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        The hiring of a head football or a head basketball coach
at a major University involves decision making by many
people. This study examined the attributes perceived as
essential by four constituency groups from NCAA Division I-A
Universities. The study also examined a framework of
decision making that allowed, for interaction and interdepen-
dence among factors involved in the decision making process.

        The review of literature discussed the complexities and
ethical considerations of decision making and established the
analytical hierarchy process as a framework for decision
making. A Coaching Attribute Questionnaire developed by
athletic directors from throughout the country was used as
the instrument for establishing important attributes. The
instrument contained nine attributes in a paired comparison
format.

The Coaching Attribute Questionnaire was completed by 150 randomly selected people from the following four constituency groups: presidents, athletic directors, faculty representatives, and alumni directors. Analysis of variance was the statistical tool used to determine if any significant difference existed between the attributes perceived to be essential in selecting head coaches by the four constituency groups. Attributes were ranked to determine priorities for the selection process.

Statistically significant differences were found at the .05 level among the four constituency groups in two of the nine attribute statements. The attribute Head Coach at a Division I School was perceived as being more important by athletic directors than by the president's group. The attribute Commitment to the Adherence of Rules was perceived by the presidents as being more important than did either the athletic directors or the alumni directors.

Strong similarities between constituency groups were indicated when attribute statements were ranked and put in order of priority. The same two attributes Commitment to Adherence of Rules and Personal Integrity and Honesty were ranked as the top two attributes by all four groups.

Recommendations for immediate action included using the coaching attribute study to help rank, plan and establish direction for NCAA Division I-A University selection committees for hiring new head coaches in football and men's basketball.

Attributes Perceived as Essential for Hiring
Football and Men's Basketball Coaches
at NCAA Division I-A Schools by
University Officials

by

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I. INTRODUCTION

Background

Historically, head coaches in football and men's
basketball in the National Collegiate Athletic Association
(NCAA) Division I-A Colleges and Universities have been
selected by athletic directors who were once head coaches
themselves. The athletic director may have used a committee
to help in the screening process, but ultimately the athletic
director made the decision and passed it on to his president
for approval (Broyles, 1979). During the late 1970's and
early 1980's the complexity of the hiring process changed in
the highly visible media sports of football and basketball as
colleges and universities became more concerned about the
image and conduct portrayed by their athletic departments.
The effect of both educational and economic pressure created
by recruiting violations, scandals, NCAA probations and the
media require institutions of higher education to review,
revise and change their selection process for head football
and basketball coaches (Mixson, 1985).

The decade of the 1970's has seen allegations of forged
transcripts and student athletes receiving credit for courses
they never enrolled in (Underwood, 1980), to paying players

and admitting young men to school who do not meet the normal entrance requirements (Williams, 1985). The integrity crisis of college sports has brought a need for tighter controls and monitoring of athletic administrators responsible for football and basketball programs in NCAA Division I schools (Monaghan, 1984). Even though the allegations creating the integrity crisis go deeper than the head football and basketball coach, their action and responsibility are instrumental in the scandals and corruption of big time college athletics (Axthelm, 1980).

The cost of supporting intercollegiate athletic programs has increased by two to three times in most universities since Title IX was implemented ten years ago (England, 1982). Salaries for head football and basketball coaches soared in 1982 when Jackie Sherrill signed a contract at Texas A & M in excess of one million dollars. Inflation in tuition, travel and equipment also increased costs. Women's sports programs were the single biggest increase in athletic department budgets as women's programs increased in number to satisfy Title IX guidelines. Scholarships for women legalized in 1978, increased from 10,000 to 370,000 nationally during the first 10 years of Title IX. These costs along with increased costs in men's programs were primarily financed by revenue from men's football and basketball programs (Newnham, 1985). With the increased costs and additional programs to support, athletic department budgets increased tremendously, but

fortunately revenues grew at the same time with million-dollar television contracts.

The late 1970's and early 1980's were a period of tremendous growth and prosperity for both men and women's athletics. During this period the NCAA negotiated television contracts with major networks for the rights to televise college football and basketball. All of the NCAA institutions in Division I were sharing in the revenue. For example between 1981 and 1982, the Pacific-10 Conference saw its football television revenue increase by five million dollars (Newnham, 1985). The Universities of Oklahoma and Georgia decided they could demand a larger share of the revenue if they did not have to share monies with all members of the NCAA and went to court. In the summer of 1984 the Supreme Court deregulated the NCAA college football TV package. With the deregulation, most NCAA schools saw a tremendous decrease in TV revenue. The Pacific-10 Conference received 7.2 million dollars in 1983 for televised football games, but in 1984 the conference revenue from TV was down to 6.5 million dollars. Even Oklahoma and Georgia had a ten percent decline in TV revenue in 1984 from 1983 (Farrell, 1985).

Revenue for college athletics is generated in four basic ways: gate receipts, donations, television and post season play (Underwood, 1980). Since gate receipts, donations and post season play, but not TV, are directly related to the

success of the schools football and basketball programs, it is easy to see why the pressure to win is so great (Bock, 1985). In this situation, critics argue that wrong-doing is inevitable in any endeavor where financial support and the pressure to win is intense. Not only dollars, but prestige rides on the success of big-time football and basketball. A university's image, its relations with alumni and its ability to raise funds often depend on how its teams fare. Todays college athletic programs are widely viewed as having as much in common with the entertainment business as they do with education (Sandoff, 1980).

Only schools with winning teams do well financially as evidenced by the attendance figures and post season selection of the top 20 rated teams (Enarson, 1985). The pressure this hard reality puts on coaches to succeed is overwhelming. Bo Schembechler, the highly successful head football coach at the University of Michigan, asserts that a way has to be found "to reduce pressures to win at all costs" (England, 1982). For example, success often depends on the recruitment of talented young athletes. Most recruitment is done honestly, but the process of recruiting an athlete to an institution can also result in unethical activity--some of it by overzealous alumni who offer youngsters enticements in violation of NCAA rules (Kirshenbaum, 1980).

In order to try and curtail some of the pressures on the head coach of major football and basketball programs,

administrators need to redefine the goals and objectives of their athletic program. If these goals and objectives are to work in harmony with the educational philosophy of the institution, then the selection of head football and basketball coaches must coincide more closely with the selection process used in the hiring of other university administrators such as deans and department heads (Williams, 1976). Administrators need to know that each head coaching candidate possesses specified strengths and abilities. Consequently, each coaching position is an opportunity to strengthen the athletic program (Broyles, 1979). To benefit the athletic program, position descriptions should be written to fill the needs of the university's athletic program in concert with the university and the National Collegiate Athletic Association (NCAA). The attributes desired in the candidate will vary with the different constituents participating in the selection process. In order to select a head coach to strengthen an athletic program, a selection process is needed that will utilize the president, athletic director, faculty representative and alumni and allow for their input based on the attributes that they perceive as essential (Williams, 1976).

Statement of Problem

The primary goal of this research is to determine the common professional attributes desired in hiring head

football and basketball coaches in NCAA Division I-A schools by university presidents, athletic directors, faculty representatives and alumni directors. The problem stems from an apparent lack of consensus about the attributes deemed as essential by the various constituencies involved in the selection process of NCAA Division I-A head football and basketball coaches. The influence of constituents other than the athletic director have increased as the priorities of the universities decision makers have changed. Little empirical or documented evidence exists on the attributes utilized in the selection of head football and basketball coaches.

Purpose of Study

The purpose of this study is to utilize a decision making framework (AHP) to derive attributes perceived essential by presidents, athletic directors, faculty representatives and alumni directors in NCAA Division I-A schools involved in the selection of head coaches in football and men's basketball. The problem involves four major dimensions:

1. The construction of a list of attributes required in the hiring process.
2. The assignment of a value to each attribute by samples of individuals currently involved in different areas of athletic administration to denote a

judgment as to the attributes required for selecting head coaches.

3. The statistical analysis of the data to determine which attributes are perceived as being most important among the four groups involved.

4. The formulation of suggestions, implications <u>and</u> a <u>decision making device</u> for universities to use in the selection of head coaches in football and men's basketball.

The study examined the attributes perceived as essential for hiring football and basketball coaches at NCAA Division I-A schools by the selected constituent groups. The study's hypotheses were tested with respect to the following attribute statements:

1. He has been a head coach at the Division I level.

2. He has demonstrated success as a recruiter.

3. He has demonstrated success by a won/lost record or improvement of a program.

4. He has experience in personnel management; hiring of assistant coaches and support people such as trainers and equipment managers.

5. He has positive recommendations from other coaches.

6. He has a commitment to the adherence of the rules of the university, conference and the NCAA.

7. He has the ability to relate to the faculty and the academic community.

8. He fits the image of the university.

9. He has personal integrity and honesty.

Definition of Terms

The following definitions are included for purposes of explanation. Other terms or phrases which are used throughout the report are considered to be self-explanatory.

Analytic Hierarchy Process: (AHP) A framework for decision making (see Chapter II).

Constituency: Any group or individual sharing a common goal or interest in the organization. In this report the constituents referred to are university presidents, athletic directors, faculty representatives and alumni directors.

Division I-A: A membership subdivision of the NCAA. Each active member institution of the NCAA is designated as a member of a Division for certain legislative and competitive purposes.

The National Collegiate Athletic Association: (NCAA) A governing body for administering intercollegiate athletics in the United States. The purpose of this association is to initiate, stimulate and improve intercollegiate athletics programs for student-athletes and to maintain intercollegiate athletics as an integral part of the educational program.

Assumptions

The following assumptions were applied to this research and its conclusions:

1. The Coaching Attribute Questionnaire accurately reflects the major attributes essential in the selection of a head football or basketball coach in an NCAA Division I-A school.

2. The readability level of the research instrument was not be a factor for any of the educated members of the university selection committee.

The assumptions related to the statistical inferences are described in Chapter III Design and Methodology.

Rationale for a New Framework of Decision Making

The hiring of a head football or a head basketball coach at a major university involves decision making by many people. Obviously, what is needed is not a more complicated way of thinking, since it is difficult enough to do simple thinking. Rather, what is needed is an organized but complex framework that allows for interaction and interdependence among factors and still enables decision makers to think about problems in a simple way. This new way of thinking should be accessible to all without straining their innate capabilities (Saaty, 1980).

The analytic hierarchy process (AHP) provides such a framework. It enables one to make effective decisions on complex issues by simplifying and expediting the natural decision-making process. Basically the AHP is a method of breaking down a complex, unstructured situation into its component parts; arranging these parts, or variables, into a hierarchic order; assigning numerical values to subjective judgments on the relative importance of each variable; and synthesizing the judgments to determine which variables have the highest priority and should be acted upon to influence the outcome of the situation (Saaty, 1980).

