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Coach-Athlete Philosophy and Team Cohesion in Collegiate Women's Basketball

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Coach-Athlete Philosophy and Team Cohesion

in Collegiate Women's Basketball

(TITLE)

BY

Angela R. Patzner

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THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF

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Coach-Athlete Philosophy and Team Cohesion in Collegiate Women's Basketball

Abstract

The study examined the effects of coach-athlete philosophy of various collegiate level women's basketball teams on team cohesion levels as perceived by the athletes. The philosophic orientation of head coaches ($n = 4$) and athletes ($n = 43$) was determined by use of the Philosophic Affiliation Team Survey (PATS). The team cohesion levels, as scored by the Group Environment Questionnaire, GEQ (Carron, Windmeyer, & Brawley, 1985), were compared between those coaches and athletes who displayed a philosophic match and those who did not match. Specifically, the purposes were to a) determine if those athletes who matched the philosophy of their head coach (PATS) scored higher in team cohesion than those athletes who did not match their coach's philosophy, b) determine in which subscales of team cohesion the coach-athlete match subjects ($n = 29$) scored higher, and c) determine if the PATS displayed concurrent validity with a parent test (Zeigler, 1989). MANOVA results indicated a significant main effect for philosophy match (Wilk's Lambda = .44, $F(4, 38) = 12.27$, $p < .0001$). Total structure coefficients for GEQ subscales were $r = .99$ (GI-T), $r = .87$ (GEQ Total), $r = .71$ (GI-S), $r = .48$ (ATG-T), and $r = .45$ (ATG-S), indicating that each aspect of team cohesion significantly differentiated athletes whose philosophy matched their coach from those whose philosophy did not match. Examination of the total structure coefficients indicated that while all GEQ subscales could significantly differentiate athletes that

matched their head coach's philosophy, Group Integration-Task ($r = .99$) and Group Integration-Social ($r = .71$) were especially meaningful in this relationship. Post hoc follow-up tests indicated that the Division II level college team produced the highest total cohesion mean ($M = 140.30$), compared to the Junior College ($M = 113.23$) and the Division I (major) ($M = 110.90$) teams. In turn, both of these teams measured significantly higher mean values than the Division I (mid-major) school ($M = 91.80$). The PATS showed no significant overall concurrent validity with the parent test (Zeigler, 1989), as evidenced by low overall correlations between the PATS results and their scores on the respective subscales of the parent test. Despite the lack of support for the validity of the PATS, there was a significant level of concurrent validity ($r = .39, p < .05$) on the idealist scale, indicating if the subject was classified as an idealist on Zeigler's survey (1989), then the subject would most likely be classified as an idealist on the PATS. Overall results provided high levels of support for the influence of coach-athlete philosophic match on team cohesion levels as perceived by the athletes. Results are discussed for the potential of the coach-athlete philosophic orientation in the study of sport philosophy based on the current findings and the importance of team cohesion in building success within athletic teams.

Dedication

This thesis is dedicated to all the coaches and athletes of the world who participate in the game of basketball; who will never know the influence of their efforts on my path in the game of life.

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Chapter 1

INTRODUCTION

The subject of philosophy is a difficult one to empirically examine because it contains ideas centering around an individual's reactions, beliefs, and ways in which they perceive their world; all measurements that prove to be difficult to quantify. Individuals unconsciously reveal their philosophy daily just by what they say, do, and feel.

By classifying an individual into one particular philosophy, a prediction of the individual's reaction(s) in a given situation can be determined. Despite doing so, the idea of one's philosophic orientation remains difficult to quantify. Although one's philosophy, if carefully revealed, can place the deep, inner truths of the individual on display. By determining the philosophic orientation of an individual, these inner truths can better be explained and supported by previous research of the various philosophies.

Zeigler's Philosophical Model

Since the times of Socrates, Plato, and Aristotle, philosophy still remains a subject requiring an in-depth conceptual thought process to even begin to understand it. The branches of the studies involving philosophic principles seem endless. One branch that is still a relatively recent subject area of study is that of sport philosophy.

