AN HISTORICAL AND SOCIOPSYCHOLOGICAL ANALYSIS OF THE RUNNING TRADITION IN EUGENE, OREGON

by

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The study was designed to analyze the historical significance of the University of Oregon upon the development of a running tradition in Eugene, Oregon and to measure the attitudes of male and female competitive and non-competitive runners using the Gerald S. Kenyon Attitude Toward Physical Activity Scale. The results of the attitude inventory were analyzed using a three way analysis of variance with repeated measures. The historical analysis related Smolicz's humanistic perspectives of tradition to the leadership contributions of significant public figures, coaches, and track and field athletes.

From the results of the study it was concluded that:

1. The University of Oregon has made a significant contribution toward the development of a running tradition in Eugene.

2. There were no significant differences between the Male and Female and Competitive and Non-Competitive groups of runners in their attitude toward physical activity as measured by the Kenyon Scale.

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CHAPTER I

INTRODUCTION

During the last ten years recreational and competitive running has gained in popularity in North America. This is evident from the increase in the number of entrants in long distance road races in the U. S. and increased membership in organized running clubs. The 1977 Bay to Breakers seven-mile road race, held in San Francisco, had more than 12,000 starters. A recent estimate of the number of active runners in the city of Eugene, Oregon was 10,000 regular participants (Newnham, 1977, Register Guard).

Eugene, Oregon, is known throughout the world as a popular jogging center. The large number of runners who use local parks, country roads, and the University of Oregon track and field facilities indicates the degree of enthusiasm which the local community has for running. There are many reasons why people run: health and fitness, competition, relaxation, and social reasons are among the most often noted.

A number of famous coaches and athletes have significantly influenced and stimulated an interest in running in Eugene. The names of Bill Hayward, Bill Bowerman, Arthur Lydiard, Bill Dellinger, Dyrol Burleson, Jim Grelle, Archie San Romani, Kenny Moore, Frank Shorter, Bill Rodgers, and Steve Prefontaine are well known among the Eugene running population. Many of these individuals achieved "folk hero" status during their running careers, especially Steve Prefontaine, who was ideolized by the Eugene track community.

The Olympic track and field qualifying meets for the American teams for the 1972 Munich and 1976 Montreal Games were held at the University of Oregon. The N.C.A.A. Track and Field Championships as well as professional meets have also been staged in Eugene. These occasions have given the local community numerous opportunities to observe world class track and field athletes.

Some of the many reasons why Eugene residents run were obtained by examining the influences of a number of track and field personalities, public figures, the programs they have established, and by analyzing the roles they played in contributing to the Eugene running tradition. Smolicz (1974) stated that: "To survive as tradition a particular item must continue to exert its appeal as one coming down from the past, but this value must now usually be supplemented by all kinds of auxiliary explanations and postulated functions " (p. 78).

Tradition, therefore, relies upon the continuation and development of an element within the historical background of a community. To be effective this process must be assisted by encouragement from individuals, small groups or large organizations of individuals. This maintains and strengthens the appeal of that particular element to the members of a community. From Smolicz's concept of tradition the question followed: Has the University of Oregon positively influenced the development of a running tradition within the Eugene metropolitan area? Significant aspects of the interaction of the University and the community were analyzed in this study.

The assessment of attitudes towards physical activity of a sample of male and female non-competitive and competitive runners provided

additional insight from the sociopsychological perspective.

Statement of the Problem

The study was designed with the purpose of examining both the historical and sociopsychological factors which contributed to the running tradition in Eugene. The attitudes of male and female competitive and non-competitive runners toward physical activity were measured by the Kenyon Attitude Toward Physical Activity Scale in a semantic differential form (Kenyon, 1968b). The attitudes of male and female runners in Eugene were assessed to observe if any differences existed between the subjects in this study and the subjects in other studies.

The historical analysis provided an additional perspective; specifically the role of the University of Oregon Track and Field program in the development of Eugene's running tradition.

Information for this aspect of the study was obtained from historical records, and personal interviews, with individuals who have been involved in the development of organized running in Eugene. A personal data questionnaire was also completed by male and female non-competitive and competitive runners.

Statement of the Hypotheses and Research Question

1. There will be no statistically significant differences in the comparisons between male and female competitive and non-competitive runners in their attitude toward physical activity (at the .05 level of significance) as measured by the Kenyon Attitude Toward Physical Activity Scale (Kenyon, 1968b).

2. There will be no statistically significant differences in the comparisons of attitude between male and female runners (at the .05 level of significance) as measured by the Kenyon Attitude Toward Physical Activity Scale (Kenyon, 1968b).

3. Has the University of Oregon Track and Field program and significant personalities positively influenced the development of a running tradition within the Eugene metropolitan area?

Definition of Terms

Attitude: A latent or non-observable, complex, but relatively stable behavioral disposition reflecting both direction and intensity of feeling toward a particular object, whether it be concrete or abstract (Kenyon, 1968b).

Physical Activity: Organized, (structured), nonutilitarian (in an occupational or maintenance sense), gross human movement usually manifested in active games, sports, calisthenics, dance (Kenyon, 1968b).

Non-Competitive Runner: A runner who does not consider rivalry and competition against other runners to be an important aspect of his running program. A runner who does not compete regularly in organized races.

Competitive Runner: A runner who considers competition and rivalry against other runners to be an important aspect of his running program. A runner who competes regularly in organized races.

Permanent Resident: An individual who has resided in Eugene for at least twelve consecutive months.

Institution: An interrelated system of social roles and norms organized about the satisfaction of an important social need or function. The

social roles and norms comprising the social institution define proper and expected behavior oriented to the fulfillment of the particular social need, such as the provision of food and other material goods (Theodorsen, 1969, p. 207).

Tradition: That part of the heritage which excites feelings of approval in the current generation by involving it in an act of identification or disassociation with predecessors. It must be viewed as it appears to human individuals who actively experience and appraise it. (Smolicz, 1974, p. 76).

Basic Assumptions

The following basic assumptions applied to this study:

1. The sample of male and female competitive and non-competitive runners represented a cross section of runners residing in the Eugene metropolitan area.

2. Jogging and running are synonymous in this study.

Limitations

The following limitations applied to this study:

1. The male and female runners did not represent a random sample.

2. Historical analysis was limited to the amount of available historical information.

Delimitations

The following delimitations applied to this study:

1. All subjects selected were male and female non-competitive and

competitive runners residing for at least 12 consecutive months in the Eugene metropolitan area.

Justification

Research in the area of running has been primarily concerned with physiological and psychological parameters of small groups and cross sections of superior track and field athletes (Kenyon, 1968b). An analysis of the attitudes of runners in Eugene towards physical activity provides a parallel study. The results of this study provide the opportunity for comparisons to be made with previous studies of attitude toward physical activity.

The psychosociological and historical perspectives of this study also provide an analysis of the development of a running tradition in the Eugene metropolitan area.

CHAPTER II

REVIEW OF RELATED LITERATURE

Many techniques have been used to measure attitudes towards physical activity. The instruments developed by Wear (1955), Richardson (1960), Adams (1963), and Mason and Ventre (1965), were concerned with physical activities under the domain of physical education. Kenyon (1968b) has developed a conceptual model for characterizing physical activity in its broadest sense. He attempted to overcome the shortcomings of previous instruments by eliminating other restricted domains such as team competition or sports. Kenyon attempted to construct relatively independent univocal scales for determining attitude, within the context of a model characterizing physical activity. The Kenyon Scales (1968a), include the following dimensions:

1. Physical activity as a social experience

   Characterized by those physical activities whose primary purpose is to provide a medium for social intercourse, i.e. to meet new people and to perpetuate existing relationships.

2. Physical activity for health and fitness

   Characterized primarily by its contribution to the improvement of one's health and fitness.

3. Physical activity as the pursuit of vertigo

   Characterized by those physical experiences providing, at some risk to the participant, an element of thrill through the medium of speed, acceleration, sudden change of direction, or exposure to dangerous situations, with the participant usually in control.

4. Physical activity as catharsis

Characterized by those activities perceived as providing a release of tension precipitated through some vicarious means.

5. Physical activity as an aesthetic experience

Characterized by those activities often perceived as having aesthetic value for the individual, that is activities are conceived of as possessing beauty or certain artistic qualities.

6. Physical activity as an ascetic experience

Characterized by those activities that are perceived as involving long, strenuous, and often painful training and stiff competition demanding a deferment of many gratifications.

Studies of Attitude Towards Physical Activity

Kenyon (1968c) conducted a comparative study of secondary school students from Canada, Australia, and the United States. Results indicated that attitudes towards social, health and fitness, aesthetic and cathartic values of physical activity were most positive, whereas ascetic and the pursuit of vertigo were valued less positively.

Hergert (1969) used the Kenyon Scale to examine attitudes towards physical activity of physical education students at the University of Utah. The subjects included 887 men and 531 women enrolled in fourteen physical education activity classes. Data from the study showed high internal reliability. Students in specific activity classes did not differ significantly in their attitudes towards any of the six scales.