Saaty (1982) stated that the AHP also provides an effective structure for group decision making by imposing a discipline on the group's thought processes. The necessity for assigning a numerical value to each variable of the problem helps decision makers to maintain cohesive thought patterns and to reach a conclusion. In addition, the consensual nature of group decision making improves the consistency of the judgments and enhances the reliability of the AHP as a decision making tool.

II. REVIEW OF LITERATURE

Introduction

Decision making is a complex process. In this chapter decision making is initially discussed from the viewpoint of the behavior theorist, then the learning theorist, and finally, brain research findings. A discussion of the complexities and ethical considerations of decision making is followed with how decision making is organized. Finally, the analytic hierarchy process, a framework of organizing knowledge for decisions, is reviewed.

Behaviorist Theories

Those who study and explain ways, reasons and consequences of human and animal behavior are finding it difficult to uphold the idea that humans are rational beings. Their theories are helping to create an atmosphere in which people are accepted as they really are rather than as they were idealistically portrayed during the Renaissance and the Age of Rationalism (Burns, 1977). Human behavior is enormously complex; the many theories explaining human action are deep and multilayered, and probably all contribute to our understanding of human behavior.

Instinct Drive Theory

Some theorists consider rational thinking to be but a thin veneer over human behavior. Much of our action is driven by instinct patterns woven into the mind, bone, and muscle. Just as wasps have an instinct for nest building and birds have their characteristic songs, humans also follow certain unlearned patterns of behavior, such as seeking food, mating, avoiding pain, caring for young and so on. Although instinct-drive theory describes such patterns, it does not explain them. It is inadequate to account for most adult behavior, including sentiment, value, ambition, attitude, taste and inclination (Domjan, 1982).

Reason-Impulse Theory

People tend to regard themselves as rational beings capable of making choices based on objective, or real, criteria. They feel that most of their decisions flow from logical necessity, not from whim and caprice. Although they may acknowledge that needs and personal motives are the driving forces behind human behavior, they contend that reason is used to attain goals efficiently and without harm or injury. Through reason people get what they want within the limits of available resources. And many ultimately do learn to apply rational techniques to decision making, regardless of what their personal wishes may dictate (Domjan, 1982).

But critics of this view say that a person's so-called reason is an abyss of unconscious or barely conscious urges and habits that overwhelm the intellect. They argue that human relationships are essentially governed by irrational, emotional forces; rational appeal in most cases plays only a minor role. These reason-impulse theorists hold that actions are based on imitation, habit, suggestion, or other subrational forms of thinking and are rarely due to pure logic. Planned actions are the result of analysis based on preferences as to which objectives are served best and preferences are strongly influenced by habit and training rather than by rational thinking (Schwartz, 1978).

Dynamic Field Theory

Other behaviorists point to the influence of environmental factors on human behavior. People act in response to a "dynamic field" of stresses and tensions which they perceive the environment to deny or fulfill the satisfaction of their wants and needs. The hierarchy of human needs that motivate behavior has been examined by Abraham H. Maslow and others; these needs range from the most basic physiological and security needs to sophisticated self-actualization and esthetic needs (Domjan, 1982).

Learning Theories

There are those who tend to assume that the way people think and the logic they use to develop their thinking is innately human and that the basics of human knowledge have come down as a package from heaven. But recent learning theories argue that people learn mainly by trial and error and through feeling rather than through logic (Catania, 1984). Stimulus-response theory, for example, maintains that humans gravitate somewhat randomly in certain directions to satisfy their needs and desires; acts that bring satisfaction are reinforced. Gestalt theory tells us that even what is considered to be "insight" - perceiving the necessary relationships in a situation - results from feeling (Cattell, 1980).

People have vague feelings and inklings about what they think they have experienced, but often are not attentive enough to register ideas and feelings sharply. Man has no systematic way of reconstructing from memory that which was not learned, understood or memorized consciously. Most daily experience goes before the senses and passes through the feelings like a hazy cloud that slightly moistens the environment but makes little difference to the growth of understanding (Catania, 1979).

Catania (1984) maintains understanding does grow when a particular experience connects well with earlier experiences, not merely with knowledge, or when it shocks, capturing

attention involuntarily as it intrudes into our being (sometimes unconsciously) either pleasantly or forcefully. Cattell (1980) defined learning as the ability to recognize a specific act in the light of previous experience. It is an iterative, or repeated, process of adding knowledge that elaborates on or expands existing knowledge.

> "Learning can be conscious and intentional, as in memorizing facts, or it can be unconscious and unintentional, as in discovering physically from experience that eating green apples results in a stomachache" (Cattell, 1980:26).

People who experience a phenomenon firsthand are the ones who can best shed light on their understanding of it; indeed, knowledge derived from experience is basic to all understanding.

Brain Research Findings

The importance of intuition, feeling and experience in human behavior and decision making is further underscored by the findings of brain researchers. In particular according to Springer (1985), a distinction in the functions of the two halves of the neocortex of the brain has been discovered, the left is the logical, rational and calculating member; the right is the intuitive, creative and verbally inarticulate half. The verbal half's job is to interpret for the world the decisions of its mute brother. Note the decisions are actually made by the intuitive, not the logical, half. The

right hemisphere arranges and puts into words the insights of the left.

Studies of human perception as discussed by Yellin (1983), show that the senses both condition and limit whatever enters the consciousness. Older people who have experienced life longer often recognize that illusion is primary experience. (Perhaps this awareness results from the aging of the senses, but more likely it is due to the wisdom of age or experience.) The senses shape man's world; thus one can never interpret the universe with absolute accuracy. The qualities studied are simply those that can be perceived, and the laws developed are concoctions of man's sense-limited brains.

Another life form could have many more senses than human's have; for example, it could have a magnetic eye, could perceive the colors of the spectrum in white light, or could see through objects. As a result, its consciousness would be different from ours. Of course, our senses have expanded through human inventions such as the microscope, telescope and x-ray. People can perceive many qualities not directly accessible to their senses, and these are only a small portion of the potential total (Grady, 1984).

> "If we had more senses acting at once, we would probably have difficulty sorting out our perceptions and understanding their relations, given the present stage of the evolution of our brains" (Grady, 1984:152).

Although sense data can be organized in chronological sequence, brain events are not rigidly bound by time. Ideas

can occur before or after other ideas. Because the way people think is fluid, they are free to arrange their ideas in the manner they desire - for good or evil purposes (Witelson, 1985).

Coping With Complexity

To the best of our understanding, the world is a complex system of interacting elements. The economy, for example, depends on energy and other resources; the availability of energy depends on geography and politics; politics depends on military strength; military strength depends on technology; technology depends on ideas and resources; ideas depend on politics for their acceptance and support; and so on (Lindgren, 1971). In such an intricate network of factors, first causes and final effects cannot be identified easily. Our minds have not yet evolved to the point where we can clearly see these ultimate relationships and readily resolve important issues.

In the complex world system, people are forced to cope with more problems than they have the resources to handle. To deal with unstructured social, economic, and political issues, there is a need to order priorities, to agree that one objective outweighs another in the short term, and to make tradeoffs to serve the greatest common interest (Bell & Wagner, 1969).

Alexander and Saaty (1977) say it is often difficult to agree on which objective outweighs another, particularly in complex issues where a wide margin of error is possible in making tradeoffs. Intuitive thought processes that serve us well in the familiar routine of daily life can mislead us on complicated matters where sources of information and opinions are varied. Increasingly people need to articulate and map out the issues to see whether what they think and what they feel lead to the same kind of answer.

Most people in the society believe life is so complicated that in order to solve problems they need more complex ways of thinking. Yet thinking even in simple ways can be taxing. It is a struggle to examine collections of only a few ideas at a time, so how can a person understand complex problems involving a great many factors? Simple thinking about such problems leads to combinations of ideas whose structure is not unlike a dish of spaghetti in which all strands are separate - but tangled (Morris, 1979).

When complexity makes normal life appear difficult and even hopeless to many, a strong individual may emerge to take over leadership charismatically by declaring that the pain and confusion all is simply due to a single problem that must be solved; Hitler is an infamous example. Such leaders draw attention to one problem and persuade or force others to believe in them. By oversimplifying the situation, they banish all other problems to narrow the perspective and make

themselves appear logical in their explanations; they linearize the workings of a system in a deductive fashion (Bell & Wagner, 1969).

It is important to realize complicated situations should not always be simplified. Also, one's previous knowledge may interfere with choice of decisions. Morris (1979) talks about accepting new ideas as truths on the basis of the manner in which they cohere with knowledge we already possess. A system of beliefs could be perfectly consistent, and yet each belief could be false. Morris cited some examples to make his point. The Gregorian calendar (1582) was based on a set of consistent assumptions that the earth is the center of the universe. Yet it was so accurate that the accumulated error was one day every 3,323 years. Our calendar is in error every 20,000 years. This is an example of a consistent prevailing view that was in error according to modern astronomy but produced good results. An example of a consistent theory of our time that produced bad results until recently involves the humble golf ball. People used to believe that it is the perfectly spherical golf ball that travels farthest when hit-until it was discovered that the more a ball is used, the more dents and dimples it develops, which serve as wings countering drag and sustaining it longer in the air. Now golf balls are made according to precisely dimpled patterns.

According to Lindgren (1971), consistent thinking with no real validity is frequently espoused by lunatics and other mental cases. Beliefs can be deduced from one another in perfect consistency depending solely on the observance of formal, linear relationships between them. Thus, one may develop a consistent deductive system with no real validity in this world.

Ethical Considerations

Because it is possible in complex, unstructured situations to present convincing arguments that have little correspondence to reality and may harm society, one must apply certain ethical standards to the decision making process. The philosopher Alasdair MacIntyre of Boston University has identified four qualities that should characterize a decision maker's approach to dealing with social issues:

* Truthfulness by not oversimplifying complexity. Our political and legislative processes demonstrate that it is easier to consider issues such as environmental protection or health care in a narrow, piecemeal way than to look at all the critical variables, fit them together, and determine their priorities and implications. In the short run a simplistic approach may satisfy local contending parties, but it is no way to get at the answers to complex problems.

* Justice by evaluating costs and benefits and assigning costs to those who get the benefits. Everyone involved in a decision making situation - family members deciding whether to purchase a home computer or corporate executives deciding which companies to invest in - should have a chance to weigh costs and benefits. Those who receive the benefits should be the ones who pay the costs, and vice versa. Justice

demands not only that everyone have a voice and a
vote but also that those who will bear the risks and
dangers have more of a voice and vote than others.