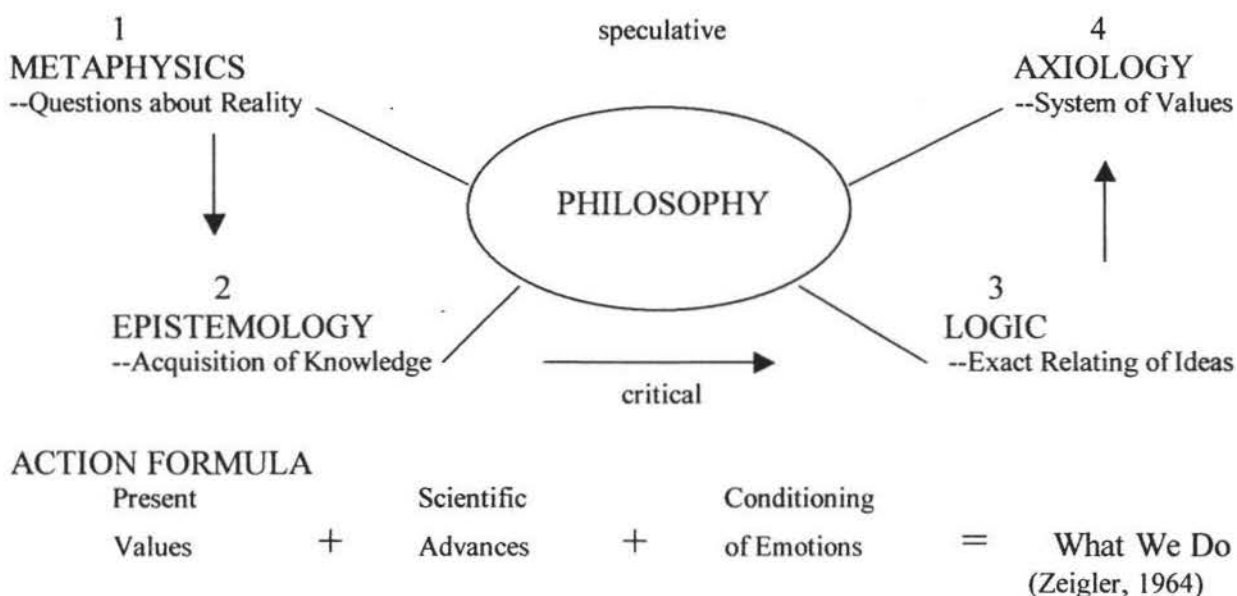
Earle F. Zeigler (1964) remains one of the primary, modern researchers in the area of philosophy, particularly philosophy as it relates to physical education and sport.

Philosophy is a branch of learning which investigates, evaluates, and integrates knowledge of reality as best as possible into one or more systems embodying all available wisdom about the universe” (Zeigler, 1964, p. 12).

A more appropriate definition of philosophy would include not only the knowledge of reality, but also the use of this knowledge to arrive at logical viewpoints that prove to be acceptable enough to revolve one’s reactions and beliefs around.

Most likely each viewpoint differs slightly from the next, thus creating a need to explain the various subdivisions which make up a philosophy. Once each different philosophy has commonalities (found in the subdivisions), they can be compared and contrasted in order to obtain a more systematic description of individuals and their actions. The method of classification developed by Zeigler is presented in the form of a philosophical model.

Figure 1—Zeigler’s Philosophical Model



The philosophical model, as shown, consists of four parts: metaphysics, epistemology, logic, and axiology. The numbers appearing in the model above each of the four subdivisions suggest an order to use in discussing a philosophic category. The suggested order moves from 1) asking questions to 2) gaining knowledge and 3) processing ideas, and finally to the 4) application of a beliefs and values system. Metaphysics and axiology are referred to as *speculative* because these subdivisions deal with ideas and values that are specific to the individual, while the epistemology and logic subdivisions are designated as *critical* because they deal with knowledge that has been or can be verified (Zeigler, 1964). When the philosophical model is put to use, consideration of all the subdivisions within the model becomes an important element because it can reveal exactly where the differences within individual philosophic orientations occur.