Alderman (1969) also using the Kenyon Scale, surveyed 1,936 championship male and female athletes in different sports at the 1967 Pan American Games. Male and female athletes were found to be notably similar in their attitudes towards the different dimensions characterizing

physical activity. Males showed consistency in their attitude towards aesthetic activity and all athletes responded weakly toward physical activity as an ascetic experience.

Blair and Kizer (1971), at the University of Colorado, investigated expressed attitudes towards physical activity among high school athletes and coaches in specific sports from test areas within the United States. The study included 468 Michigan athletes and coaches, and 552 Texas athletes and coaches. High internal consistency was indicated among all six dimensions of the Kenyon Attitude Towards Physical Activity Scale. The attitudes of Michigan and Texas sport groups and coaches towards physical activity were not found to differ significantly in any of the six dimensions, and athletes participating in the same sports from the two different geographical areas were much more alike than they were different in their attitudes towards Kenyon's six dimensions.

Coutts (1973), at the University of New York, Bridgehampton, questioned 1,895 students of physical education regarding social values and attitudes towards physical activity and sport. The Value Profile by Couchard Bales, containing the four social values of Acceptance of Authority, Need Expression, Value Restraint Equalitarianism, and Individualism, was administered with the Kenyon Scales. In addition, information was gathered pertaining to sex, type of community, socio-economic status and religious preference of the respondents. Also considered were degree of maternal and paternal encouragement of sports participation and the extent of participation in high school inter-scholastic athletics.

Results of the study indicated that participation in interscholastic

athletics was positively correlated with Equalitarianism. No significant correlations existed between interscholastic athletic participation and the value scales of Need Expression and Individualism. Parental encouragement resulted in more positive attitudes toward a more extensive participation in the various dimensions of physical activity with the exception of the aesthetic sub-domain. There was also a pattern of consistency between the parents and the students in the study regarding the frequency of their participation.

Delforge (1973), at the University of Arizona, researched the attitudes towards physical activity of handicapped and non-handicapped students. The Kenyon Scale was administered to four groups of twenty-five subjects, including college athletes, non-handicapped, and ambulatory physically handicapped. No significant difference in attitude towards physical activity was found among the four groups. No statistically significant differences in attitude toward physical activity were found between male handicapped and female handicapped students; female non-handicapped and female handicapped; and male handicapped and male non-handicapped. The comparison groups responded similarly to each of the six dimensions of physical activity. Each of the groups compared showed significantly more positive attitudes towards physical activity as a social experience, as a means to health and fitness, as an aesthetic experience, and as catharsis than they did toward physical activity as the pursuit of vertigo and as an ascetic experience. Male students and male and female handicapped students expressed significantly less positive attitudes towards physical activity as an ascetic experience than they did towards all other dimensions.

Straub and Felock (1974), at Ithaca College, compared attitudes towards physical activity in delinquent and non-delinquent junior high school age girls. Results indicated a significant difference in only one dimension of the Kenyon Scales; physical activity as a social experience. Non-delinquent girls scored significantly higher than delinquent girls in this area.

Morton (1975), at the University of the Pacific, administered the Kenyon Scale in order to examine the attitudes towards physical activity of selected groups of 64 master runners and 61 senior runners. The master runners were over forty years of age and the senior runners were between the age of twenty-five and thirty-five. Results indicated that the health and fitness domain ranked highest, the catharsis domain second, followed by the aesthetic and social sub-domains. Attitudes toward the pursuit of vertigo were less positive. Statistically significant differences were found in the comparisons of attitude within the combined group of selected senior and master runners on the Kenyon Scales. No statistically significant differences were found in the comparison of attitude between selected groups of male senior and master members of running clubs on the Kenyon Attitude Toward Physical Activity Scale. Running Club members in the Northern California area were found to have a generally positive attitude towards the total concept of "physical activity" and toward each of the Kenyon six dimensions of physical activity. The pursuit of vertigo and ascetic sub-domains were the least positively ranked of the six dimensions.

Brumel (1975), at the University of Oregon, examined the meaning of running for eight junior high school age athletes and its relation to

improvement in performance. Results indicated that greater depth to the meaning of running derived from daily training sessions. Running became more enjoyable through improved performance and improved feelings towards the meaning of running. The subjects rated themselves as feeling more active as individuals (apart from running) when the season was ended. Other changes in self-concepts were found to be negligible.

Psychological Testing of Runners

The greatest proportion of completed research on runners has concentrated on personality and motivational characteristics of runners.

Husman (1955) studied the personality characteristics of nine cross-country runners during pre-season, pre-contest, post-contest, and post-season conditions. Husman also compared the results of projective techniques on nine college boxers, eight wrestlers, and a control group of seventeen subjects. The cross-country runners were found to be extra punitive and differed significantly from the boxers on this variable. The runners were also found to be more extra punitive than the control subjects.

Crakes (1960) compared two groups of distance runners from the University of Oregon track team. One group of outstanding runners (including two international class milers) and one group of "average" runners on a series of personality traits measured by the California Personality Inventory and the Rohrshach Projective Test.

The result of the California Personality Inventory showed significant differences between the two groups of runners. The faster runners had significantly lower scores than the slower runners in the scales

designated as Responsibility, Socialization, Well-being, Communality and Flexibility. In the Rohrshach Test, the better runners had a significantly greater number of "Detailed" responses than the poorer runners at the 10.2 level of confidence. The better runners also had more "Movement" responses (at the 8.2% level) and a greater number of "Total" responses (at the 17.2% level) than the poorer runners. The better runners also had a greater number of responses labelled "Orality" than the poorer runners.

Morgan (1968), at the University of Missouri, investigated athletic sub-groups on introversion, extroversion, and neurotic variables. He examined thirteen basketball players, nine tennis players, fifteen wrestlers, and nine cross-country runners. The cross-country runners were found to be significantly more introverted than the other groups of athletes. The runners did not differ from any of the other groups on the neuroticism dimension.

Fundukian (1969), compared the self-images of successful and unsuccessful high school track athletes using an objective check list of traits. An athlete was considered successful if he completed the track season as a participant on the track team. An unsuccessful athlete was one who dropped out of the team before the end of season.

Results indicated that a successful athlete had a higher self-concept significant at the .01 level of confidence. Fundukian stated that self-regard can be designed in a program by judging performance rather than by place in a race and by awarding each personal success according to this definition. The time of the test is not stated, therefore it is difficult to determine whether the poorer self-image of the dropouts was

related perhaps to unpleasant experiences in athletics.

Cooper (1969) states that studies which take note only of personality traits of athletes oversimplify psychological functioning and the contribution of physical activity to emotional reactions. He suggests that studies of the nature of the experience of motor activities for the individual's sense of self and psychological organization should be designed and defines physical education as the process by which an individual learns to appreciate psychologically the capacities of body pleasures uniquely expressed and derived through motor activity.

Morgan and Costill (1972), investigated the characteristics of nine selected marathon runners. These athletes were selected through their participation in previous physiological studies conducted by the researchers. The marathon runners completed tests, measuring introversion, extroversion, neuroticism, stability, anxiety, and depression. Results indicated that marathon runners scored appreciably lower than a normal group for the anxiety variable. None of the psychological variables were significantly correlated with performance in the marathon.

Vernacchia (1973), using a combination of interviews and psychological personality tests, studied running performances of seven middle-distance and long-distance runners on the University of Utah track team. Each athlete was found to be self centered in the sense that he was concerned and aware of his social, athletic and individual needs. Successful participation in athletics enhanced self-worth and self-acceptance, and positive reinforcement encouraged each subject to continue his participation in athletics. Further results indicated that each athlete desired a close personal relationship with his coach. In addition,

athletes preferred training with a coach present as opposed to training alone. The personality characteristics of each athlete were distinctly different. For this reason it was concluded that each athlete should be coached individually, because of individually specific psychological and physiological qualities which deserved careful attention.

Reasons for Running Published in Recent Literature

Recently individuals have considered running as a form of escape from the modern way of life. Roger Bannister (1955) the first sub four-miler, wrote:

> We seek individual freedom in a world that of necessity imposes more and more restrictions. The less we find freedom in our work, the more we shall need to find freedom in the games we play. We do not want to become identical human beings, the servants of a new totalitarianism (Porter, 1956).

Norman Harris (1967, p. 123), a marathon runner and author, also considers running to be a form of escape:

> It has become a security in which to wrap yourself, so that, when feeling uncomfortable in strange company, you could think of the simple, personal satisfaction of running and say all the more readily that this social situation was unimportant and escape outside.

Hart (1972), at the University of Berkeley, California, studied running as a form of collective behavior. The information used in the study was obtained from randomly chosen members of the National Jogging Association. The results of the study indicated that the adult population does not feel the need for vigorous physical activity, but lacks the skills to pursue an activity which is not ephemeral in nature. Hart (1972) concludes that: "Most joggers seem to have been swept into the movement as

a result of some mass contagion which is apt to lead people to . . . "irrationality and whimsical behavior or crazes." Many "lukewarm" joggers, in addition to participants of various ages, do not begin jogging because of some felt strain, but rather, begin because of social pressure similar to that which operates in fashion circles (Hart, 1972).

From the studies in this chapter it can be observed that individuals perceive running to be a means of expressing certain personal dispositions. Their attitudes differ with regard to sex, age, athletic ability and other less apparent personal and social factors.