* Ability to plan for the unknown by calculating
  changes, determining where they are likely to occur,
  and deciding which priorities should dictate action.
  Leaders must be able to plan and deal both with
  projected futures, such as higher energy prices in
  1985, and with desired and less predictable futures,
  such as energy independence by the year 2000.

* Flexibility in adapting to change by planning,
  implementing and, in response to new conditions,
  reimplementing. This iterative approach is
  essentially a learning process; it tempers our
  tendency to let immediate needs dictate short-term
  solutions. For example, flexibility is necessary in
  planning strategies for the use of alternative
  resources in dealing with the energy situation (p.
  10-11).

Organizing Knowledge for Decisions

Most people have trouble coping with ordinary problems

of society that cannot be understood by a deductive, linear,

cause-and-effect explanation. Respect for the scientific

method, which relies on deduction, has led many to try to

solve all their problems through logical debate. As a result

of our scientific education which usually deals with things

that can be observed through physical senses, people have

been made to feel that there is precision in what they do.

Their senses are trained to be consistent in focusing on

their objects; thus, people's minds have a sense of consis-

tency in synthesizing and interpreting sense data. But when

someone deals directly with ideas rather than with sense

perceptions, things lose their precision. Thus, people use

words whose meanings are imprecise (Saaty, 1976). Philoso-
phers have long recognized that primary language does not
express thoughts or ideas but feelings and affections.
Moreover, someone cannot be exact in describing abstract
relationships, and one's understanding is conditioned by the
states of mind, feeling and imagination at the moment of
thinking. Thought without language is impossible (Saaty,
1977).

Weiss (1971) says people are very much creatures of the
moment. At any given time attention is captured by whatever
the senses perceive. The past cannot be remembered clearly,
not even what the tomorrow of our personal lives will be
like, despite the fact that some may have lived more than ten
thousand days on this earth, repeating the same pattern that
many times. With all this experience it is impossible to see
the immediate future with adequate clarity. But some would
try to venture predictions on serious issues of politics or
economics in which they have had little experience.

To understand and deal with what is going on in the
world, our recollection of events and the precision of our
knowledge must be improved by reviewing the facts and
organizing them in a logical framework. If decisions are to
be rational and effective, one must participate intensely in
the act of understanding the world around them. It is an
exaggeration to say that humans are logical creatures. More
accurately, our understanding is filtered through our senses,

and our judgment relies on often hazy impressions of reality.
With experience and through the perceptions and opinions of
other people, our views of reality may change and become more
precise. For a better understanding of the world, we need to
persevere in thinking matters through carefully and to debate
with others who hold different views (Saaty, 1980).

But the complexity of social systems cannot await a
full, logical analysis of situations on which health, safety
and even survival depend. Alexander and Saaty (1972) wrote
that people need to rethink the traditional use of logic to
derive knowledge. They need to expand their analytic
procedures to improve their understanding of situations in
which not only time and space but also human behavior plays a
fundamental role in determining the outcome.

The human mind has learned how to organize knowledge for
decisions. The two fundamental approaches humans have
developed so far for analysis are the deductive approach and
the inductive or systems approach (Lindgren, 1971).

The Deductive Approach and the Systems Approach

According to Lindgren (1971) a system can be analyzed
logically by representing it as a network and structuring it
into chains and cycles. In analyzing natural systems, for
example, biologists break down networks into food chains,
hydrologic cycles, and so on. After structuring the
networks, explanations are sought for the functioning of its

parts. Then, by an act of imagination, as no rules of logic exist for combining these piecemeal explanations, people synthesize an explanation for the whole network. But, this scientific, deductive approach ignores the feedback mechanisms among the parts and between the parts and the environment that affect the whole system (Fishburn, 1972).

System theorists have pointed out that an entire system can be better understood by examining it from a general, holistic perspective that does not give as much attention to the function of the parts. For example, a car is better understood by observing how it functions in the environment than by studying the operation of its mechanical parts. In this way it is seen as a whole. Simultaneously it is perceived how the car runs and how it interacts with other cars, road conditions, traffic signals, and so on (Fishburn, 1964).

Whether humans use the deduction or systems approach, logic, intuition and experience play a role in the decision making process. The everyday way one proceeds to understand and solve problems is to use logical deduction to argue through familiar matters. Fulcher (1965) illustrates this by saying it is easy to reason that to increase capital one must obtain a good return on it by investing it or by obtaining a good interest rate. In this case in order for capital to increase from size A to size B, money has to be added to A somehow. That much can be said with bold certainty, but by

tending to treat larger, imprecise perceptions of a problem
by relying on feeling, experience, emotion and sometimes even
force is a mistake. Many political problems in advanced as
well as less developed countries are handled in such a
fashion. In unstructured situations people often act on
their "gut feelings" rather than strictly on rational
grounds. Logic plays a role mostly in arranging words and
ideas after the conclusions have been reached.

Sowell (1980) states that people in the public and
private sectors tend to cooperate in defining and structuring
their problems broadly and richly so that all their ideas can
be included. But when they need to explain which factors
have the greatest impact on the outcome of a decision, not
even experts with the clearest logic can hold fast to their
positions in the face of objections. As a result they are
willing to compromise. Thus decisions are based not so much
on the clarity of ideas or amount of information exchanged as
on the persistence of some participant in the decision making
process and on that person's ability to persuade others to
accept his or her ideas, like a politician selling himself in
a campaign.

People, then, not only have different feelings about the
same situation, but their feelings change or can be changed
by discussion, new evidence, and interaction with other
experienced people. Usually the outcome is a compromise of
many viewpoints involving substantial change in individual

attitudes. The fact is that in making decisions, personal preference and persuasion usually prevail over clear and straight logic (Cornell, 1980).

According to Saaty (1980) the deductive and the systems approach contribute to our understanding of complex systems. There is a benefit to combining the two within an integrated, logical framework: the analytic hierarchy process. The AHP enables decision makers to structure a system and its environment into mutually interacting parts and then to synthesize them by measuring and ranking the impact of these parts on the entire system. By providing a new logic for synthesis, this structured approach to decision making eliminates much of the guesswork and confusion of our ordinary method of synthesizing an overall explanation for a system from piecemeal explanations arrived at through deduction.

The AHP Process

The analytic hierarchy process enables decision makers to represent the simultaneous interaction of many factors in complex, unstructured situations (Saaty, 1982). It helps decision makers to identify and set priorities on the basis of their objectives and their knowledge and experience with each problem. Feelings and intuitive judgments are probably more representative of our thinking and behavior than are our verbalizations of them. The AHP framework organizes feelings

and intuitive judgments as well as logic so complex situations can be mapped out as they are perceived. It reflects the simple, intuitive way that people actually deal with problems, but it improves and streamlines the process by providing a structured approach to decision making.

In solving problems by explicit logical analysis, three principles can be distinguished: the principle of constructing hierarchies, the principle of establishing priorities, and the principle of logical consistency. These natural principles of analytic thought underlie the analytic hierarchy process (AHP).

Structuring Hierarchies

Humans have the ability to perceive things and ideas, to identify them, and to communicate what they observe. To obtain detailed knowledge, the mind structures complex reality into its constituent parts, and these in turn into their parts, and so on hierarchically. By breaking down reality into homogeneous clusters and subdividing these clusters into smaller ones, people can integrate large amounts of information into the structure of a problem and form a more complete picture of the whole system (Saaty, 1982).

Because a hierarchy represents a model of how the brain analyzes complexity, the hierarchy must be flexible enough to deal with that complexity. The sample hierarchy offered here

is presented to prescribe a framework for the selection of a
head football or basketball coach by a university selection
committee.

Level 1:   Select Coach
Focus

Level 2:   #1   #2   #3   #4   #5   #6   #7   #8   #9
Attributes
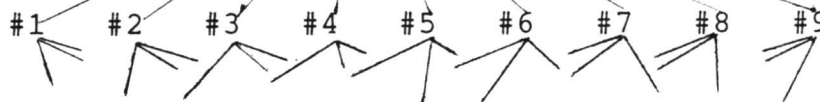
Level 3:
Alternatives   Candidate 1   Candidate 2   Candidate 3

Figure 1

Sample Hierarchy

Each set of elements in a hierarchy occupies a level of
the hierarchy. The top level, called the focus, consists of
only one element: the broad, overall objective. Subsequent
levels may each have several elements. Because the elements
in one level are to be compared with one another against a
criterion in the next higher level, the elements in each
level must be of the same order of magnitude. If the
disparity between them is great, they should belong to
different levels (Saaty, 1982).

Setting Priorities

Humans have the ability to perceive relationships among the things they observe, to compare pairs of similar things against certain criteria and to discriminate between both members of a pair by judging the intensity of their preference for one over the other. Then they synthesize their judgments - through imagination or, with the AHP - and gain a better understanding of the whole system.

The first step in establishing the priorities of elements in a decision problem in the AHP, is to make pairwise comparisons - that is, to compare the elements in pairs against the criterion. For pairwise comparisons, a matrix is the preferred form. The matrix is a simple, well-established tool that offers a framework for testing consistency, obtaining additional information through making all possible comparisons and analyzing the sensitivity of overall priorities to changes in judgment (Saaty, 1982).

To begin the pairwise comparison process, start at the top of the hierarchy to select the criterion C, or property, that will be used for making the first comparison. Then, from the level immediately below, take the elements to be compared: A_1, A_2, A_3, and so on. These elements are arranged in a matrix in Figure 2.

$$
\begin{array}{c|cccc}
C & A_1 & A_2 & \cdots\cdots & A_9 \\
\hline
A_1 & & & & \\
A_2 & & & & \\
A_3 & & & & \\
A_4 & & & & \\
\vdots & & & & \\
A_9 & & & &
\end{array}
$$

Figure 2

Sample Matrix for Pairwise Comparison

In the matrix of Figure 2 compare the element A_1 in the column on the left wih th element A_1, A_2, A_3, and so on in the row on top with respect to property C in the upper left hand corner. Then repeat with column element A_2 and so on. To compare elements, ask: How much more strongly does this element possess - or contribute to, dominate, influence, satisfy or benefit - the property than does the element with which it is being compared?