The first subdivision, metaphysics, refers to the views about what defines the nature of reality (Zeigler, 1964). The reality believed by an individual is dependent on the metaphysical position taken. The only way to arrive at the reality of a situation is to question it; this is done in the metaphysical phase of determining a philosophic orientation. Individuals are constantly questioning themselves, usually subconsciously, to find out more about what they believe to be true. Once a metaphysical position is taken, the acquisition of more knowledge becomes the natural next step in determining the reality of one's philosophic orientation.

The second subdivision, epistemology, explains various theories about the channels through which knowledge can be gained (Zeigler, 1964). The type of channels chosen is, again, dependant upon the philosophical orientation of the individual and

determines the reality of it. Once this knowledge is acquired, it must be reasoned through in a logical order.

The third subdivision, logic, focuses on the interpretation of the knowledge to form interrelated ideas (Zeigler, 1964). The best way the mind knows how to do this is to determine which ways of thinking are logical and which ways of thinking are illogical. Logic can be thought of as a problem-solving step. There are two types of reasoning to use to solve a problem. The first is inductive, which consists of going from an individual or small group viewpoint and using it to form generalizations about the whole human population. The other type of reasoning is deductive, which consists of the relating of a global viewpoint to a single or small group of individuals (Zeigler, 1964). When the most useful type of logic is finally determined, the values of the individual can be displayed through their actions and strong beliefs, allowing the individual to arrive at the last step in determination of a philosophic orientation—axiology.

The fourth and final division, axiology, involves implementing a values system into one's lifestyle based on previously determined beliefs arrived at by use of the three associate subdivisions modeled by Zeigler. The idea of ethics falls into the study of value domain and plays a huge part in the decisions made by an individual throughout life.

Zeigler's idea of ethics includes all aspects of what a value should entail: morals, a code of conduct, and the decision of good verses evil. Zeigler's definition (1964) refers to ethics in terms of values. Although this is not wrong, ethics can be defined in other ways. Lumpkin, Stoll, & Beller (1999) regard the definition of ethics as the study of the reasons and motives behind one's actions, not just simply their actions. By considering the various realms of ethics, the decision of how one will live their life can be determined

according to their ethical framework, defined by the values one displays through their actions.

The Action Formula (Figure 1) explains how the subdivisions of a particular philosophy are related to one's actions as viewed by others. The first aspect of the action formula pertains to an individual's present values. These values are the same values that are formed during the examination of axiology in the philosophical model. Once a set of values are deemed important by an individual, any scientific advances that have been made in the same area as a value is concerned need to be taken into consideration. Significant research in a given area may change how an individual views a given value, thus changing their action. The hardest part of determining what action will be taken by use of this formula is conditioning emotions. By controlling emotions, an individual is better able to think through a situation and take a more rationale approach. Although the step-by-step action formula seems lengthy, it happens almost unconsciously. The more aware one is about what their mind is actually doing during this decision-making process, the more control an individual can be over their entire outlook on life, or their philosophy.

One's philosophy is the sole determinant for what actions they take. The actions are the most important part because it is the part that others see. Others often do not see the process, but only the outcome, making the end result the part of the action we are judged on and feel we have to justify in some way. Developing a better understanding of one's philosophic orientation by controlling the process, thus controlling the end result, can make a justification of these actions. The way to understanding one's philosophic orientation, which is the next step, is to create a clear knowledge base of the philosophic

schools of thought upon which philosophic classification is possible. This classification will rely highly on the differences exhibited through examination of each of the subdivisions present in Zeigler's philosophic model (Figure 1).

Four Classic Philosophic Schools of Thought

The four classic philosophic schools of thought are Idealism, Naturalism, Pragmatism, and Realism. These classic philosophies serve as a basis for the development of all other philosophic branches, categorizing them into one of these main four based on the principles of the philosophy.

Idealism remains the oldest philosophy, as Plato is thought to be its founder, emphasizing ideas of the mind as the basis of reality (Davis, 1963). The point of the idealistic way of thought is to develop a metaphysical premise to determine the pathway to perfection, or to the ideal. The pragmatist does not place this same emphasis on the metaphysical because it does not offer definite, proven, workable thought processes (Davis, 1963). Hook (1927) differed, since he placed great emphasis on the metaphysics of pragmatism. Hook (1927) contemplated the idealistic premise of freedom being nothing without the pragmatic uniformity and order to express the ideas of the free mind through, thus emphasizing the importance of pragmatic metaphysics.