CHAPTER III

PROCEDURES

The study was designed to analyze, from an historical and socio-psychological perspective, some possible explanation for the continued development of distance running in Eugene. The historical analysis considered the development of running at the University of Oregon as an institutionalized form of physical activity and related this phenomenon to the resultant influence upon the Eugene community. The sociopsychological analysis examined the present attitudes of Eugene runners towards physical activity and their perception of the University's contribution to the growth of running. Male and female competitive and non-competitive runners residing in Eugene completed a personal data questionnaire and the Kenyon Attitude Toward Physical Activity Scales (Kenyon, 1968b).

Subjects

The subjects were selected from participants in the "Along the River Race". This was an organized, open entry ten thousand meter race held on the bicycle paths adjacent to the Willamette River. Other subjects were selected from the Oregon Track Club membership list, and from among runners using the Steve Prefontaine Trails.

Instruments

A letter explaining the study, a personal data questionnaire, and the Kenyon Attitude Toward Physical Activity Scale were administered to

each of the subjects. The questionnaire requested that the subjects provide the following information: birthdate; sex; present occupation; length of residence in Eugene; whether or not the subject was a member of an organized running club; the number of miles the subject ran each week; whether or not the subject considered himself to be a competitive or non-competitive runner; the subject's primary reason for running; identification of factors which contributed toward participation in physical activity or running; whether the subject was aware of the track and field program at the University of Oregon; and whether the subject considered that the University of Oregon had made a significant contribution toward the growth and interest of running in Eugene. The information supplied from the personal data questionnaire was analyzed to provide information for the sociopsychological analysis of the development of a running tradition in Eugene. Additional data for this analysis were obtained from conversations with Bill Bowerman, former head coach at the University of Oregon, Bill Dellinger, the present coach at the University, and Kenny Moore and Clayton Steinke, two former University of Oregon distance runners. Personal correspondence with Arthur Lydiard in New Zealand provided additional information for the analysis.

The Kenyon Attitude Toward Physical Activity Scale was administered to the subjects to assess further perceived individual reasons for participation in running in Eugene.

Kenyon Model for Assessing Attitude Toward Physical Activity

In the early development of his research Kenyon administered two Likert-type attitude statements judged to be representative of each of

the six dimensions of physical activity to 353 lower division college men and 215 lower division college women. These procedures enabled Kenyon to evaluate his conceptual model for internal consistency and independence of sub-domains. Reliability coefficients ranged from .72 to .89 using Hoyt's analysis of variance procedures for the six dimensions (Kenyon, 1968b). From the results of the survey Kenyon concluded that internal consistency and subdomain independence requirements were sufficiently met to warrant that the conceptual model has some validity.

Attitude is a non-observable behavioral disposition, therefore the validity of attitude inventories is difficult to determine directly. Kenyon attempted to validate his conceptual model by comparing the attitudes towards each of the six dimensions of his conceptual model with expressed preferences for particular types of physical activity (Kenyon, 1968b). Preferred activities were determined through the use of a separate instrument. Strong and weak preference groups were devised for each type of activity and compared for significant differences in attitude toward each of the six dimensions of physical activity. From the results of his analysis Kenyon (1968b) concluded that scale scores differentiated between strong and weak preference groups on the predicted direction for all dimensions.

Other instruments for measuring attitude toward physical activity:

> Have not paid sufficient attention to the characterization of "physical activity" in its broadest sense; efforts to date usually limited the enquiry to a somewhat restricted domain such as "physical education", "team game competition", or "sports". Second, instruments seldom were based upon a thorough application of appropriate test construction procedures so long a part of the measurement literature, such as item analysis and psychological scaling techniques. Also,

> there has been a failure to account for the multidimensionality of the domain in question (Kenyon, 1968b).

Kenyon attempted to overcome these problems with a model characterizing physical activity using relatively independent univocal scales for determining attitudes toward physical activity.

Semantic Differential

The Kenyon Scale in semantic differential form consists of seven sets of bipolar adjective pairs for each of the six sub-domains of Health and Fitness, Social, Pursuit of Vertigo, Physical Activity as an Aesthetic Experience, Physical Activity as Catharsis, and Physical Activity as an Ascetic Experience. Kenyon's six dimensions of physical activity have been used in semantic differential form by Alderman (1969), Blair and Kizer (1971), and Delforge (1973).

Kerlinger (1966) described the semantic differential as:

> A number of scales each of which is a bipolar adjective pair, chosen from a large number of such scales for a particular purpose, together with the concepts to be rated with the scales. The scales, or bipolar adjectives are seven point (usually) rating scales, the underlying nature of which has been determined empirically. That is, each scale measures one, sometimes two, of the basic dimensions or factors that Osgood and his colleagues have found to be behind the scales: Evaluative, Potency, Activity. These factors may be called clusters of adjectives (pp. 566-567).

Osgood, Suci and Tannenbaum (1957) found through factor analysis, that adjective pairs good-bad, happy-sad, valuable-worthless, and nice-awful constituted the evaluative factor; adjective pairs strong-weak, heavy-light, large-small, constituted the potency factor; and adjective pairs fast-slow, active-passive, and hot-cold constituted the activity

factor.

Attitudes predispose towards an evaluative response although they are learned predispositions (Osgood et al., 1957). Attitudes are, therefore, referred to as "tendencies of approach or avoidance," or as "favorable or unfavorable". Attitudes can indicate both direction and intensity of feeling when measured against a bipolar continuum. Bipolar adjective pairs which have high loadings on the evaluative factor and low loadings on the potency and activity factor are used when selecting scales for attitude measurement.

Osgood et al. (1957) used test re-test procedures to determine the reliability of the semantic differential as a measure of attitude. Each of the six concepts was judged against an evaluative scale by 135 subjects. Five weeks elapsed between the test and the re-test. Correlation coefficients ranged from .87 to .93 for the concepts, with a mean of .91. Validity was determined by comparing the semantic differential with two other independently devised measuring instruments, the Thurston scales and a Gutman type scale. Product moment coefficients between the semantic differential and the Thurston scale ranged from .74 to .82 for the various concepts used. Rank order correlation between the semantic differential and the Gutman scale was .78. On the basis of the correlations, the investigators concluded that the evaluative factor of the semantic differential is an index of attitude (Osgood et al., 1957).

Construction of a semantic differential involves selecting the concepts and selecting the scale. Research purposes determine the concepts to be judged against the semantic differential scales. Relevance of the concepts and representation of the area of research is also important in

the selection procedures. Selection of the concepts should emphasize the expectance of considerable differences of response, single unitary meaning for the individual, and present concepts which are familiar to all of the subjects. Unfamiliar concepts will produce a "spurious" regression toward the middle of the scale (Osgood et al., 1957, pp. 77-78).

Criteria for the selection of the scale involves factorial composition, relevance, and semantic stability. To meet the criteria of factorial composition, scales should be loaded maximally on the appropriate factor and minimally loaded on the others. Scales should be relevent to the judged concepts to avoid neutral, and non-directional responses produced by irrelevant scales. Semantic stability demands that each scale have a specific usage in judging the particular concept with which it is associated (Osgood et al., 1957). Alternation of the negative and positive ends of the bipolar scales eliminates further possibilities of set responses.

The individual scores for each of the subjects were calculated for attitude toward each of the six dimensions in the Attitude Inventory. The scores were determined by summing the value of the response based on weights of one through seven. The highest or most positive was forty nine; the lowest, or most negative was seven. A score of twenty eight indicated a "neutral" attitude toward the dimension of physical activity being judged. Mean attitude scores were calculated for each sample group toward each of the six dimensions of physical activity in the study.

Analysis of Data

The analysis of data included a dualistic approach. An historical

analysis and a statistical analysis of attitude toward physical activity. The historical analysis provided insight into the influence of the University of Oregon Track and Field program upon the development of a running tradition.

The roles played by track and field coaches and athletes related to some sociological concept of behavior (Turner and Killian, 1957), with particular emphasis on the development of running as an institutionalized physical activity at the University of Oregon, the leadership roles played by some significant personalities who contributed toward this development. Some additional references included Smolicz's concepts of the formation of a tradition from a humanistic perspective. The historical analysis covered the period from 1900 until 1977.

To test the two hypotheses, three way analysis of variance procedures with repeated measures were employed. In addition, intercorrelations were determined among independent variables.

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CHAPTER IV

DATA ANALYSIS

The results of the study were divided into three sections:

1. an historical analysis of the role of the University of Oregon Track and Field program, coaches, track and field athletes and public figures in the formation of Eugene's running tradition;

2. analysis of the personal data questionnaire;

3. analysis of the data pertaining to the hypotheses in the study.

Selected male and female competitive and non-competitive runners were surveyed regarding their attitudes toward physical activity. One hundred and thirty-five runners received the Gerald S. Kenyon Attitude Toward Physical Activity Scale in a semantic differential form with a personal data questionnaire. Fifty-one percent of the questionnaires were returned with an n of seventy-nine, forty-nine male and thirty female runners; sixteen competitive and sixty-four non-competitive runners. Each subject's scores on the six Kenyon subdomains were determined together with the results of the personal data questionnaire.