To fill in the matrix of pairwise comparisons, use numbers to represent the relative importance of one element over another with respect to the property. The comparisons are first made in verbal judgments and then translated to numerical values. When comparing one element in a matrix with itself, for example, A_1 with A_1, the comparison must give unity, so fill in the diagonal of the matrix with 1's. Compare the first element of a pair (the element in the

left-hand column) with the second (the element in the row on top) and place the numerical judgment in the matrix. The reciprocal value is then used for the comparison of the second element with the first. For example, if the two elements are stones and the first is five times heavier than the second, then the second is one-fifth as heavy as the first.

To obtain the set of over all priorities for a decision problem, first pull together or synthesize the judgments made in pairwise comparisons, then do some weighting and adding to give a single number to indicate the priority of each element. The following example explains how to synthesize.

Suppose a decision must be made on which of three new cars - a Chevrolet, a Thunderbird and a Lincoln - to buy on the basis of comfort. Draw a matrix with the criterion "comfort" listed in the upper left-hand corner and the cars listed in the column on the left and in a row on top (Figure 3).

Comfort	C	T	L
Chevrolet (C)	1	1/2	1/4
Thunderbird (T)	2	1	1/2
Lincoln (L)	4	2	1

Figure 3

Sample Matrix Comparing the Cars for Comfort

First put 1's in the diagonal positions as indicated. This matrix has nine entries to fill. Three are already committed to 1's. Three of the remaining six are reciprocals. This leaves three judgments to make.

Next ask: How much more comfortable is an average new Chevrolet than an average new Thunderbird and an average new Lincoln? Based on experience and personal preference the decison maker determines that a Chevrolet is one-half as comfortable as a Thunderbird and one-fourth as comfortable as a Lincoln. In staying consistent it is now known that the Thunderbird is one-half as comfortable as the Lincoln. The three judgments needed have now been made and are entered into the matrix. The matrix is then completed by inserting the reciprocals in their proper position (Figure 3).

The next step is to synthesize the judgments to get an overall estimate of the relative priorities of these cars with respect to comfort. To do so, first add the values in each column (Figure 4). Then divide each

Comfort	C	T	L
C	1	1/2	1/4
T	2	1	1/2
L	4	2	1
Column Total	7	3.5	1.75

Figure 4

Synthesizing the Judgments

entry in each column by the total of that column to obtain the normalized matrix, which permits meaningful comparison among elements (Figure 5). Finally, average over the rows

Comfort	C	T	L
C	1/7	1/7	1/7
T	2/7	2/7	2/7
L	4/7	4/7	4/7

Figure 5

Normalized Matrix

by adding the values in each row of the normalized matrix and dividing the row by the number of entries in each:

$$\frac{1/7 + 1/7 + 1/7}{3} = 1/7 = 0.14$$

$$\frac{2/7 + 2/7 + 2/7}{3} = 2/7 = 0.29$$

$$\frac{4/7 + 4/7 + 4/7}{3} = 4/7 = 0.57$$

This synthesis yields the percentages of overall relative priorities, or preferences, for the Chevrolet, the Thunderbird and the Lincoln: 14, 29 and 57 percent, respectively. Thus, as far as comfort is concerned, the Thunderbird and the Lincoln are about twice and four times more preferable than the Chevrolet.

Logical Consistency

The third principle of analytic thought is logical consistency. Saaty (1982) said that humans have the ability to establish relationships among objects or ideas in such a way that they are coherent - that is, they relate well to each other and their relations exhibit consistency. Consistency means two things. The first is that similar ideas or objects are grouped according to homogeneity and relevance. For example, a grape and a marble can be grouped into a homogeneous set if roundness is the relevant criterion but not if flavor is the criterion. The second meaning of consistency is that the intensities of relations among ideas or objects based on a particular criterion justify each other in one logical way. Thus, if sweetness is the criterion and honey is judged to be five times sweeter than sugar, and sugar twice as sweet as molasses, then honey should be ten times sweeter than molasses. If honey is judged to be only four times sweeter than molasses, then the judgments are inconsistent and the process may have to be repeated if more accurate judgments could be obtained.

In utilizing these principles, the analytic hierarchy process incorporates both the qualitative and the quantitative aspects of human thought: the qualitative to define the problem and its hierarchy and the quantitative to express judgments and preferences concisely. The process itself is designed to integrate these dual properties (Saaty, 1982).

III.   DESIGN AND METHODOLOGY

The research instrument, population and sample, sampling and data collection, and statistical design are described in this chapter.

Instrumentation

The instrument used in this study was a mail survey questionnaire containing nine coaching attribute statements and a paired comparison scale which enabled the respondents to judgmentally score the importance of each attribute compared to one of the other attributes. The development of the questionnaire was accomplished by the identification of essential attributes as perceived by athletic directors who had hired a new coach within the past two years.

Initially, the literature on athletic administration and school personnel selection was reviewed in order to develop the first draft of coaching attributes. The earlier writings in the administration of athletic and physical education programs (Broyles, 1979; Buchneer, 1983), staffing American colleges and Universities (Rogers, 1967) and job descriptions for a successful coach (Frederick, 1983; Frohova, 1982) were all helpful. Personal interviews with both past and present athletic administrators at Oregon State University were used to add to and delete from the list of coaching attributes.

This primary search resulted in 42 coaching attribute statements which were reduced to 36 statements by combining

similar statements. A field test of the 36 statements by 12 respondents representing all populations was then conducted. The field test respondents were asked to complete the questionnaire and to identify any attribute statements which were unclear or difficult to read. Following field-testing, the list of attribute statements was reduced to 27 statements to be used in the questionnaire to be sent to the 16 athletic directors selected for further reducing the list of attributes.

The panel of 16 athletic directors (see Appendix A) from across the nation had been involved in the selection of a head football or basketball coach within the past two years. They were asked to rate the 27 items on a five point Likert-type scale where the values ranged from one (1) representing the value not important to five (5) very important. They were given the opportunity to add additional statements if they felt it was necessary (see Appendix B & C). From this questionnaire came the nine attributes used in the paired comparison questionnaire, which after minor changes, was the actual instrument used in the study.

The process for developing the instrument was under the advice of Mason (1985) of the OSU Research Center. Since the athletic directors were asked for their opinions concerning the attributes they perceived as important in the selection process, it was deemed impossible to arrive at a consensus; thus, a Delphi process was not used.

Respondents were asked to make judgments which indicated the dominance of one attribute with each of the other eight attributes. Responses were recorded on a five point scale with the following definitions:

Equal: Two attributes cannot be distinguished with respect to this criterion.

Weak: Experience and judgment slightly favor one attribute over the other.

Strong: Experience and judgment strongly favor one attribute over the other.

Very Strong: One attribute is favored very strongly; dominance is demonstrated in practice.

Absolute: The evidence favoring one attribute is of the highest possible order.

This summated rating scale was treated as interval data for the statistical analysis in this study. Kerlinger (1973) and Courtney (1982) support the assumption of the Likert scale as an equal and continuous measure. Behavioral scientists have routinely accepted the underlying continuity principle for use with such scales (Courtney, 1982).

Population and Sample

In 1984 the National Collegiate Athletic Association was made up of 990 members. The membership is divided into Divisions I, II and III for the purpose of competition with institutions of similar philosophies and level of support for

their various athletic teams. Division I institutions are further sub-divided into Divisions I-A and I-AA for football. For this study, the 105 Division I-A schools were used as the population for the study.

The sample was drawn from four selected groups within each institution which were involved or had vested interests in the selection process for head football and basketball coaches. The four utilized groups were, University Presidents or Chancellors (P); faculty athletic representatives (FR); athletic directors (AD); and alumni directors (A). These groups influence and impact the selection process for coaches within the universities.

Sampling Procedure

The four samples were randomly drawn from the presidents, faculty representatives, athletic directors and alumni directors of the 105 NCAA Division I-A schools. The names and addresses of the presidents, faculty representatives and athletic directors were obtained from the 1984-85 NCAA Directory. The names and addresses of the alumni directors were obtained from the 1984-85 directory of the American Association of Alumni Directors.

A variable response rate of 40-60 percent among the four constituent groups was projected. This sample size and response rate exceeded Cohen's recommended sample size for the F-statistic in all cells except the Presidents. Cohen's

Tables suggested a minimum sample size of 36 respondents for four groups where 1 - B = .70 with an effect size of .25 and alpha level of .05 (Cohen, 1969). Courtney (1984) cited the power level as conventional for most problems in the control of Type II errors. The medium effect size is used for detecting differences where the detection of medium differences is needed.

Group Samples

P	AD	FR	A
N-30	N-37	N-39	N-44

This sampling procedure for each constituency group provided for randomness and a sufficient response rate for statistical analysis, assuring representativeness within the selected constituency groups of the 105 universities belonging to Division I-A of the NCAA.

Data Collection Procedure

Data were collected during Summer and early Fall Quarter 1985. The following procedure was used for data collection from each constituency group.

After each constituency group was identified, a master set of address labels was typed and coded to indicate each constituency group and number on the master list. This coding procedure assured confidentiality of the respondents.

Data were collected by mailing a questionnaire, a stamped, self addressed envelope, and an explanatory letter to each respondent (see Appendix D & E). All data were collected within a period of twelve weeks.

Different methods of follow-up were used. Respondents who did not respond by the date requested in the first mailing were sent a card to remind and encourage them to return the questionnaire (see Appendix F). Because of the school recess between summer term and the beginning of the fall term, a longer than normal time was utilized between the card and the third letter to avoid the respondent's vacation time. The third and final follow-up consisted of another explanatory letter (see Appendix G), a questionnaire and a self-addressed envelope.

The final step in the collection of data was to check and code each returned questionnaire before analysis.

The Dependent Variable

The dependent variable in this study was a score judgmentally assigned by randomly selected respondents in each of four selected sample groups to denote the perceived importance for each attribute statement as compared to another attribute. Scores (values) were assigned on the basis of a five-point scale. Each statement was scored independently.

Respondents represented university presidents, athletic directors, faculty athletic representatives and alumni

directors. Each respondent was asked to indicate the level of importance of each attribute based upon personal experience and current job setting.

Statistical Design

As previously stated, the central goal of this study was to determine the common professional attributes desired in hiring head football and basketball coaches by university presidents, athletic directors, faculty representatives and alumni directors. There was particular interest in learning if differences existed among the four groups in the importance level assigned by the respondents for each statement. The hypothesis tested was that there were no significant differences among the group mean responses to the importance level scale values.

The following hypothesis, applicable to each attribute statement, was tested using one-way classification analysis of variance.

$$\mu_1 = \mu_2 = \mu_3 = \mu_4$$

where, μ_1 is the mean score for university presidents,

μ_2 is the mean score for athletic director,

μ_3 is the mean score for faculty representatives,

μ_4 is the mean score for alumni directors.