The point being, that though the four classic philosophic schools of thought remain interrelated, they also remain very different depending on the opinion of individuals. Although the differences between all of these schools of thought allow for the rejection of beliefs by the other, this does not often happen. The trend seems to suggest that a placement of various levels of emphasis on the philosophic ideas occurs

more often than total rejection of the idea. Thus, individuals have the freedom to learn about themselves and their world as they display their actions through their everyday lifestyle (Hook, 1927) and choices, while ultimately revealing their philosophic orientation.

Idealism

The best metaphysical description of idealism includes ideas of the body-mind connection, but also the connection of the spirit. Idealism refers to all three of these smaller connections as a whole by using the word, Self (Butler, 1968), and is most strongly characterized by the mind-spirit connection. The nature of reality in idealism includes the Self, but portrays the Self as only one part of the entire reality explaining the philosophy. The ability of an idealist to reason and their intuitive nature helps in this search for reality or truth (Melograno, 1996). This search for the reality in idealism focuses on the origination of an idea in the mind and taking it to a point in the mind where it can be understood (Davis, 1963).

The epistemology creates a solid background for the validity of ideas, at least while they remain true to the individual (Butler, 1968). Ideas should not be made into a dream like fantasy, because it lessens their element of truth. The epistemology of idealism refers to finding the truth behind an idea and making it reality. Much of the educative process for an idealist occurs within the self and is initiated by the self (Melograno, 1996). The truth in an idealistic philosophy comes from learning about the process taken to arrive at a given idea, rather than focusing on the end result. Ideas are constantly changing providing a challenge of discovering new processes allowing an

idealistic individual to constantly question both old and new knowledge to arrive at new findings.

Logic offers a way where ideas can be tested by comparing and contrasting all their aspects and can be rendered valid through finding the truth. The development of the mind through reasoning and rationalization remains integral in idealistic processes (Melograno, 1996). Through investigation of ideas, the ideas can become interrelated and can become a representation of the whole Self. The logic of the whole Self in idealism is analogous to a puzzle. To make sense of an idea, the idea must first be broken down into explainable parts (the pieces), then it can be put back together one piece at a time until the idea becomes a finished product (the puzzle) (Butler, 1968). Only after the pieces of an idea are put together in a logical order, ready for others to view, can the idea be fully appreciated.

What is of value to an idealistic individual is specific to that individual, and is not considered valuable based solely on its existence in the real world. Idealists suggest that because we exist, so do our values (Butler, 1968). So, values go farther than just stating them, but require actually living them. Idealists believe the ability to do good is instilled naturally in man (Davis, 1963). Idealists value living life to the fullest, while developing all phases of the Self, through the development of self-qualities, such as self-reliance, self-responsibility, and self-direction (Melograno, 1996).

Naturalism

The reality of naturalism is Nature and the processes occurring within it (Butler, 1968). The metaphysics of naturalism relies highly on the natural order of events and lets

them explain the reality. This explanation is possible because Naturalists rely on the regularity and dependability found in Nature's laws. To a naturalist, reality and Nature are one in the same because everything that is experienced is considered Nature (Melograno, 1996). Naturalists strongly believe Nature sets the limits of reality because if it is not explained through nature then it is not considered real (Butler, 1968).

The epistemology of naturalism revolves around scientific principles because science is the basis of the processes taking place in nature (Butler, 1968). By using science to explain natural processes, it allows naturalists to feel they have control over Nature, an entity much larger than themselves. Naturalists believe in both moral and physical development, while respecting the individual learning abilities and rates (Melograno, 1996).

Science also plays an important role in the logic subdivision of naturalism. By using scientific principles as support, ideas are allowed to become more dependable and secure (Butler, 1968). The logic in Nature can only come from exploration and appreciation of it by living in it and also by living with it. Since man and Nature are forced to live together, it is important that a harmonious relationship be established (Butler, 1968). In order to do this successfully, man must respect Nature and its elements by understanding and appreciating all of Her unwritten laws. Nature offers a reliable and dependable source of value that can be applicable to any situation since everything is considered Nature (Melograno, 1996).