An Historical Analysis of the Institutionalization of Running at the University of Oregon and Its Effects Upon the Eugene Community: A Humanistic Perspective

Many factors contributed to the institutionalization of running within the University of Oregon. Reference was made earlier to the influence of a number of significant track and field personalities, and the evolution of a distance running tradition at the University of Oregon.

This section focused on an historical-sociological analysis of the development of distance running as an institutionalized physical activity, using the humanistic sociological approach applicable to individual and group interaction. "Institutions are a complex of social actions providing procedures through which human conduct is patterned, compelled to go, in grooves deemed desirable by society" (Berger, 1963, p. 87).

Assuming that individual interaction is the precursor of group interaction, the influence of significant personalities is a significant factor when new attitudes are formed. This was perhaps the case in Eugene after the appointment of Bill Hayward as the first professional track and field coach at the University of Oregon in 1904. He was the innovator of an organized track and field program which stimulated an increased interest among the university community. As Lang and Lang (1966) state, "innovation is an important factor, when a new object or a new idea is introduced or a change takes place in the established order." Hayward introduced a new, highly organized approach to track and field athletics at Oregon.

Prince Lucien Campbell (1906), the President of the University of Oregon, also fulfilled a significant role as an innovator when he announced that "athletics are an important phase of college life. They not only develop the students' physiques but also raise the moral tone of the university" (p. 2). Campbell's views can be interpreted as an indication that participation in athletics was an accepted and desirable part of college life. Until this was expressed, no official statement in support of athletics was given by any other members of the Oregon faculty. Because of his declaration Campbell helped to legitimize athletics at

the University of Oregon.

Bill Hayward's appointment as head track and field coach at the University encouraged a greater interest in the sport and initiated the beginning of the institutionalization of distance running. Because of the legitimization of athletics by Campbell, Hayward's role as a coach, leader, and innovator of organized track and field became more effective. Hayward was a dynamic, charismatic personality. His authoritative leadership contributed to the development of attitudes towards running through his ability to interact effectively with his athletes as individuals and as members of a team. Group and individual interaction combined is more meaningful to most individuals, as it can integrate them into society more thoroughly. Thus, when individuals are integrated into a community, that community concurrently absorbs their habits and values (Lang and Lang, 1966). The growth and success of the Oregon team provided the basis for its increased acceptance within the University, together with the values developed by Hayward and his athletes.

Hayward's leadership qualities closely resembled those elements of leadership which, "involve effective action and central influence" (Lang and Lang, 1966, pp. 232-234). Effective action can be considered as the active aspect of authoritative behavior with the leader influencing the led. Hayward initiated interest and developed a large following of University students. The aspect of central influence relates to collective actions or collective emotions. Relating this concept to Hayward's organizational ability, many opportunities developed for group action through team practices and intercollegiate meets. This was important for the institutionalization of running and facilitated the further

development and University support of track and field athletics. Oregon athletes attracted increased interest within the University as their reputation spread. Success frequently attracts greater interest from a general public, but according to Lang and Lang (1966), the extent of enlisted support of a potential following depends upon effective and efficient use of the resources which are available. Hayward's knowledge of track and field athletics with his organizational ability, enabled him to develop the potential of his athletes. The results of his coaching then faced the test of regular competition. Another aspect was the impact which the progress of the University track and field team had upon its athletes individually. Dan Kelly set a new world record for 100 yards in 9.6 seconds, Walter McClure in the mile, and Martin Hawkins, 120 yards hurdles, represented the United States in the Stockholm Olympic Games in 1912. Performances of this nature contributed toward further team successes and Oregon established a world wide reputation in track and field. The increase of a mass following often depends upon how popularity is achieved (Lang and Lang, 1966, p. 340). The publicity that the Oregon successes received increased the opportunity for further community interest in Eugene. The People's Press of Portland (1903) wrote, "the Oregon University today has the best track team in the United States and probably the world. This is not vain glory nor theory; it can be demonstrated by the records and by individual feats."

Hayward's enthusiasm for coaching and organizing provided clearly defined goals for his athletes. This also contributed towards the increased interest of students in track and field at Oregon. Well known personalities also have the potential for influencing groups and indi-

viduals with whom they have no personal contact (Bernard, 1966). As a well known coach throughout the world Hayward was offered the position as coach of the German national track and field team which he refused. The Oregana (1915) stated, "Bill Hayward is a success and he has made good in his chosen profession. Today he is recognized as one of the leading coaches in the country" (p. 346).

The specific elements of Hayward's leadership, role models embodied by Oregon Track and Field athletes and opportunities for spectators contributed to the development of running as an institutionalized activity at the University of Oregon. Bill Bowerman was appointed head track and field coach in 1949. Bowerman was a former Oregon athlete who competed on Hayward's 1934 track and field team. As a member of this team he was familiar with Hayward's ideas, opinions, and attitudes towards the development of the sport at Oregon. This association helped to perpetuate the running tradition which had developed concurrently with Oregon's success in track and field during Hayward's time. Bowerman's succession as the new head coach of Track and Field athletics at Oregon can be related to Smolicz's definition of the concept of tradition. "An item coming down from the past which must be supplemented by all kinds of auxiliary explanations and postulated functions (1974, p. 78). Bowerman supplemented the knowledge which he had received from Hayward by adding his own interpretations to training and organization. This situation not only maintained the tradition, but helped to develop it.

Bowerman experienced early success when his team recorded five consecutive dual meet wins. These successes reinforced Bowerman's position and helped to establish a positive image of his coaching abilities within

the University and the Eugene community. Bowerman, following Hayward, continued in the role as an innovator. This enhanced the appeal of participation in distance running for Oregon athletes. The "Oregon System" of alternating "hard" and "easy" training days to facilitate recovery from work outs became a well-known method of training for running. Bowerman also revised the form of track and field meets to eliminate the unnecessarily long periods of time between events. Warren (Oregon Emerald, 1973) stated that "in the old days, track meets lasted all day long. He scheduled them down and made them more enjoyable to the spectators." Bowerman was also concerned with emphasizing mass participation for individuals of all abilities. This approach certainly helped to strengthen his position as a central authority. He helped form the Oregon Track Club, which provided competitive opportunities for former Oregon track and field athletes as well as Eugene residents in general. Whereas Hayward was primarily involved with developing track and field athletics for the elite athlete, Bowerman began to extend his approach to include all levels of ability. This new approach manifested itself in the summer "All Comers" meets.

Jim Bailey, an Australian who spent four years at Oregon, held the American national college mile record of 3:58.6, the Pacific Coast mile record of 4:06.00, and the Northern Division records in the mile and 880 yards. Bailey had come to Oregon because he had been positively influenced by former University of Oregon athletes (Oregon Emerald, 1973). Bailey's arrival indicates that personal interaction and personal opinion of other athletes at Oregon had some effect upon the growth of the Oregon tradition of running.

From 1957 through 1960 Oregon's track and field teams experienced

further successes against top class American college teams. Bill Dellinger, Jim Grelle, Otis Davis, Dave Edstrom, Roscoe Cook, Dyrol Burleson, Harry Jerome and Vic Reeve, won many running races at important national and international track meets.

The 1962 National College Track and Field meet held in Eugene, enabled the local community to observe Oregon athletes in competition with the best in America. Invitational meets attracted many world class American and foreign athletes to Eugene. The high level of competition attracted the interest of the Eugene Community.

The growing receptivity for track and field among the Eugene community provided an excellent foundation for the resulting effects which developed following the Oregon four mile relay team's visit to New Zealand in late 1962. "During the summer Bowerman made arrangements with Arthur Lydiard of New Zealand, coach of Peter Snell and Murray Halberg, to send a four mile relay team to compete against the New Zealand team in New Zealand" (Steinke, 1966). The team of Archie San Romani, Vic Reeve, Dyrol Burleson, Keith Foreman and Clayton Steinke, toured New Zealand with coach Bowerman for six weeks.

Prompted by Lydiard, Bowerman decided to participate in a jogging meet, because Lydiard had so many people jogging in New Zealand (Steinke, 1966). Bowerman's experience allowed him to consider the value of this form of physical activity personally, and he became aware of its possible benefits for everyone. Bowerman left New Zealand determined to innovate this new approach to running in Eugene. The Lydiard system, jogging easily for increasing amounts of time, helped to popularize jogging in New Zealand and the Eugene community experienced the same phenomenon.

The popularity of jogging in Eugene increased rapidly and the number of people at weekly gatherings increased from 50 to 3,000 in a short time (Bowerman, 1965). Bowerman's ability as an innovator quickly influenced the local community and he organized expert assistance to fully exploit as many promotional aspects as possible for the development of running within Eugene. "In his typically tenacious style he went about analyzing its effects upon himself and others with the help of the physiologists at the university" (Lydiard, 1977).

Bowerman and Harris (1967) published a book designed to increase the popularity of running for all abilities and age groups. The National Bank of Portland assisted in advertising jogging. New phrases connected with jogging appeared in advertising and throughout news media; Socrates Shuffle, Train but don't Strain, and Patience + Work = Improvement, were popular slogans associated with the promotion of jogging for the community. The Oregon Emerald stated, "because of its greater contributions to our physical fitness, we are happy that the University of Oregon, through its track coach Bill Bowerman, is responsible for jogging's introduction to the United States" (1962, p. 4).