The mathematical model for the study (Courtney, 1984:95) specifies the components of the analysis of variance process for the one-way field arrangement. The components of the model are as follows:

$$Yij = \mu + \alpha i + \varepsilon ij$$

where, μ is a fixed but unknown constant,

αi is a differential (fixed) effect associated with groups, and

εij is a random variable characterized as being normally and independently distributed with a mean of zero and a variance of σ^2.

The model is implemented for the present research using the analysis of variance arrangement shown here:

Analysis of Variance Layout (Fixed Design)

Sources of Variation	df	SS	MS	F
Between Groups	3	A	A/3	MS_B/MS_E
Error	146	B	B/146	
Total	149	C	C/149	

The .05 level of significance was selected as the basis for retention or rejection of the null hypothesis. In cases where the null hypothesis was rejected, Tukey's HSD Multiple Range Comparison test was utilized as the vehicle for

indicating positions of rejections of the means of the four groups.

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IV. FINDINGS

The main objectives of this study were to determine if
any significant differences existed between attributes
perceived to be essential in the selection of NCAA Division
I-A head football and basketball coaches by university presi-
dents, athletic directors, faculty representatives and alumni
directors and to determine the priorities the constituencies
placed upon these attributes. In this chapter, the first
section reports the data on respondents. The second section
compares perceived attribute statements using analysis of
variance to test for significant differences. The third
section includes a report of prioritized attribute
statements.

Respondent Data

The total sample included in this study was 150 persons
from four constituent groups from 105 NCAA Division I-A
schools. Table 1 shows the breakdown of the respondents by
constituent groups. The cell size of each constituent group
was as follows: presidents = 30, athletic directors = 37,
faculty representatives = 39, and alumni directors = 44.

With the exception of the president groups, response
was sufficient from all constituent groups to meet the
minimum sample size for statistical analysis as cited by
Cohen (1969).

Table 1: Respondents by Constituent Group

Groups	Number Sent	Number Returned	% Response	*Incomplete Returns
Presidents	75	30	40	6
Athletic Directors	75	37	49	3
Faculty Representatives	75	39	52	4
Alumni Directors	75	44	59	6
TOTALS	300	150	50	19

*Returns that omitted questions or failed to answer the second page of questionnaire.

All groups were selected by a random sampling procedure to assure proper representation of the groups. The respondents were geographically dispersed across the United States. Using the four regions of the country, the distribution was as follows: Region I, the Northeast, 14 respondents; Region II, the Southeast, 40 respondents; Region III, the Midwest, 48 respondents; Region IV, the West, 48 respondents. The small number of respondents in the Northeast can be accounted for by the fact that there are fewer Division I-A football schools in that section of the country.

Significant Differences

One-way analysis of variance was used to contrast the means between university presidents, athletic directors, faculty representatives and alumni directors with respect to the following nine attribute statements:

1. He has been a head coach at the Division I level.

2. He has demonstrated success as a recruiter.

3. He has demonstrated success by a won/lost record or improvement of a program.

4. He has experience in personnel management; hiring of assistant coaches and support people such as trainers and equipment managers.

5. He has positive recommendations from other coaches.

6. He has a commitment to the adherence of the rules of the university and the NCAA.

7. He has the ability to relate to the faculty and the academic community.

8. He fits the image of the university.

9. He has personal integrity and honesty.

The analysis of variance arrangement in Table 2 was used as the process model for rejection of the null hypothesis for each of the nine attribute statements. With degrees of freedom equal to three for the between groups, 146 for error and an alpha level of .05, the tabular F for significance is 2.67.

Table 2: Analysis of Variance Arrangement

Source of Variation	df	SS	MS	Computed F	Tabular F $\alpha = .05$ df 3,150
Between Groups	3	A	A/3	MS_B / MS_E	2.67
Within Groups (Error)	146	B	B/146		
Total	149				

When the computed F value generated by the one-way analysis of variance was found to be equal to or greater than the tabular F value at the .05 level of significance, the hypothesis was rejected for the data being tested.

Table 3: Analysis Summary for Coaching Attributes
by Four Constituent Groups

Attribute Statements	Presidents		Athletic Dir		Faculty Reps		Alumni Dir		Computed
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	F
1. Head Coach at Div. I	6.00	4.77	10.57	8.48	7.00	4.90	9.30	6.78	3.61*
2. Success as a recruiter	8.20	4.68	8.95	5.58	7.97	4.59	9.41	5.43	.67
3. Success by won/lost record	10.33	3.58	10.73	4.64	9.41	4.41	11.05	6.36	.82
4. Experience in personnel management	4.80	2.07	5.81	2.86	5.23	1.95	6.32	3.00	2.50
5. Positive recommendations	8.83	2.91	7.81	2.30	8.21	3.18	7.70	3.90	.88
6. Commitment to the adherence of rules	24.43	5.40	19.43	8.88	21.46	6.30	18.16	7.28	5.09*
7. Relate to faculty	7.40	3.09	7.54	2.97	7.08	3.60	7.86	3.83	.37
8. Fits the image of the university	8.03	3.37	8.76	4.47	10.26	5.14	10.25	4.24	2.26
9. Personal integrity and honesty	21.80	4.82	20.65	10.08	23.49	4.66	19.80	8.12	1.88

*Significant at the .05 level
Tabular F = 2.67

Table 3 shows the computed F values for each of the nine attribute statements.

The information in Table 3 shows there was no statistically significant difference between the presidents, athletic directors, faculty representatives and alumni directors on seven of the nine attribute statements. A statistical significant difference occurred for the statements (1) Head Coach at Division I and (6) Commitment to the Adherence of Rules.

Tukey's HSD Multiple Range Comparison test was applied to identify the source(s) of significant differences found in the analysis of variance. The data consisted of the responses of the four constituency groups as they perceived the importance of the attribute statements at that time. With this test, when the difference between any two means is larger than the critical difference, the means are assumed to be significantly different. Table 4 shows the source(s) of significant differences in attribute statement 1, Head Coach at Division I School.

Table 4: Difference Between Means in Statement 1

Presidents vs Alumni Director 9.30-6.00 = 3.30 nonsignificant
Presidents vs Faculty Reps.   7.00-6.00 = 1.00 nonsignificant
Presidents vs Athletic Dir. 10.57-6.00 = 4.57 significant
Athletic Dir vs Alumni Dir. 10.57-9.30 = 1.20 nonsignificant
Athletic Dir vs Faculty Rep. 10.57-7.00 = 3.57 nonsignificant
Faculty Rep. vs Alumni Dir.   9.30-7.00 = 2.30 nonsignificant

critical difference = 3.8906

The source(s) of significant differences in attribute statement 6, <u>Commitment to the Adherence of Rules</u>, is shown in Table 5.

Table 5: Differences Between Means in Statement 6

```
Presidents vs Alumni Dir.    24.43-18.16 = 6.27 significant
Presidents vs Faculty Reps   24.43-21.46 = 2.97 nonsignificant
Presidents vs Athletic Dir   24.43-19.43 = 5.00 significant
Athletic Dir vs Alumni Dir   19.43-18.16 = 1.27 nonsignificant
Athletic Dir vs Faculty Rep  19.43-21.46 = 2.03 nonsignificant
Faculty Rep vs Alumni Dir    21.46-18.16 = 3.30 nonsignificant
```

Critical difference = 4.2819

When examining the differences detected by Tukey's test on the two attribute statements, the sources of differences were identified for three situations. Athletic directors perceived the attribute of having been a <u>Head Coach at a Division I School</u> as being more important than did the University President's. The attribute of having a <u>Commitment to the Adherence of Rules</u> was perceived by the President's as being more important than did either the athletic directors or the alumni directors. No other differences were detected by the Tukey's test for the remaining attribute statements.

Rank-Orders

The third part of this study was designed to identify attribute priorities for each of the four constituency groups. Preferred attributes by the constituents in four geographic regions are also in this section.

Table 6: Rank Order of "Attribute Statements" for Constituents

Attribute Statements	Presidents		Athletic Dir		Faculty Reps		Alumni Dir	
	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
1. Head Coach at Div. I	8	6.00	4	10.57	8	7.00	6	9.30
2. Success as a recruiter	5	8.20	5	8.95	6	7.97	5	9.41
3. Success by won/lost record	3	10.33	3	10.73	4	9.41	3	11.05
4. Experience in personnel management	9	4.80	9	5.81	9	5.23	9	6.32
5. Positive recommendations	4	8.83	7	7.81	5	8.21	8	7.70
6. Commitment to the adherence of rules	1	24.43	2	19.43	2	21.46	2	18.16
7. Relate to faculty	7	7.40	8	7.54	7	7.08	7	7.86
8. Fits the image of the university	6	8.03	6	8.76	3	10.26	4	10.25
9. Personal integrity and honesty	2	21.80	1	20.65	1	23.49	1	19.80

Table 6 illustrates the rank order "attribute statement" means for the four constituency groups. The presidents ranked 6, Commitment to the Adherence of Rules, as their number one priority. The athletic directors, faculty representatives and alumni directors all ranked 9, Personal Integrity and Honesty, as their number one priority. The greatest disparity came in attributes 1, 5 and 8. In 1, Head Coach at a Division I School, the athletic directors ranked it as number four (4), while the presidents and faculty representatives ranked it as number eight (8). Attribute 5, Positive Recommendations, was ranked number four (4) by presidents, but was seven (7) and eight (8) by athletic directors and alumni directors respectively. In 8, Fits the Image of the University, faculty representatives ranked this number three (3) while both presidents and athletic directors ranked it number six (6).