The Naturalist described thus far, for this research study, can be considered a Pure Naturalist. There is a branch of Naturalism that does not prove to be so pure called Hedonism. Hedonism is defined in the Oxford English Dictionary (1989, p. 98) as "the

doctrine or theory of ethics in which pleasure is regarded as the chief good, or the proper end of action". Although pleasure may not be harmful, it can be when it becomes pleasure at the expense of others' views or at the expense of laws, just to please oneself. Hedonists take the idea of self-indulgence to the extremes, which creates a view of them as dangerous or careless. McCarthy (1974) suggests that this philosophy is predominantly in the young because of the 'do your own thing' trends and the growing tendency of the youth to express themselves in all aspects of society.

Pragmatism

To a pragmatist, life is constantly changing and one must move and change with it or they will get lost (Butler, 1968). The challenge arises in trying to constantly keep up with the fast pace. Pragmatists use a practical approach to life situations by realizing the difference between what they can and cannot change. A pragmatist is not in the practice of explaining changes that occur, but tries to predict and then deal with them (Davis, 1963).

Pragmatism's rationale weighs more heavily on epistemological aspects because it is supported by concrete facts, while the metaphysical views take on more of an abstract premise (Butler, 1968). Abstract thought is not considered highly reliable by pragmatists who want scientific proof. The metaphysics of pragmatism, because it does not emphasize experience, then becomes difficult to justify from a pragmatic viewpoint (Davis, 1963).

Pragmatists are concerned with knowledge only if it is important in achieving the desired result; all other knowledge would be irrelevant at this time. Inquiry, observation,

and first-hand participation must be included in the educative experience because it is considered reliable and essential in validation of new ideas from old ones (Melograno, 1996). Pragmatists are similar to scientists where their laboratory becomes the environment in which they are living and using to gather knowledge.

It is important in pragmatic logic to arrive at a specific result, rather than a generalization. Logic must provide a way for information to be practical for all times and for people in society regardless of differences (Melograno, 1996). Through experience, a pragmatist can develop an appropriate problem solving process specific to the situational needs and desired results (Davis, 1963). The point of the experimentation is to invite further testing as validation or as expansion of the original activity, either of their own ideas or of others.

In order for values to remain valuable to a pragmatist, they must first be considered functional in preparation for future endeavors (Melograno, 1996). A pragmatist holds themselves and others accountable for their actions because they maintain a high regard for the idea of responsibility (Butler, 1968). Ultimately, what action a pragmatist decides to take is based primarily on past experiences. A pragmatist simply reacts to a situation, but with a very process oriented mindset. Pragmatists hope by reacting to the situation first, the people involved will automatically benefit, but if they do not, pragmatists will still feel victorious as long as the situation was resolved.

Realism

The reality of a realist remains as simplistic as the rest of the subdivisions of this particular philosophy. This could be the main reason for the significant difference

between the belief system of a realist and the other philosophies. There is an order that is representative of the way things are and the statement 'that's just the way things are' seems to be justification enough for the realist. A need for a higher power to describe the happenings of life is not a priority (Butler, 1968).

The main way realists gain knowledge is through the five senses because they provide validated facts concerning the surrounding environment (Davis, 1963). Ideas are not formed through abstract premises at all, but are formed through actual physical objects that can be seen, smelled, heard, tasted, and touched. The five senses offer insight in to the 'real' world and offer the ability of the realist to adjust and interpret for themselves (Melograno, 1996). The realist promotes and understands the idea that there is an equal need of the body for the mind, as there is an equal need of the mind for the body.

The realist is concerned with gaining control over their experiences through investigation and reasoning techniques (Butler, 1968). The realist uses both of these concepts to effectively adjust to the given situation. Step-by-step processes offer the most objective form of reasoning, preferred by the realist (Melograno, 1996).

The realist values only that in which they have a personal interest, otherwise it is not considered real. Realists realize their obligations to not only themselves, but also to others by realizing the importance of living in the now, and not looking to the future or to the past because it can only take away the emotions of the present (Butler, 1968). Harmony between the two, personal and societal happiness, is important because a realist's happiness is a reflection of society's happiness. Realists are concerned about the end result (happiness), more so than the process by which it was achieved.