Bowerman organized joggers into small groups with an Oregon track athlete acting as a leader of the group (Moore, 1977). Astute organization such as this contributed an important motivational influence for many beginning joggers. Small groups led by Oregon athletes greatly assisted the duality of interaction between each individual. From a humanistic viewpoint, how each individual perceived his early running experience was a factor in his personal development and ultimately the development of Eugene's running tradition. The availability of expert

advice from the medical profession and experienced athletes allowed many individuals to personally experience running's intrinsic and extrinsic benefits. Many new Eugene residents observed the collective behavior of the community and evaluated jogging for themselves. Many individuals subsequently began to jog (Bowerman, 1976).

Bowerman retired from his position as head track and field coach at Oregon after an extremely successful period in the history of Oregon track and field athletics. He continued the tradition which he inherited from his competitive days and developed many new ideas related to running at both the University and the community levels. Smolicz (1974) stated that "to survive as a tradition, a particular item must continue to exert its appeal as one coming down from the past, but this value must be supplemented by all kinds of auxiliary explanations and functions" (p. 78). High calibre track and field meets such as those provided by Bowerman and his athletes furnished many examples of the factors to which Smolicz refers. The Oregon team under Bowerman produced 23 individual N.C.A.A. winners, 37 Pac 8 Conference winners, and 127 Northern Division winners. Oregon finished among the top ten all American college track and field teams on fourteen out of nineteen occasions. It won the National meet in 1962, 1964, 1965, 1970 and was runner up in 1961 and 1967. Nineteen athletes competed in the Olympic Games and 56 athletes became All Americans (Duck Dope; University of Oregon Athletic Department, 1972).

Bill Dellinger, another former Oregon track and field athlete, succeeded Bowerman as Oregon's head coach. He had a successful running career under Bowerman and his experience enabled him to provide the continuity of the Oregon tradition in track and field athletics. He was

well known as a successful runner as a former world two-mile indoor record holder and Olympic 5,000 meter bronze medal winner. He continued to develop a world class cross country program, which he had innovated as an assistant coach under Bowerman. In 1977 the cross country team added another success when it won the N.C.A.A. meet in Pullman, Washington. The traditional desire for success remained as strong as in former days. "The number of talented runners who are eligible for a place on the team continues to create the strong competitive spirit for which Oregon is famous" (Dellinger, 1977).

The influence of the running tradition in Eugene is apparent when the opportunities for running are noted. The Prefontaine Trails provide traffic-free training facilities for the community. The Oregon Track Club organizes regular open road races and track races in summer. These opportunities perpetuate the growth of interaction and discussion at the individual and community level which is so vital for the continuance of a tradition.

This tradition is also apparent from the economic standpoint, with the increased sales of running equipment. Jeff Hollister, a Nike Shoe Company representative (1977), states: "Nike sales rose from $9 million to $27 million last year. If per capita sales of shoes in Eugene could be realized throughout the United States the Nike Company would be the largest in the world; bigger than U.S. Steel or General Motors."

Much has been done to nourish and maintain the growth of Eugene's interest in the sport of running. The facilities and organized races in Eugene, already mentioned in this analysis, together with the influence of the University of Oregon provided the necessary impetus for community

participation. However, despite the variety of opportunities for competition, Eugene's running in general maintained a strongly individual and non-competitive approach. Eugene residents were primarily interested in the recreative aspects of running rather than in competition. The population was more oriented towards jogging four or five miles per day and some people never got involved in a race (Anderson, 1977).

Analysis of the Personal Data Questionnaire

In addition to the Kenyon Scales, each subject answered a personal data questionnaire. In this questionnaire the principal areas of inquiry included age, sex, occupation, current running status (whether or not a member of an organized running club), approximate number of miles run each week, whether the subject considered himself to be a competitive or non-competitive runner, the primary reason for running, whether or not the subject felt that the University of Oregon had contributed toward the growth of running in Eugene, and whether or not the subject was aware of the track and field program at the University of Oregon.

The age of the male runners ranged from 19 to 70 years. The average age was 32. The female runners ranged from 19 to 51 years of age with an average of 33. The competitive runners ranged from 24 to 50 years with an average of 33 years. The non-competitive runners ranged from 19 to 70 with an average of 30 years. A presentation of age data appears in Table 1.

Forty-three percent of the subjects, thirty-four of the seventy-nine runners, were students at the University of Oregon. Of the remaining forty-five runners, thirty-six subjects were engaged in primarily profes-

sional occupations (teaching, accounting, medicine, research), and nine were engaged in occupations which included clerical, secretarial and postal work. Ten runners (14%) indicated that they belonged to an organized running club. The remaining sixty-nine subjects did not belong to an organized running club.

The length of time each subject resided in Eugene ranged from the minimum time of one year to a lifelong residence of 35 years.

The male runners averaged a total of 33 miles per week, while the females ran an average of 16.50 miles per week. The competitive runners averaged 49 miles per week and the non-competitive runners ran an average of 18.50 miles per week. A summary of the distance run each week by the subjects is presented in Table 1.

Sixteen of the seventy-nine runners considered themselves to be competitive runners. The competitive group included thirteen males and three females. Included in the total of sixty-three non-competitive runners were twenty-seven females and thirty-six males.

The personal data questionnaire indicated that the most common reasons for participation in running were health and fitness, the opportunities for running provided by the city of Eugene, and the convenient and simple aspects of running as a method of exercising. Seventy-two runners considered that the University of Oregon had contributed significantly toward the growth and interest of running in Eugene. Seven runners did not agree that the University had made a positive contribution. Sixty-eight of the subjects expressed an awareness of the track and field program at the University and eleven were not aware of the program.

TABLE 1

Summary of Age Data, Total Miles run:

Male and Female, Competitive and Non-Competitive Runners

Groups	n	Age Range	$\overline{X}$ Ages	$\overline{X}$ Number of Miles per Week
Males	49	19-70	32.10	32.94
Females	30	19-51	30.97	16.60
Competitive Runners	16	24-50	33	49.35
Non-Competitive Runners	63	19-70	30.69	18.66

Tests of the Hypotheses

Hypothesis number one stated that there will be no statistically significant differences between the groups of male and female runners as measured by the Kenyon Attitude Toward Physical Activity Scales. Three way analysis of variance procedures were employed to test this hypothesis. From the results of the analysis it was determined that no statistically significant differences were found between the groups of male and female runners over all the combined scores within the six domains. Since there were no significant differences between sex and the domain, this infers that there were no significant differences within each of the various domains. From this result the null hypothesis was accepted.

The mean scores of the six subdomains in the Kenyon Scale indicated that the male runners expressed the most positive attitudes toward health and fitness, physical activity as a social experience, and physical activity as an aesthetic experience. Less positive attitudes were expressed toward the subdomains of catharsis, the pursuit of vertigo, and asceticism. The female runners expressed the most positive attitudes toward the aesthetic, cathartic, ascetic, and health and fitness subdomains. Less positive attitudes were expressed toward the social and pursuit of vertigo subdomains.

Hypothesis number two stated that there will be no significant differences between the competitive and non-competitive groups of runners as measured by the Kenyon Attitude Toward Physical Activity Scale. Three way analysis of variance procedures were used to test this hypothesis. From the results of the analysis no statistically significant differences

were found between the groups of competitive and non-competitive runners over all the combined scores within the subdomains. Since there was no significant difference between the competitive and non-competitive groups of runners, this infers that there was no significant difference within each of the various domains. From this result the null hypothesis was accepted.

There was a significant difference among the scores in each of the domains, but since this was not a part of the original hypothesis stated in this study, a statistical analysis to find where these differences occurred was not conducted.

There was no significant three way interaction between sex, competitiveness and subdomains. A summary of the three way analysis of variance procedures is presented in Table 3.

The competitive runners expressed more positive attitudes toward the cathartic, aesthetic, health and fitness, and social subdomains than toward the ascetic and pursuit of vertigo subdomains. The non-competitive runners ranked health and fitness first, with social second. The aesthetic, cathartic, pursuit of vertigo, and ascetic subdomains were less positively rated.

The combined sample of seventy-nine runners expressed most positive attitudes toward health and fitness, physical activity as a social experience, and physical activity as an aesthetic experience. Less positive attitudes toward catharsis, the pursuit of vertigo and physical activity as an ascetic experience were expressed.

Analysis of the Intercorrelations Between the Subdomains

The intercorrelation between the pursuit of vertigo and the ascetic subdomains shows that r^2, or approximately 37 percent of the elements of which these scales consist, have some relationship. The degree of relationship can be considered with regard to these scales. Other intercorrelations resulted in lower r^2 values than the relationship between the pursuit of vertigo and the ascetic subdomains. The intercorrelation matrices of the subdomains are presented in Table 4.