The last ranking of this study was on a geographic basis. The purpose was to see if the constituency groups in the four geographic regions of the United States perceived the attribute statements the same way. The regions were number I, the northeast; number II, the southeast; number III, the midwest; and number IV, the west. Precaution should be taken with regard to data taken from Region I, the northeast, because of the small number of respondents representing this region. Tables 7, 8, 9, 10 show how the four

Table 7: Regional Ranking by Presidents

	Region I		Region II		Region III		Region IV	
Attribute Number	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
1. Head Coach at Div. I Level	8	5	7	7.6	8	6.3	8	5.0
2. Success as a recruiter	6	6	4.5	8.0	4	9.2	5	7.9
3. Success by won/lost record	4	10.5	3	8.9	3	10.2	3	11.5
4. Experience in personnel management	9	3.5	9	5.4	9	5.3	9	4.2
5. Positive recommendations	3	11.5	6	7.8	7	7.9	4	9.9
6. Commitment to the adherence of rules	1	29.0	1	25.9	1	21.6	1	24.9
7. Relate to faculty	5	6.5	8	7.5	6	8.9	7	6.3
8. Fits the image of the university	7	5.5	4.5	8.0	5	9.1	6	7.6
9. Personal integrity and honesty	2	23.5	2	20.4	2	21.3	2	22.9

Table 8: Regional Ranking by Athletic Directors

		Region I		Region II		Region III		Region IV	
	Attribute Number	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
1.	Head Coach at Div. I Level	3	11.4	3	10.8	8	6.3	4	11.5
2.	Success as a recruiter	7	8.0	6	8.6	6	7.9	5	9.4
3.	Success by won/lost record	4.5	9.0	4	9.5	3	11.8	3	11.8
4.	Experience in personnel management	8	6.6	9	5.5	9	4.9	9	6.5
5.	Positive recommendations	9	6.2	7	8.1	4	8.8	7.5	6.9
6.	Commitment to the adherence of rules	1	21.4	1	22.3	2	20.3	2	15.3
7.	Relate to faculty	6	8.8	8	8.0	7	7.0	7.5	6.9
8.	Fits the image of the university	4.5	9.0	5	8.8	5	8.2	6	9.0
9.	Personal integrity and honesty	2	19.8	2	18.2	1	21.2	1	22.8

RANK BY REGIONS

Table 9: Regional Ranking by Faculty Representatives

Attribute Number	Region I		Region II		Region III		Region IV	
	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
1. Head Coach at Div. I Level	9	4.5	8	5.8	9	5.0	4	10.1
2. Success as a recruiter	7	5.5	7	6.3	5	8.3	5	9.3
3. Success by won/lost record	7	5.5	5	8.1	4	9.2	3	11.1
4. Experience in personnel management	7	5.5	9	4.6	8	5.3	9	5.6
5. Positive recommendations	5	6.5	4	8.4	6	8.2	7	8.4
6. Commitment to the adherence of rules	1	29.5	1	24.6	2	20.6	2	18.9
7. Relate to faculty	4	8.5	6	7.9	7	7.0	8	6.4
8. Fits the image of the university	3	9.5	3	10.1	3	11.8	6	9.0
9. Personal integrity and honesty	2	25.0	2	24.1	1	24.8	1	32.3

Table 10:   Regional Ranking by Alumni Directors

		Region I		Region II		Region III		Region IV	
	Attribute Number	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
1.	Head Coach at Div. I Level	8.5	5.6	6	8.4	6	9.8	4	11.1
2.	Success as a recruiter	7	8.6	5	8.5	4.5	9.9	5	9.9
3.	Success by won/lost record	5	10.0	4	10.8	4.5	9.9	3	13.5
4.	Experience in personnel management	8.5	5.6	9	5.0	9	6.9	9	6.9
5.	Positive recommendations	6	9.4	7	7.3	8	7.4	7	8.0
6.	Commitment to the adherence of rules	2	16.2	2	19.3	1	18.9	2	16.7
7.	Relate to faculty	4	10.4	8	6.9	7	8.3	8	7.0
8.	Fits the image of the university	3	10.6	3	11.2	3	10.9	6	8.1
9.	Personal integrity and honesty	1	22.8	1	22.5	2	17.6	1	19.0

constituent groups in each of the four geographic regions ranked the attributes.

The presidents in all four regions agreed that attribute 6 and 9 should be ranked number one and number two respectively. The largest discrepancy among the presidents was in Attribute 5, Positive Recommendations, where the northeast region ranked it number three (3) and the midwest region number seven (7) in importance (Table 7). The athletic directors also ranked Attributes 6 and 9 as their top two in importance, but had a marked difference in opinion concerning Attributes 1 and 5. Attribute 1, Head Coach at a Division I School, was ranked as number three (3) in importance by Regions I and II, but number eight (8) in importance by region III, the midwest. The athletic directors also disagreed on Attribute 5, Positive Recommendations, where Region III ranked it as number four (4) and Region I as number nine (9) in importance (Table 8). Faculty representatives agreed that Attributes 6 and 9 were of the highest importance. This constituency group had significant regional differences in three attribute statements. Attribute 1, Head Coach at a Division I School, ranged from number four (4) in the western region to number nine (9) in both Region I and Region III. Attribute 3, Success by Won/ Lost Record, was considered as number three (3) in importance by Region IV and number seven (7) by Region I. Attribute 7, Relate to the Faculty, was the faculty representatives number four (4) rank

in Region I and number eight (8) in Region IV (Table 9).
Attributes 6 and 9 remained in the top two spots by the
alumni directors group. Large discrepancies were detected in
Attributes 1 and 7. Number 1, Head Coach at a Division I
School, was number four (4) in the western region and tied
for the eight (8) and nine (9) rank in the northeast.
Attribute 7, Relate to the Faculty, was ranked number four
(4) in importance by Region I and number eight (8) by both
Region II and Region IV (Table 10).

Discussion

This coaching attribute study was directed to the
presidents, athletic directors, faculty representatives and
alumni directors of NCAA Division I-A colleges and
universities throughout the United States. As indicated by
this study, there is a strong congruence in the perceived
importance of the various attributes utilized in the
selection of head football and basketball coaches of NCAA
Division I-A schools.

The literature has shown that there is a need for deter-
mining attributes to be used in the selection of head
football and basketball coaches if the problems of college
athletics are to be controlled. In this study, the
differences between the attributes perceived as essential in
the selection process by the four constituency groups were
detected in two of the nine attributes utilized for the

study. Attribute statement 1, Head Coach at a Division I
School, and Statement 6, A Commitment to the Adherence of
the Rules, were not perceived as being of equal importance by
all four constituency groups utilized in the study. However,
this study noted strong similarities between the four
constituency groups on rank order of the most important
attributes to be utilized in the selection process. Three
attributes, Commitment to the Adherence of the Rules,
Personal Integrity and Honesty, and Success by Won/Lost
record were ranked by all four constituency groups in their
top four attributes (see Table 6). In this study the
similarities between the four constituency groups appear more
pronounced than do the differences.

In light of the findings, four constituency groups such
as utilized in this study, would be compatible on a head
coach selection committee. Since university presidents,
faculty and alumni perceive the essential attributes much the
same as do athletic directors, a selection process could be
used to help insure that the best interests of university and
college athletics are being fulfilled. The athletic director
need not make the selection and shoulder the entire burden of
athletic integrity. The total university community should be
involved.

By utilizing the desired attributes in a head football
and basketball coach, a university selection committee can
quantify the attributes possessed by candidates, using the

AHP process, to insure that they are selecting the coach who rates the highest in desirable attributes. This process will aid in selecting the most qualified people to coach university football and basketball teams, thus, helping to bring integrity back to college athletics.

V. SUMMARY, CONCLUSIONS, RECOMMENDATIONS

Summary

The purpose of this study was to assess and analyze the preferred importance of coaching attributes as perceived by presidents, athletic directors, faculty representatives and alumni directors in NCAA Division I-A Universities throughout the United States.

The Coaching Attribute Questionnaire was administered to the four constituency groups using a random sampling procedure that yielded a sample of 150 persons from the 105 NCAA Division I-A schools.

The Coaching Attribute Questionnaire consisted of nine coaching attributes, placed into 36 paired comparison statements, with each pair to be rated in accord with its perceived importance in the selection of a head football or basketball coach.

Each of the attribute statements were compared to the remaining attributes and rated on a scale of importance:

Response Choice for Attribute Statements	Converted Point Value
Equal: Two attributes cannot be distinguished with respect to this criterion.	1
Weak: Experience and judgment slightly favor one attribute over the other.	2

Strong: Experience and judgment strongly favor

            one attribute over the other   3

Very Strong: One attribute is favored very

                strongly; dominance is demonstrated

                in practice.   4

Absolute: The evidence favoring one attribute is

            of the highest possible order.   5

Analysis of data followed three procedures in the
study. First, the 150 respondents ratings of the coaching
attributes on the paired comparison questionnaire were placed
into matrices to compute numerical importance values on each
attribute statement using the analytic hierarchy process
(Figures 2-5). From these values the means and standard
deviations were computed on each of the nine attribute
statements for each constituency group.

To determine if differences existed between the four
constituency groups on the importance of the coaching attri-
bute statements, analysis of variance was used to test for
significance at the .05 level (see Table 3).

Coaching attribute statements were ranked to determine
the four constituency groups ratings of the ideal importance
of specific attributes (Table 6). Examination of data
provided identification of priorities for the presidents,
athletic directors, faculty representatives and alumni
directors of NCAA Division I-A universities.

Conclusions

No statistical significant differences were found between the NCAA Division I-A presidents, athletic directors, faculty representatives, and alumni directors on seven of the nine coaching attribute statements (see Table 3). On the attributes of Head Coach at Division I Level and Commitment to the Adherence of the Rules, significant statistical differences did occur. Thus, the four constituency groups did not agree on the relative importance of these two attributes.

However, even though significant statistical differences were found on two attribute statements, this does not mean the four constituent groups may be in conflict over the importance of the attributes. For example, when the Tukey HSD Multiple Range Comparison Test was applied to identify the source of differences to the attribute statement, Head Coach at the Division I Level, the conflict of opinion was only between the presidents and the athletic directors (see Table 4). On this statement, the athletic directors perceived the attribute to be of more importance than did the presidents. This can be best understood by looking at the rank order of the means (Table 6). The athletic directors perceived the statement, Head Coach at the Division I Level, as being the fourth (4) most important attribute with a mean of 10.57, while the presidents ranked it as eighth (8) in importance with a mean of 6.0. The other two constituent groups perceived the goal much the same as did the

presidents, but not enough different from the athletic directors to be significant.

There was also a significant statistical difference for the attribute statement, Commitment to the Adherence of the Rules. On this statement, the Tukey HSD Multiple Range Comparison test identified the differences to be present between the president's group and the athletic directors and the presidents and alumni directors (Table 5). The presidents perceived this attribute to be of the highest importance, ranking it as number one (1) with a mean of 24.43, while the athletic directors and alumni directors both ranked the attribute as number two (2) with a means of 19.43 and 18.16 respectively (Table 6). The faculty representative group perceived this attribute much the same as did the athletic and alumni directors but not significantly different from the presidents.