Summary

In discussing each of these philosophies, it is important to briefly relate each of their ideas to one another to not only see how they relate, but also to understand how these philosophic beliefs make individuals distinctly different from one another. Each of the philosophies is able to relate to scientific principles, but relies on them in different ways.

For an idealist, science offers the surface for the discussion of ideas and beliefs, but is not the ultimate decision maker (Davis, 1963). However, the pragmatist places a high value on science and its results, because experimentation and testing of ideas offers the validation of pragmatic beliefs. Naturalists and realists fall in between these two scientific extremes with Nature's scientific realm as the focus of naturalists and realists less focused on science as a process, but mostly the results science offers.

The way these philosophies demonstrate the importance of processes and outcomes is one of the main ways that they can be differentiated. A realist places the greatest emphasis on the quantitative outcome of the activity (Davis, 1963), while the idealist is only focused on the process itself. Naturalists are concerned primarily with those processes that occur in Nature alone. Pragmatists are concerned with both the process and with the result it produces to educate on how to think, rather than what to think (Davis, 1963).

Philosophic beliefs often are proven through one's actions. Davis (1963) relates one's individual philosophic beliefs to what is the most worthy, and recently the trend of understanding oneself is of primary importance. Only when individuals know themselves, can they understand their strengths and weaknesses and surround themselves

with others who compliment these characteristics. Also, these characteristics can be related to all aspects of one's life (career, family, friends, etc.), considering they are understood.

Sport Specific Interpretations of the Four Classic Philosophic Schools

By understanding the four classic philosophic schools of thought, the ideas can be applied to more specific domains, such as sport. The application offers interpretations starting with the basis of how these subdivisions and philosophies are presented in the physical education area research, then from there will be adapted to the specifics of athletics. This process is necessary because there is little information on the subject of philosophy as it specifically relates to sport.

Idealism

The idealistic athlete is often described as the heart of the team. Usually this athlete takes pride in development of their full potential and expects the same from their teammates and coaching staff (Zeigler, 1964). The idealistic athletic views should revolve around characteristic development of courage, honesty, and sportsmanship (Melograno, 1996), which usually develops from the rules addressing the expectations in this area made by the coach.

The idealistic coach shares similar views since they believe in setting a good example for their athletes to follow and strive for in both their athletic and personal lives (Zeigler, 1977). Athletes should be highly valued and protected from exploitation. Idealistic coaches realize their athletes are not tools to be used to get higher on the career

ladder (Davis, 1963). Athletes should be highly valued and protected from the exploitation that can occur in collegiate level athletics.

Idealists, in general, see participation in athletics as a means to an end and not an end in itself (Zeigler, 1977). The idealists remain less concerned with scores and results and remain more concerned with character development through athletic participation (Zeigler, 1977). Coaches and athletes would take into consideration the feelings of their athletes and teammates, respectively. Because of their clear focus on reaching their potential and getting others around them to do the same, they see the win/loss record as secondary to consistently playing with heart and getting along with their teammates.

Naturalism

The pure Naturalist would not be interested in participating in an indoor sport such as intercollegiate women's basketball; they would rather be hiking, skiing, or running outdoors, so obviously their participation in this study would be non-existent. These activities are individually based, suggesting that naturalists may avoid collegiate level basketball because of its competitive nature. Naturalistic coaches and athletes, if existent, would most likely promote some type of use of mental imagery within their teams as a form of self-improvement.

A sub-philosophy of Naturalism, called Hedonism, seems to be alive and strong in collegiate level athletics. An athlete with Hedonistic qualities would be concerned in their own happiness as it benefits them only. For example, this athlete would most likely be the one who promotes 'going out' and having a good time no matter what the consequences or other responsibilities may be, and the moral development of this athlete

might predict they would engage in un-sportsmanlike behavior to obtain these two objectives. Behavior such as this may seem “weak and selfish, because private enjoyment, even though it may be in no way contrary to convention, is placed prior to all other considerations”, including the team (Butler, 1968).