TABLE 2

Mean Scores and Rank Order

Between Male and Female Runners

and Between Competitive and Non-Competitive Runners

on each of the Six Kenyon Subdomain Mean Scores

Subdomains	Male n=49		Female n=30		Competitive n=16		Non-Competitive n=63		Overall n=79	
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
1. Social	41.04	(2)	39.16	(5)	40.00	(4)	40.20	(2)	40.39	(2)
2. Health and Fitness	42.17	(1)	39.59	(4)	40.96	(3)	40.80	(1)	41.14	(1)
3. Pursuit of Vertigo	37.03	(5)	38.78	(6)	35.64	(6)	35.16	(6)	35.67	(5)
4. Aesthetic	38.72	(3)	41.26	(1)	41.00	(2)	38.98	(4)	39.07	(3)
5. Catharsis	37.94	(4)	40.50	(2)	41.38	(1)	38.00	(5)	38.20	(4)
6. Ascetic	35.51	(6)	39.89	(3)	35.77	(5)	39.68	(3)	34/97	(6)

TABLE 3

Summary of Three Way Analysis of Variance Procedures

Source	Sum of Squares	Degrees of Freedom	Mean Square	F	Probability F Exceeded
1. Competitive/ Non-Comp. Differences	48.22	1	48.22	0.62	0.43
2. Male and Female Diff.	15.09	1	15.09	0.19	0.66
3. Interaction between Male and Female and Comp.	1.70	1	1.70	0.02	0.88
4. Domain Diff.	1053.86	5	210.77	4.68*	0.00
5. Domain/Compet. Interaction	44.19	5	8.84	0.20	0.96
6. Domain/Sex Interaction	272.64	5	54.53	1.21	0.30
7. Domain/Comp. Sex Interact.	163.80	5	32.76	0.73	0.60

* Significant at the .05 level $F_{.95}(1,75)=3.98$ $F_{.95}(5,375)=2.23$

TABLE 4

Intercorrelation Matrix of Dependent Variables:

Six Kenyon Sub Domains

Subdomains	Health Fitness	Pursuit Vertigo	Aesthetic	Catharsis	Ascetic
Social	0.27	0.12	0.10	-0.8	0.33
Health and Fitness	----	0.11	0.29	0.42	0.004
Pursuit of Vertigo	----	----	-0.20	0.10	0.61
Aesthetic	----	----	----	0.29	-0.43
Catharsis	----	----	----	----	-0.10
Ascetic	----	----	----	----	----

CHAPTER V

FINDINGS, CONCLUSION, DISCUSSION, RECOMMENDATIONS

The study was designed to analyze the development of a running tradition within the Eugene metropolitan area and to examine the contribution of the University of Oregon. The problem was approached from an historical and a psychosociological perspective. The historical aspects of the study covered the institutionalization of running as a physical activity at the University of Oregon and attempted to outline how the contribution of a number of significant personalities at the University influenced the growth of running within the Eugene community.

The attitudes of selected male and female runners residing in Eugene were surveyed using the Gerald S. Kenyon Attitude Toward Physical Activity Scale in a semantic differential form. The six subdomains which form the Kenyon scales included the following: physical activity as a pursuit of vertigo; physical activity as a social experience; physical activity for health and fitness; physical activity as an aesthetic experience; physical activity as a catharsis; and physical activity as an ascetic experience. The six attitudes toward physical activity were used to investigate the attitudes of these groups.

The subjects were chosen from the "Along the River Race," from runners using the Prefontaine Trails, an Oregon Track Club membership list, and from runners in general who lived in the Eugene metropolitan area. Each subject received a personal data questionnaire in addition to the

Kenyon scales. The questionnaire requested information regarding age, sex, occupation, current running status (whether or not a member of an organized running club), approximate number of miles run each week, whether the subject considered himself to be a competitive or non-competitive runner, whether or not the subject felt that the University of Oregon had contributed toward the growth and interest of running in Eugene, and whether or not the subject was aware of the track and field program at the University of Oregon. Fifty-one percent of the questionnaires and attitude inventories were returned. This resulted in a total of seventy-nine runners; forty-nine males and thirty females.

Findings

The historical analysis surveyed the development of running as an institutionalized physical activity at the University of Oregon from 1900 until 1977. The influence of Prince Lucien Campbell, Bill Hayward, Bill Bowerman, Arthur Lydiard, and Bill Dellinger, in addition to many former Oregon track and field athletes, significantly contributed toward the development of the sport. The significance of the University's influence was also noted from the personal data questionnaires. Ninety-one percent indicated that they considered "the University of Oregon had made a significant contribution toward the growth and interest of running in Eugene." Eighty-six percent of the runners expressed a knowledge of the track and field program at the University of Oregon. The influence of many former collegiate runners and the opportunity for watching world class track meets in Eugene were also considered to be a positive influence upon participation in running.

Seventy-nine male and female runners were also surveyed regarding their attitudes toward physical activity. The male runners expressed positive attitudes toward physical activity and ranked the health and fitness subdomain highest, social second, with the aesthetic and catharsis subdomains following. Less positive attitudes were expressed toward the pursuit of vertigo and the ascetic subdomains. The female runners ranked the aesthetic subdomain highest, followed by catharsis, ascetic, and health and fitness. The social and pursuit of vertigo were less positively ranked (see Table 2, p. 40). The competitive runners ranked physical activity as a means of catharsis highest, with the aesthetic subdomain second, and health and fitness third. The social, ascetic, and pursuit of vertigo were less positively rated. The non-competitive runners ranked the health and fitness subdomain highest, followed by social, ascetic and aesthetic subdomains. Catharsis and the pursuit of vertigo were less positively rated.

The combined group of seventy-nine runners expressed the most positive attitude toward physical activity as a means of health and fitness, as a social experience, and as an aesthetic experience. The subdomains of catharsis, pursuit of vertigo, and as an ascetic experience were less positively rated.

No statistically significant differences were found between the male and female runners or the competitive and non-competitive runners. A low degree of relationship (τ^2=37%) was found to exist between the pursuit of vertigo and ascetic subdomains. The remaining intercorrelations produced no significant results among the other subdomains.

Conclusions

Within the limits of the study it was concluded that:

1. The University has made a significant contribution toward the growth and interest of running in Eugene.

2. There were no statistically significant differences between the groups of male and female runners as measured by the Gerald S. Kenyon Attitude Toward Physical Activity Scales.

3. There were no statistically significant differences between the competitive and non-competitive groups of runners as measured by the Gerald S. Kenyon Attitude Toward Physical Activity Scale.

4. Runners in Eugene have generally positive attitudes toward physical activity and toward each of Gerald S. Kenyon's six domensions of physical activity.

Discussion

On the Gerald S. Kenyon Attitude Toward Physical Activity Scale runners in Eugene expressed positive attitudes toward the maintenance of health and fitness, physical activity as a social experience, and physical activity as an aesthetic experience. The subdomains of catharsis, pursuit of vertigo, and ascetism were less positively rated. These findings support the results of Delforge (1973), and Morton (1975). The subjects in these two studies also expressed more positive attitudes towards the health and fitness, social, and aesthetic subdomains. The pursuit of vertigo, cathartic and ascetic subdomains were also less positively rated.

The similarity of the results of this study with those of Delforge in Arizona and Morton in California suggested that the runners in Eugene did not differ in their intrinsic reasons for participation in physical activity from individuals who resided in other areas of the United States. The individual's inner attitudes were not the only motivational forces which influence running participation. External reasons, the sight of many other runners, the opportunity to interact, exchange and reinforce opinions about running were also important to maintain consistent involvement. Through group and individual interaction many individuals in Eugene derived additional external psychological support. The importance of the visual and external influence of other runners was emphasized by seventy percent of the runners sampled in this study. They considered these factors important to reinforce their participation in running.

The runners in this study also stated that a variety of traffic-free areas helped to increase the popularity and enjoyment of running. The City of Eugene provides a number of running areas which are safely removed from traffic circulation. The Prefontaine Trails and trails in Hendrick's Park are well known in Eugene. A third external influence which affected the enjoyment of running is the climatic situation. Eugene's location in the Pacific Northwest of America provides a temperate, moist, cool climate which is conducive to distance running and the absence of severe climatic changes encourages consistency in training.

The historical analysis outlined the role of the University of Oregon in the development of a running tradition in Eugene. Ninety percent of the runners in this study stated that the University had made a significant contribution toward the growth and interest of running in Eugene.

Sixty percent stated that they were aware of the track and field program at Oregon. The influence of former Oregon athlete Steve Prefontaine was considered inspirational by a small proportion (9%) of the sampled subjects. Others stated that track meets and the opportunities to see world class athletes increased their awareness of running as a sport.

Running has increased in popularity during the last ten years in Eugene. However, it is probable that most residents are unaware of former famous names in track and field at the University of Oregon. Most individuals in Eugene are possibly unaware of the specific ways in which track and field athletics became institutionalized at the University. The influence of Prince Lucien Campbell, Bill Hayward, Dan Kelly, Bill Bowerman, Jim Grelle, and Dyrol Burleson have contributed toward the development of running in Eugene, although the exact extent of their contribution is difficult to assess. The present growth of interest in running in Eugene indicates that the contribution of former personalities has been significant.

It is important here to reconsider Smolicz's (1974) definition of tradition with particular regard to "that part of the heritage which excites feelings of approval in the current generation by involving it in an act of identification." World class track meets in Eugene, the sight of many other runners, regularly organized races, the facilities for running, and even the availability of commercial running equipment reinforces the identification to which Smolicz refers. In Eugene running is a regular daily physical activity for thousands (see p. 1) of residents, therefore the degree of approval accorded to runners by the general population is considerable. As a result of the wide interest in running it becomes

easier for individuals to receive regular reinforcement, or approval than in areas where running is not accepted by the community. The "acceptance factor" is necessary for the continuance of a tradition (Smolicz, 1974).