The rank ordering of preferred attributes provided evidence of what the presidents, athletic directors, faculty representatives and alumni directors saw as important coaching attributes at their particular NCAA Division I institutions. The presidents ranked Commitment to the Adherence of Rules as the most important attribute. Personal Integrity and Honesty and Demonstrated Success by a Won/Lost Record were number two (2) and three (3) for the presidents. The athletic directors, faculty representatives, and alumni directors all ranked Personal Integrity and Honesty and

Commitment to the Adherence of Rules as number one (1) and two (2) respectively. The athletic directors and alumni directors ranked Demonstrated Success by Won/Lost Record as number three (3), just like the presidents, but the faculty representative group ranked Fits the Image of the University as number three (3) (see Table 6). All four constituency groups ranked the attribute Experience in Personnel Management as the least or number nine (9) in importance. Even though there were slight variations in the rank order of attributes between constituency groups, the presidents and faculty representatives had strikingly similar views on their priorities of the coaching attributes, just as the groups of athletic directors and alumni directors were similar in their perceived importance of the attributes.

By isolating the constituency groups into four geographic regions, using the NCAA's regional boundries, much clearer differences in the perceived importance of the coaching attributes were revealed. All four constituency groups in each of the four regions ranked the attributes Commitment to the Adherence to Rules and Personal Integrity and Honesty as either their number one (1) or number two (2) priority. The most striking regional difference among the presidents was in the statement, Positive Recommendations from Other Coaches, where the east region ranked it as number three (3) in importance, to a number seven (7) ranking by Region III, the midwest (see Table 7). The athletic director group had two

statements that were perceived very differently. First, Head Coach at the Division I Level, was ranked number three (3) by the east and southeast regions and number eight (8) by the midwest. The statement Positive Recommendations from Other Coaches, was rated number four (4) by the AD's in the midwest to a number nine (9) rating in the east (see Table 8). Three attributes were viewed to extremes by the faculty representative group. Having been a Head Coach at the Division I Level, was ranked number four (4) in Region IV, the west, while the east region ranked it number nine (9) in importance. Demonstrated Success by a Won/Lost Record was viewed as number three (3) in importance to the faculty representatives in the west to a number seven (7) rank in the east. Region I, the east, ranked The Ability to Relate to the Faculty as number four (4) in importance while Region IV, the west ranked it as number eight (8) (see Table 9). The big difference in opinion among the alumni directors in the regions came on two statements. Having been a Head Coach at the Division I Level, was rated number four (4) in the west and a rating of 8.5 was given by the east region. The Ability to Relate to the Faculty was ranked number four (4) by the east region while both the southeast and west ranked this attribute as number eight (8) in importance (Table 10).

In reviewing the results of this study, there was general agreement between the presidents, athletic directors, faculty representatives and alumni directors of NCAA Division

I-A schools on the attributes they perceived as essential in the selection of head football and basketball coaches. When comparing the rankings of essential attributes, all four constituency groups ranked the same two attributes as either their first or second choice (Table 6). Statistically significant differences were found in the attribute statements Head Coach at the Division I Level and Commitment to the Adherence of the Rules. However, the attribute Commitment to the Adherence of the Rules was considered to be of the highest importance.

Since there are no other surveys of this type, it was not possible to compare the results with other research findings. The regional priority ratings have shown a striking difference in the perceived importance in some attributes as one moves through the various geographic regions of the United States.

The three priority Attribute Statements 9, 6, 3 (see Table 6), as ranked by the four constituency groups should identify those priorities deemed most essential to NCAA Division I-A schools in the selection of head football and basketball coaches. If an effective decision making process is to occur, these Attribute Statements could be an important contribution in any deliberations about the selection of a head football or basketball coach.

It was established in Chapter I that NCAA University Athletic Departments should have identified attributes which

are placed into a prioritized list. These attributes may not be easy to achieve or easily quantifiable, but they can serve as guides in decision making.

With the help of the Coaching Attribute Questionnaire this study has identified the attributes that the presidents, athletic directors, faculty representatives and alumni directors at NCAA Division I-A Universities have pinpointed for their respective positions and universities. It remains in the hands of those who are most involved in the selection of NCAA Division I-A head football and basketball coaches to use the results of this study as one reference point in the selection of future head football and basketball coaches.

Recommendations for Immediate Action

On June 20, 1985 the NCAA Presidents Commission and Council met in New Orleans, Louisiana for the purpose of bringing "integrity" back to the NCAA. With the passing of more severe penalties for rule violations and new entrance requirements for athletes, the college presidents are now more involved in the administration of the NCAA. The football and basketball coach's "boss" is no longer his old friend the athletic director, who probably is an ex-coach who knows what it takes to win today. The coach has another "boss" now, the college president (Mixson, 1985).

Therefore, the President's Commission and Council and newly structured NCAA should take time to review and revise

their selection process for head football and basketball coaches. The results of this study, the legislation of the NCAA's President's Commission, and additional information that is available, should be used to set new directions for the selection process of the university's head coaches in football and basketball.

This study of coaching attributes perceived as essential by university presidents, athletic directors, faculty representatives and alumni directors could be used to serve a variety of purposes:

1. Ranked coaching attributes should be carefully considered for use in the decision making process of selecting head football and basketball coaches at NCAA Division I-A schools. Without established attribute priorities, it is difficult to include a cross campus selection committee that can accurately assess the strengths of potential head coaches that will meet the integriy criteria of the university.

2. Constituency groups of universities coaching selection committee should be apprised of their similarities and differences in perceived coaching attributes. If all constituency groups do not perceive an attribute in the same manner, it is essential to place these attributes on different levels of the hierarchy for the AHP so that proper weighting of the attribute can be achieved.

3. The analytic hierarchy process of decision making could be developed as a tool for the selecting of head football and basketball coaches in the university athletic departments. By utilizing the paired comparison method of analyzing attributes, a more percise judgment can be made. The numerical comparison allows group decisions to be made with greater ease.

4. Specific measurable strengths and weaknesses of coaches could be evaluated by using the coaching attribute study as a source of information. This would allow for a more consistent selection process across the country; thus, the entire NCAA membership would be on a common ground for selecting coaches with the integrity needed to restore college athletic credibility.

5. Aspiring head football and basketball coaches could be attuned to the attributes perceived as essential in their selection as a head coach. By knowing which attributes are essential to the various selection constituents, an aspiring coach could work to develop a philosophy that is compatible to the attribute needed for selection of a head coaching position.

If the latter two suggestions are decided upon as a possible course of action, a new regional list of attributes might be developed to better serve the universities and coaches of a specific geographical region.

Recommendations for Further Study

1. This study should be replicated in three to five years to test the effect of change. If it is true that the presidents of NCAA universities are creating a change in the "integrity" of college athletics (Mixson, 1985), then future studies should show stronger similarities in the integrity related attributes than the present study. This is essential if corruption in college athletics is to be stopped and their integrity with the public restored. In addition it would be of interest to determine if won/lost records and recruiting success still carried as much weight with the selection constituents as they do at the present.

2. A replication of this study should include broader constituencies such as NCAA Division I-AA, Division II and Division III representatives. At these lower levels of NCAA competition where post season and TV revenue do not play such an important role in the financing of athletic programs, will the attributes perceived as essential be the same? Will academic

preparation and background carry more weight when physical education departments become a constituent in the selection process?

3. Additional coaching attribute studies should use factor analysis to determine how the variables of age, gender, size of budget, years in position, private schools and state schools to determine correlation between perceived coaching attributes.

4. Since this study has revealed a statistical difference in the attribute area "commitment to the adherence of the rules," further research should examine and evaluate the effect the NCAA's President's Commission has on the integrity of college athletics. The President's Commission appears to be plotting the future course of college athletics, so will this leadership alter the perceptions of selection constituents as they perceive integrity related attributes?

5. A longitudinal survey focusing on coaching attributes should be conducted to study the changes in perceived coaching attributes and/or priorities for NCAA Division I-A Universities. Along with changes in time, attitudes, and values toward college athletics will change. With this change will come different perceptions in desired coaching attributes and roles for coaches to play within the

framework of college athletics. Only by constantly monitoring desired attributes can selection committees stay abreast of the coaching needs of their universities.

Implications

The findings and conclusions of this study indicate some considerations, directions and implications for coaching selection committees at NCAA Division I-A Universities. Since the most frequent source of difference in opinion was between the University Presidents and the athletic directors, some of the implications may reflect the change in control of the NCAA from the athletic directors to the Presidents.

The solid commitment by all constituency groups to the importance of the attributes Commitment to the Adherence of Rules and Personal Integrity and Honesty implies a strong foundation for "cleaning up" the corruption and integrity of college athletics.

The lower importance ratings by all constituency groups to the attributes Experience in Personnel Management and Relate to Faculty may very well change as integrity increases. The ability of a head coach to select and communicate with his immediate staff will become more important as the credibility of the coach and his program gains its proper place in the university. As academic, admission and retention standards become more stringent, the head

coaches ability to relate to the faculty will become more important to the selection constituents.

As selection committees formulate attribute priorities for the selection of head football and basketball coaches, what do they do about the dismissal attributes? Does it remain the same? Attributes that were perceived as of medium importance in the ranking seem to be the top attributes used for the dismissal of a coach. When a coach is fired by a university, his won/lost record will be the number one reason. Tied with this attribute is his ability to recruit athletes. It seems that the constituents who are responsible for the selection and retention of head college football and basketball coaches need to evaluate their selection criteria when they are formulating dismissal criteria.

An aspiring head college coach needs to familiarize himself with the attributes perceived as essential by the constituents of selection committees. By doing this, the coach can start preparing himself at an early stage for the demands he must satisfy if he is to be successful in his pursuit of head coaching position. In light of the essential attributes by today's selection constituents, an aspiring head coach needs to develop a strong committment to integrity related attributes. Educational background might very well play a bigger role in his future selection. This fact is demonstrated by the conflict between the Presidents' group and the athletic directors on having been a Head Coach

at a Division I School. The athletic directors consider this rather high in importance whereas the Presidents rate the attribute at the bottom of the importance scale. Perhaps the athletic director's view on previous head coaching experience will not be nearly as important as academic background in the future selection of head college coaches.