In such a close environment, such as a basketball team, where individuals are forced to spend large amounts of time together, the pressures to conform to this Hedonistic influence may be greater (Collier, 1991). Hedonistic athletes can appear to be unfocused and are sometimes referred to as a ‘problem athlete’. Hedonism is more extreme than just showing individuality within the team structure, because Hedonistic qualities often overpower the purposeful group efforts athletic teams try to promote (McCarthy, 1974). The assumption made that any coaches with Hedonistic philosophies would not remain in the coaching field for long periods of time because of the poor example they would continuously set for their athletes.

Pragmatism

The pragmatic athlete is one who is described as the thinkers or strategists on the team; those athletes that a head coach wants in at the end of the game. These athletes use their reasoning abilities along with any other associated informational tools available to them to increase their understanding of the game of basketball (Zeigler, 1964) and the game of life. Pragmatic views force these athletes to take their time away from the rigors of a basketball season to pursue activities that will increase not only their athletic ability, but also their future career opportunities.

Pragmatic head coaches view the basketball court as their laboratory and see themselves as the scientists. These coaches are thinkers and expect their players to think for themselves in practice. Often times they rely on the use of a scientific-like process to solve any problems that may occur with strategies, drills, or teaching techniques (Butler, 1968). These pragmatic coaches tend to be the most successful and last the longest in this field because they realize the importance of changing with the times and adapting various strategies to the strengths of their team. Both the pragmatic athlete and coach feel watching practice and game film is an important part of the process of preparation for the next task ahead.

In general, a pragmatist understands the game plan, including the steps it will take to get the desired result—success. And if the desired result is not reached, the pragmatist contemplates what may have gone wrong with the intent of making changes to get the desired result. The new plan will be adjusted on the basis of the athletes' needs, interests, and potentials of the specific athletic program (Davis, 1963).

Realism

The realistic athlete is usually described as the most competitive athlete on the team. They are compelled to win at every drill, every practice situation, and every game. Players understand the importance of a well-planned out practice with clearly defined objectives (Davis, 1963) and can recognize the importance of the formation of good habits through constant skill development (Zeigler, 1964), especially their own.

Realists believe “sport contributes to the learning of sportsmanship and desirable social conduct”, not to the high level promoted by an idealist, but to the level that is

promoted by the head coach (Zeigler, 1977). Whatever code of conduct the coach instills in the players will be the one they will follow most often, whether it is ethical or not. These coaches promote a clear distinction between work and play, not allowing their players to waiver from that fine line during any part of their collegiate career (Zeigler, 1977). Effort is an unwritten law, and should not have to be asked for by a realistic head coach, as it is an eternal expectation. Interest in basketball is desirable but remains a distant second to effort; allowing for the coach to use a reward/punishment system to get the greatest amount of effort from the athletes (Zeigler, 1964).

Realistic head coaches frown on a democratic system as they allow very little election of activities by a majority vote (Zeigler, 1964). An understanding of the importance of outstanding physical conditioning is recognized by both the coach and the athlete and is planned for and accepted, respectively, as part of the job (Zeigler, 1964).