World class track and field meets and regularly organized races have not influenced the Eugene community toward a predominantly competitive attitude toward running. Anderson (1978) stated: "Despite the opportunities for collective running in the form of races and the Oregon Track Club, the running population maintains a strongly individual approach. Eugene is primarily interested in the recreative aspects of running rather than the competitive." This opinion was supported by attitudes of the majority of the sample of runners in this study. Approximately eighty percent of the subjects indicated that they considered themselves non-competitive, recreational runners. Their principal reason for running is to participate recreatively, not competitively.

Today, running is considered a sport for all ages and abilities. Formerly, competition and facilities in America were primarily available just for college athletes and individuals of college and high school age. Many athletes discontinued athletic participation after completing their college studies. In Eugene, however, the tendency of the community to be non-competitive can be related to a former attitude that associated competitive running primarily with elite athletes. Perhaps in another ten years this attitude will change to include increased numbers of every level of ability in view of the growth of interest in running and the existing running tradition (Bowerman, 1976; Dellinger, 1977).

A comparison of the attitudes toward running in Eugene with those of other American cities may reveal some fundamental differences. The

acceptance of a running community within a social structure varies according to its social background, climate, and heritage. Communities who labor physically are often usually less inclined to select physical pastimes in their leisure hours. The subjects in this study were engaged in non-physical occupations. There are other areas of the country where members of the community have similar occupations as in Eugene but where the influences of a running tradition are not evident. Runners in areas which lack such strong external reinforcement often rely upon greater internal motivation and greater interaction among runners to provide adequate reinforcement.

In the United States in general, sport promotion continues to appeal to an enormous spectator population. The findings, within the limits of this study, have indicated that the Eugene community runs primarily for recreative reasons. This indicates that satisfaction is derived from this form of regular exercise without too much emphasis upon the competitive aspects. This approach has encouraged many individuals to participate in running while perhaps helping to eliminate some of the negative and widespread attitudes towards spectatorism which are so prevalent in modern American society.

Recommendations

1. A study be designed to compare the growth of interest in running in Eugene with that of the development of interest in Honolulu, Denver, and New Zealand.

2. A similar study be conducted to include a larger sample of runners in the Eugene metropolitan area.

3. A study of the socio-economic differences in Eugene which provide a background for participation in physical activity.

APPENDIX A

Department of Physical Education,
University of Oregon
Eugene, Oregon 97403

October 31st, 1977

Dear Runner:

Eugene is well-known as a running centre in the United States and throughout the world. Community interest in running continues to grow and recently it was estimated that there are 10,000 active runners within the Eugene area.

Several articles have been written concerning the popularity of running in Eugene. You may have read them and asked yourself the question: Why do so many people in Eugene run? The purpose of this study is to survey the attitudes towards physical activity of runners within the Eugene metropolitan area in order to provide some of the answers to this question. Your participation in this study, by completing these questionnaires will help to provide some of the answers.

Please complete and return this survey and enclosed questionnaire to me at the above address as soon as possible. This is an extremely important contribution to the study. Both sections will only take 10-15 minutes of your time.

If you have any questions regarding this study please contact me at the above address.

Thank you very much for your cooperation.

Sincerely,

Raymond Tricker
Graduate Department
University of Oregon

I have read the questionnaires and understand that there are no risks which will jeopardize the integrity of an individual who participates in this study.

Return of the questionnaires will indicate consent to participate in the study.

I agree to allow any data to be used in professional presentations and publications, provided that my anonymity is maintained.

Signed _____

Date _____

I have read the questionnaires and understand that there are no risks which will jeopardize the integrity of an individual who participates in this study.

Return of the questionnaires will indicate consent to participate in the study.

I agree to allow any data to be used in professional presentations and publications, provided that my anonymity is maintained.

Signed _____

Date _____

I have read the questionnaires and understand that there are no risks which will jeopardize the integrity of an individual who participates in this study.

Return of the questionnaires will indicate consent to participate in the study.

I agree to allow any data to be used in professional presentations and publications, provided that my anonymity is maintained.

Signed _____

Date _____

PERSONAL DATA QUESTIONNAIRE

1. Please give your:

   a) Date of birth

   b) Sex - Male or Female

   c) Present occupation

2. How long have you lived in Eugene?

3. Are you a member of an organized running club?

4. As accurately as possible please estimate the number of miles that you run each week.

5. Do you consider yourself to be primarily a competitive runner (participating regularly against other runners in organized races) OR do you consider yourself to be a recreative non-competitive runner?

6. What is your primary reason for running?

7. If you did not run regularly before you came to Eugene, what factors contributed towards your participation in running?

8. Do you feel that the U of O has contributed to the growth of interest in running in Eugene? Are you aware of the track and field program at the U of O?

ATTITUDE INVENTORY

Instructions

The purpose of this study is to measure the meaning for you of certain concepts of physical activity by judging them against a series of descriptive scales. In completing this inventory, please make your judgments on the basis of what these things mean to you. On each page of the booklet you will find different concepts to be judged and beneath each a set of scales. You are to rate the concept on each of these scales in order.

Here is how you are to use these scales:

If you feel that the concept at the top of the scales, for example "physical education" is very closely related to the end of the scale, you should place your check mark as follows:

PHYSICAL EDUCATION

Good X : ___ : ___ : ___ : ___ : ___ : Bad

Good ___ : ___ : ___ : ___ : ___ : X : Bad

If you feel that the concept is quite closely related to one or the other end of the scale (but not extremely), you should place your checkmark as follows:

PHYSICAL EDUCATION

Good ___ : X : ___ : ___ : ___ : ___ : Bad

Good ___ : ___ : ___ : ___ : X : ___ : Bad

If the concept seems only slightly related to the side on the left as related to the other side (but is not neutral), then you should check as follows:

PHYSICAL EDUCATION

Good____: X :____:____:____:____:____: Bad

Good____:____:____:____:____: X :____: Bad

The direction toward which you check, of course, depends upon which of the two ends of the scale seem most characteristic of the thing you are judging.

If you consider the concept to be Neutral on the scale (both sides of the scale seem equally associated with the concept), then you should place your check-mark in the middle space.

PHYSICAL EDUCATION

Good____:____:____: X :____:____:____: Bad

Good____:____:____: X :____:____:____: Bad

IMPORTANT:
(1) Be sure you check every scale for every concept.
(2) Do not omit any of the questions.
(3) Never put more than one check mark on a single scale.
(4) Make each item a separate and independent judgement.

Work at a steady speed through the inventory. Do not puzzle over individual items. Work at a fairly high speed. It is your first impressions, the immediate "feelings" about items that we want. On the other hand, please do not be careless because we do want your true impressions.

Using the following scales, express on the answer sheet what the concept in the box means to you.

PHYSICAL ACTIVITY AS A SOCIAL EXPERIENCE

Sports and games and other forms of physical recreation whose primary purpose is to provide opportunities for social interaction; that is, to meet new people and to continue personal friendships.

As you proceed, always be thinking about the idea or concept in the box.

1.	good	: : : : : : :	bad
2.	worthless	: : : : : : :	valuable
3.	unpleasant	: : : : : : :	pleasant
4.	sweet	: : : : : : :	sour
5.	awful	: : : : : : :	nice
6.	happy	: : : : : : :	sad
7.	tasty	: : : : : : :	distasteful

PHYSICAL ACTIVITY FOR HEALTH AND FITNESS

Participating in physical activity primarily to improve one's health and physical fitness.

1.	good	: : : : : : :	bad
2.	worthless	: : : : : : :	valuable
3.	unpleasant	: : : : : : :	pleasant
4.	sweet	: : : : : : :	sour
5.	awful	: : : : : : :	nice
6.	happy	: : : : : : :	sad
7.	tasty	: : : : : : :	distasteful

PHYSICAL ACTIVITY AS A THRILL BUT INVOLVING SOME RISK

Physical activities providing, at some risk to the participant, thrills and excitement through speed, acceleration, sudden change of direction, and exposure to dangerous situations.

1. good _____:_____:_____:_____:_____:_____:_____: bad
2. worthless _____:_____:_____:_____:_____:_____:_____: valuable
3. unpleasant _____:_____:_____:_____:_____:_____:_____: pleasant
4. sweet _____:_____:_____:_____:_____:_____:_____: sour
5. awful _____:_____:_____:_____:_____:_____:_____: nice
6. happy _____:_____:_____:_____:_____:_____:_____: sad
7. tasty _____:_____:_____:_____:_____:_____:_____: distasteful

PHYSICAL ACTIVITY AS THE BEAUTY IN HUMAN MOVEMENT

Physical activities which are thought of as possessing beauty or certain artistic qualities such as ballet, gymnastics or figure skating.