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APPENDICES

APPENDIX A

ATHLETIC DIRECTORS PARTICIPATING IN THE DEVELOPMENT
OF THE COACHING ATTRIBUTE QUESTIONNAIRE

William J. Flynn	–	Boston College
O. Kenneth Karr	–	East Carolina University
Clifford O. Hagan	–	University of Kentucky
William C. Olsen	–	University of Louisville
Sam JanKovich	–	University of Miami
Frank Broyles	–	University of Arkansas
Chalmers W. Elliott	–	University of Iowa
Douglas Weaver	–	Michigan State University
Paul R. Giel	–	University of Minnesota
Dave Hart	–	University of Missouri
Myron Roderick	–	Oklahoma State University
August Erfurth	–	Rice University
Cedrick Dempsey	–	University of Arizona
David Maggard	–	University of California
Ferdinand A. Geiger	–	Stanford University
Milo R. Lude	–	University of Washington

APPENDIX B

The Department of
Physical Education

Oregon
State
University

Corvallis, Oregon 97331-3302

May 15, 1985

Dear

    I am in the process of conducting a doctoral research project concerned with examining the attributes perceived as essential for hiring football and men's basketball coaches at NCAA Division I-A schools. Since your institution has been involved with the selection of a new coach within the last couple of years, I am asking for your help in this project.

    Your opinion will be used to help reduce the list of possible attributes into a paired comparison questionnaire which will provide information to complete the project. If there are additional attributes that you feel are vital to the selection of a head coach, there is space at the end of the questionnaire for you to include the additional attributes.

    Your cooperation is vital to this project, and I appreciate the time you take from your busy schedule to complete the questionnaire. Each respondent will remain anonymous and your opinions will be kept confidential.

    Please return the coaching Attribute Analysis sheet in the self-addressed envelope. Your prompt response will be appreciated.

Sincerely,

Scott Johnson
Doctoral Candidate

Dr. Arnold Flath
Major Advisor
Professor of P.E.

Dr. Sylvia Moore
Interim Athletic Director

APPENDIX C

Coaching Attribute Analysis

INSTRUCTIONS: Listed below are 27 attributes which may or may not be important to you in the selection of a head football or men's basketball coach. Please rate each item carefully, based on its importance to you, by circling the appropriate number on a scale from one to five where 1 is Not Important and 5 is Very Important.

		Not Important				Very Important
PLAYING EXPERIENCE						
1.	He played at the Division I level	1	2	3	4	5
2.	He played at the Division II or III level	1	2	3	4	5
COACHING EXPERIENCE						
3.	He has been a head coach at the Division I level	1	2	3	4	5
4.	He has been a head coach at the Division II or III level	1	2	3	4	5
5.	He has been an assistant coach in a successful Division I program	1	2	3	4	5
6.	He has been an assistant coach at the Division II or III level.	1	2	3	4	5
7.	He has had successful classroom teaching experience	1	2	3	4	5
8.	He has been a high school coach	1	2	3	4	5
9.	He has demonstrated success by a won/ lost record or improvement of a program	1	2	3	4	5
ADMINISTRATIVE EXPERIENCE						
10.	He has experience in personnel management; hiring of assistant coaches	1	2	3	4	5
11.	He has experience in fiscal management, travel, budget, equipment and facilities.	1	2	3	4	5
12.	He has demonstrated success as a recruiter	1	2	3	4	5
13.	He has recruiting contacts in the immediate geographical area	1	2	3	4	5
14.	He has the ability to work with "support" people under him, such as trainers, equipment people and ground crew.	1	2	3	4	5
MISCELLANEOUS EXPERIENCE						
15.	He has positive recommendations from other coaches	1	2	3	4	5
16.	He has knowledge of sports medicine, including drug problems and drug testing	1	2	3	4	5
17.	He has experience in promotional activities.	1	2	3	4	5

	Not Important				Very Important
18. He has demonstrated success in fund raising activities.	1	2	3	4	5
19. He has successful experience in the organizing and running of clinics and camps	1	2	3	4	5

PERSONAL ATTRIBUTES

20. His self image as portrayed on the radio and T.V. is appropriate	1	2	3	4	5
21. He has a commitment to the adherence of the rules of the University, Conference and the NCAA	1	2	3	4	5
22. He has the ability to relate to faculty and the academic community.	1	2	3	4	5
23. He fits the image of the University	1	2	3	4	5
24. His style of play; is it compatible to the weather and crowd appeal	1	2	3	4	5
25. He has good physical appearance	1	2	3	4	5
26. He has good communication skills.	1	2	3	4	5
27. He has personal integrity and honesty	1	2	3	4	5

List and rate any additional attributes that you feel are essential.

28.	1	2	3	4	5
29.	1	2	3	4	5
30.	1	2	3	4	5

ADDITIONAL COMMENTS:

APPENDIX D

The Department of
Physical Education

Oregon
State
University

Corvallis. Oregon 97331-3302

July 12, 1985

Dear Sir:

In order to complete the thesis for my graduate program, I am asking for your help.

With all of the talk today concerning college athletics, I am conducting a study on the hiring of football and men's basketball coaches at NCAA Division I schools. I need to have you complete the enclosed questionnaire on how you perceive the attributes used in the selection process.

The list of nine attributes used in the questionnaire were reduced from an original list of approximately 30 attributes by a nationwide group of athletic directors who have selected a coach within the past two years. The questionnaire is a paired comparison, meaning that you will be using judgments on the importance of each attribute compared to one of the other attributes. You will only need to make a check to determine the relative dominance, if any, of one attribute to another. One part of the study will be to compare how University presidents, athletic directors, faculty and alumni perceive the attributes used in the selection process.

Your cooperation is vital to this study, and I appreciate any time you take from your busy schedule to complete the questionnaire. Each respondent will remain anonymous and your opinions will be kept confidential.

Please return the Attribute Analysis Questionnaire in the self-addressed envelope by August 1. Your prompt response will be appreciated.

Sincerely,

Scott Johnson
Doctoral Candidate

Dr. Arnold Flath
Major Advisor
Professor of P.E.

SJ,AF/dlr
Enclosure

| COACHING ATTRIBUTE QUESTIONNAIRE |

INSTRUCTIONS: Check the judgment which indicates the dominance of the attribute in the left column over the corresponding attribute in its row in the right column. If, in fact, there is such dominance some position in the set of values to the left of equality is checked. Otherwise, equality or a position in the right set of values is checked.

DEFINITION:
Equal: Two attributes cannot be distinguished with respect to this criterion.
Weak: Experience and judgment slightly favor one attribute over the other.
Strong: Experience and judgment strongly favor one attribute over the other.
Very Strong: One attribute is favored very strongly; dominance is demonstrated in practice.
Absolute: The evidence favoring one attribute is of the highest possible order.

ATTRIBUTE STATEMENTS:
1) He has been a head coach at the Division I level.
2) He has demonstrated success as a recruiter.
3) He has demonstrated success by a won/lost record or improvement of a program.
4) He has experience in personnel management; hiring of assistant coaches and support people such as trainers and equipment managers.
5) He has positive recommendations from other coaches.
6) He has a commitment to the adherence of the rules of the University, Conference and the NCAA.
7) He has the ability to relate to the faculty and the academic community.
8) He fits the image of the University.
9) He has personal integrity and honesty.

Left Column	Absolute	Very Strong	Strong	Weak	EQUAL	Weak	Strong	Very Strong	Absolute	Right Column
1) Head coach at Div. I										2) Success as a recruiter
1) " " "										3) Success by won/lost record
1) " " "										4) Experience in personnel management
1) " " "										5) Positive recommendations
1) " " "										6) Commitment to the adherence of rules
1) " " "										7) Relate to faculty
1) " " "										8) Fits image of the University
1) " " "										9) Personal integrity and honesty
2) Success as recruiter										3) Success by won/lost record
2) " " "										4) Experience in personnel management
2) " " "										5) Positive recommendations
2) " " "										6) Commitment to the adherence of rules
2) " " "										7) Relate to faculty
2) " " "										8) Fits image of the University
2) " " "										9) Personal integrity and honesty

ATTRIBUTE STATEMENTS (continued):

1) He has been a head coach at the Division I level.
2) He has demonstrated success as a recruiter.
3) He has demonstrated success by a won/lost record or improvement of a program.
4) He has experience in personnel mangement; hiring of assistant coaches and support people such as trainers and equipment managers.
5) He has positive recommendations from other coaches.
6) He has a commitment to the adherence of the rules of the University, Conference and NCAA.
7) He has the ability to relate to the faculty and the academic community.
8) He fits the image of the University.
9) He has personal integrity and honesty.

Left Column	Absolute	Very Strong	Strong	Weak	EQUAL	Weak	Strong	Very Strong	Absolute	Right Column
3) Success by won/lost record										4) Experience in personnel management
3) " " "										5) Positive recommendations
3) " " "										6) Commitment to the adherence of rules
3) " " "										7) Relate to faculty
3) " " "										8) Fits image of the University
3) " " "										9) Personal integrity and honesty
4) Exp. in Personal Managem't										5) Positive recommendations
4) " " "										6) Commitment to the adherence of rules
4) " " "										7) Relate to faculty
4) " " "										8) Fits image of the University
4) " " "										9) Personal integrity and honesty
5) Positive recommendations										6) Commitment to the adherence of rules
5) " " "										7) Relate to faculty
5) " " "										8) Fits image of the University
5) " " "										9) Personal integrity and honesty
6) Commit.-adher. to rules										7) Relate to faculty
6) " " "										8) Fits image of the University
6) " " "										9) Personal integrity and honesty
7) Relate to faculty										8) Fits image of the University
7) " "										9) Personal integrity and honesty
8) Fits image of Univ.										9) Personal integrity and honesty

APPENDIX F

JUST A REMINDER ....

August 1, 1985

Check your mid-July mail stack. I have not received your completed Coaching Attribute Questionnaire. Your response is important! Would you please complete the questionnaire and return it by August 10, 1985. If you already completed your Coaching Attribute Questionnaire, thank you for your interest and cooperation.

Sincerely,

Scott Johnson
Doctoral Candidate
Oregon State University

APPENDIX G

The Department of
Physical Education

Oregon
State
University

Corvallis. Oregon 97331-3302

September 16, 1985

Dear Sir,

In July I wrote to you seeking your opinion on the attributes that you perceive as essential in the hiring of head football and basketball coaches in NCAA Division I-A schools. Your response will be used to help determine how important attributes are perceived by various groups involved in the selection process.

I am writing to you again because of the significance each questionnaire has to the usefulness of the study. Your name was drawn through a scientific sampling proces in which every president, athletic director, faculty representative and alumni director in a Division I-A school had an equal chance of being selected. In order for the results of this study to be truly representative of the opinions of these groups, it is essential that you return the questionnaire.

If you have already completed and returned your questionaire, please accept my sincere thanks. In the event that you did not receive a questionnaire, or it got misplaced, I have enclosed another questionnaire and addressed return envelope for your use. Please complete it today and mail it back to me tomorrow.

Your contribution to the success of this study is greatly appreciated.

Sincerely,

Scott Johnson
Graduate Student
Oregon State University

SJ/jj
Enclosure