lauren Langman, Director
Professor, Sociology, Loyola University

Dr. Kirsten Gronbjerg
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Dr. Helena Lopata
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The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of
Doctor of Philosophy.

June 1 1987
Date

Lauren Langman
Director's Signature