1. good _____:_____:_____:_____:_____:_____:_____: bad
2. worthless _____:_____:_____:_____:_____:_____:_____: valuable
3. unpleasant _____:_____:_____:_____:_____:_____:_____: pleasant
4. sweet _____:_____:_____:_____:_____:_____:_____: sour
5. awful _____:_____:_____:_____:_____:_____:_____: nice
6. happy _____:_____:_____:_____:_____:_____:_____: sad
7. tasty _____:_____:_____:_____:_____:_____:_____: distasteful

PHYSICAL ACTIVITY FOR THE RELEASE OF TENSION

The participation (or watching others participate) in physical activities to get away from the problems of modern living, to provide a release from "pent up emotions."

1. good _____:_____:_____:_____:_____:_____:_____: bad
2. worthless _____:_____:_____:_____:_____:_____:_____: valuable
3. unpleasant _____:_____:_____:_____:_____:_____:_____: pleasant
4. sweet _____:_____:_____:_____:_____:_____:_____: sour
5. awful _____:_____:_____:_____:_____:_____:_____: nice
6. happy _____:_____:_____:_____:_____:_____:_____: sad
7. tasty _____:_____:_____:_____:_____:_____:_____: distasteful

PHYSICAL ACTIVITY AS PROLONGED AND STRENUOUS TRAINING

Physical activities which require long periods of strenuous and often painful training; which involve stiff competition and demands that the individual give up a number of pleasures for a period of time.

1. good _____:_____:_____:_____:_____:_____:_____: bad
2. worthless _____:_____:_____:_____:_____:_____:_____: valuable
3. unpleasant _____:_____:_____:_____:_____:_____:_____: pleasant
4. sweet _____:_____:_____:_____:_____:_____:_____: sour
5. awful _____:_____:_____:_____:_____:_____:_____: nice
6. happy _____:_____:_____:_____:_____:_____:_____: sad
7. tasty _____:_____:_____:_____:_____:_____:_____: distasteful

APPENDIX B

ADDITIONAL SOURCES OF INFORMATION

Bowerman, W. J. Telephone conversation. February 14th, 1977.

Bowerman, W. J. Letter dated March 4th, 1977.

Dellinger, W . Personal interview, September 24th, 1977.

Lydiard, A. L. Letter dated February 21st, 1977.

Moore, K. Telephone conversation, February 6th, 1977.

Newnham, B. Eugene Register Guard, November 15th, 1977.

Steinke, C. Personal running memoirs, 1957-1966.

Steinke, C. Personal interviews February - May, 1977.

Warren, C. Oregon Emerald. A history of sport at the University of Oregon 1900 - 1973. 1973, May 20th, 3, 24.

REFERENCES

Adams, R. S. Two scales for measuring attitude toward physical education. Research Quarterly, 1963, 34, 91-94.

Alderman, R. B. A sociopsychological assessment of attitude toward physical activity in champion athletes. Research Quarterly, 1970, 41, 1-9.

Bernard, J. American Community Behavior. New York: Holt, Reinhart, and Winston, 1966.

Blair, M. S., & Kizer, D. L. An assessment of expressed attitude toward physical activity among high school athletes and coaches in specific sports from two geographical areas. (Doctoral Dissertation, University of Northern Colorado) Ann Arbor, Michigan: University microfilms, 1972, No. 72-3247.

Bowerman, W., & Harris, W. Jogging. New York: Grossett and Dunlap, 1967.

Braibanti, R., & Spengler, J. Tradition, Values, and Socio-economic Development. Durham, N.C.: Duke University Press, 1961.

Brumel, R. The meaning of running for junior high school age athletes and its relation to improvement in performance. Master's thesis, University of Oregon, 1975.

Clarke, D. H., & Clarke, H. H. Research Processes in Physical Education, Recreation, and Health. Englewood Cliffs: Prentice-Hall, 1970.

Cooper, L. Athletics, activity, and personality. A review of literature. Research Quarterly, 1969, 40, 17-22.

Coutts, C. A. The relationship of social values and attitude toward and participation in physical activity and sports among college students. (Doctoral dissertation, University of Arizona) Ann Arbor, Michigan: University microfilms, 1973, 73-28-848.

Crakes, J. G. The anatomical, physiological, and psychological differences between distance runners of varying abilities. Doctoral dissertation, University of Oregon, 1960.

Delforge, G. D. Attitude of physically handicapped college students toward physical activity. (Doctoral dissertation, University of Arizona) Ann Arbor, Michigan: University microfilms, 1973, No. 73-20-649.

Freeman, W. H. A biographical study of William Jay Bowerman. (Doctoral dissertation, University of Oregon, December, 1972.

Freeman, W. The coaching attitude and practices of Oregon high school Track and Field coaches (1968-69). Master's thesis, University of Oregon, 1970.

Fundukian, J. M. The self-concept as a factor in the success of track athletes. U. S. Track Coaches Association (1969). Track and Field Quarterly Review, December, 1969, 38.

Gerber, E. Methodology in historical research. J. H. Wilmore (Ed.), Exercise and Sports Medicine Reviews (Vol. 2). New York: Academic Press, 1974.

Gilmour, G. Run for your life - Jogging with Arthur Lydiard. Auckland: Minerva, 1966.

Hart, D. P. Jogging as a form of collective behavior. (Doctoral dissertation, University of California, Berkeley): University of Oregon Microfilms, 1975, G. V. 1061 H37.

Hergert, J. H. An explanatory study of attitudes toward physical activity as expressed by university students. (Doctoral dissertation, University of Utah) Ann Arbor, Michigan: University Microfilms, 1970, No. 70-3781.

Hussman, B. F. Aggression in boxers and wrestlers as measured by projective techniques. Research Quarterly, 1955, 26, 421-425.

Judkins, C. W. Differences in student and faculty members' attitudes toward physical activity. (Doctoral dissertation, North Texas State University) Ann Arbor, Michigan: University Microfilms, 1973, No. 73-22-845.

Kenyon, G. S. A conceptual model for characterizing physical activity. Research Quarterly, 1968, 39, 96-105(a).

Kenyon, G. S. Six scales for assessing attitudes toward physical activity. Research Quarterly, 1968, 39, 96-105(b).

Kenyon, G. S. Values held for physical activity by selected secondary school students in Canada, England, and the United States. U. S. Office of Education Contract, University of Wisconsin, 1968, S-376(c).

Kerlinger, F. N. Foundations of Behavioral Research. New York: Holt, Reinhart, and Winston, 1966.

Lang, K., & Lang, G. E. Collective Dynamics. New York: Thomas Y. Cromwell, 1966.

Mason, M. G., & Ventre, A. G. L. Attitude toward athletics in second and fourth year boys in secondary schools. Research Papers in Physical Education. 1965, 1, 42-50.

McArthur. C. N. Scrap Book. University of Oregon Collection. 1903.

Morgan, W. P. Extra-neuroticism and athletic performance. Paper at 15th annual meeting of the American College of Sports Medicine. University Park, Pennsylvania, 1968.

Morgan, W. P., & Costill, D. L. Psychological characteristics of the marathon runner. Journal of Sports Medicine and Physical Fitness, 1972, 12, 42-46.

Morton, K. A. A comparative sociopsychological assessment of attitudes toward physical activity in selected male members of running clubs. Master's thesis, University of the Pacific, January 1975.

Mouly, G. J. The Science of Educational Research. New York: The American Book Company, 1963.

Oregana, University of Oregon. Alumni Number, July 3rd, 1906.

Oregana, University of Oregon, 1915, VI, 352.

Oregana, University of Oregon, 1922, XIV, 188.

Oregon Emerald. A history of sport at the University of Oregon 1900-1973. 1973, May 20th, 3, 24.

Oregon Emerald. A history of sport at the University of Oregon 1900-1973. 1973, May 20, 5, 20.

Oregon Daily Emerald. 1962, December 5th, 4.

Oregon Weekly. University of Oregon Alumni Number, June 3rd, 1906.

Osgood, C. E., Suci, G. J., & Tannenbaum, P. H. The Measurement of Meaning. Urbana, University of Illinois Press, 1957.

Porter, J. L. The first fifty years of track and field athletics at the University of Oregon. Master's thesis, University of Oregon, June, 1956.

Richardson, C. E. Thurston scale for measuring attitudes of college students toward physical fitness and exercise. Research Quarterly, 1960, 31, 638-643.

Smolicz, J. Tradition: A humanistic perspective. Australian and New Zealand Journal of Sociology, 1974, 10(2).

Stolarov, V. I. The historical method in the sociology of sport. International Review of Sport Sociology, 1976, 3 (11), 103-112.

Straub, W. F. & Felock, T. Attitudes toward physical activity of delinquent and non-delinquent junior high school girls. Research Quarterly, 45, 21-27.

Turner, R. H., & Killian, L. M. Collective Behavior. New Jersey: Prentice-Hall, 1957.

University of Oregon Athletic Department. Duck Dope track and field annual manual, 1973.

Van Dalen, D. B. Understanding Educational Research. New York: McGraw Hill, Inc., 1973.

Vernnachia, R. A. Case profiles of track athletes. (Doctoral dissertation, University of Utah). Ann Arbor, Michigan: University microfilms, 1974, No. 74-1465.

Wear, C. L. Construction of equivalent forms of and attitude scale. Research Quarterly, 1955, 26, 113-119.

Carole S. Irsfeld, Typist