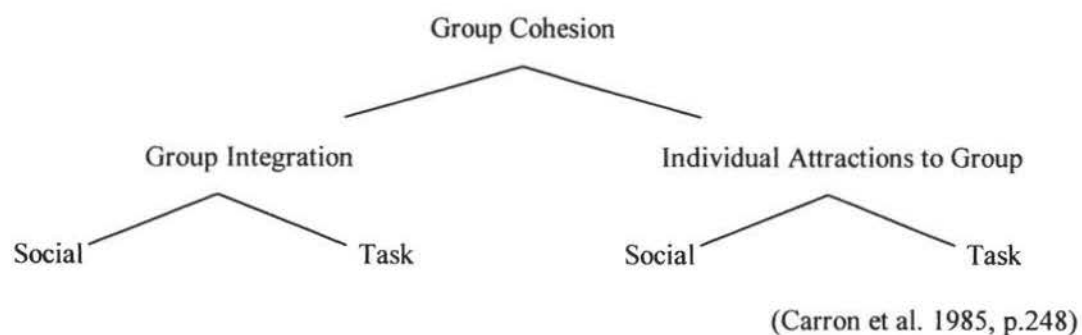
Team Cohesion Measurement

In testing the original idea that group cohesion can be determined by individual perception, various assumptions have been made regarding this concept: 1) a group can display observable properties, 2) socialization occurs within a group, 3) beliefs are formed from processing and integration in a group, 4) individual perceptions reflect the unity of the group, and 5) all of these aspects can be measured through a paper-pencil questionnaire (Carron & Hausenblas, 1998). The hardest assumption to accept may be the final one regarding the ability to place this information in simple paper-pencil questionnaire format.

Prior to Carron, Widmeyer, & Brawley's (1985) ability to develop the first paper-pencil questionnaire assessment for group cohesion levels with the Group Environment Questionnaire (GEQ), various leadership models were formed and acted as a foundation to the modern group cohesion research. Fiedler's contingency model of leadership effectiveness originated the idea of dividing the relationships leaders have with their followers into task and person oriented variables (Gill, 2000). Carron et al. (1985) furthered the findings of Fiedler in the development of the GEQ.

The GEQ is unique because it acknowledges the difference between individual and group bases for cohesion, while noting the task and social divisions of each initial division. Carron & Hausenblas (1998) use three levels to describe a group through individual evaluation, where the levels progress from descriptions of the individual group members, to the member-to-member interactions, and finally to the description of the group as a whole. A conceptual model (Figure 2) describing the branches of group cohesion can better explain the content behind the development of the GEQ.

Figure 2—A Conceptual Model of Cohesion



The first branch, group integration, assesses the perception of the group as a whole, while the other branch, individual attractions to group, assesses the perception of

personal attraction to individuals within the group (Carron et al., 1985). Both social and task aspects appear to be influential in the determination of the perceived group cohesion levels in both of the initial branches. With the conceptual model (Figure 2) in mind, four correlated constructs developed by Carron, Widmeyer, & Brawley (1985) were determined to be influential in group cohesion evaluation: group integration-task (GI-T), group integration-social (GI-S), individual attractions to group-task (ATG-T), and individual attractions to group-social (ATG-S).

In knowing that the bases for group cohesion is determined by both the individual and the group, one can now consider the social and task aspects of group cohesion and use them to be able to form a more complete picture of team cohesion evaluation. The social realm consists of the maintenance of social relationships with group members, while the task realm reflects an association with performance and productivity activities of the group (Carron & Hausenblas, 1998).

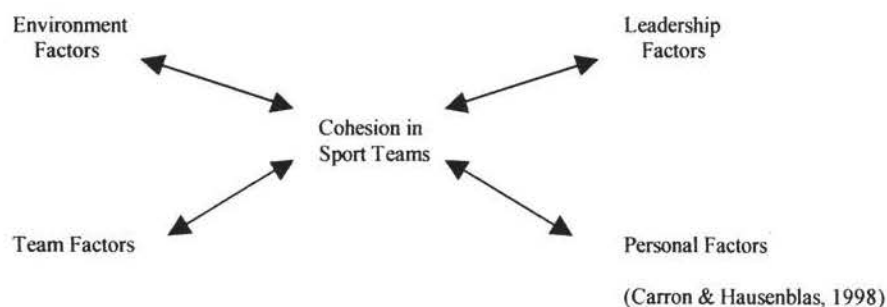
Each of the four subdivisions of team cohesion can be more specifically differentiated. The GI-T subdivision refers to the level at which the athlete identifies with the entire athletic team's goals and objectives. The GI-S subdivision investigates how the athlete perceives their social relationship with the team as a whole, including the coaching staff. The third and fourth subdivisions, ATG-T and ATG-S, eliminate the direct influence of the coaching staff and focus solely on the athlete-athlete relationship. The ATG-T subdivision reveals the level to which the athletes identify with the personal goals of their teammates, while the ATG-S subdivision measures the level the athletes identify with the personal relationships they make with individual teammates or small social groups within the team structure.

Team Cohesion Correlates

Team cohesion refers to the “tendency of groups to stick together and remain united” (Carron & Hausenblas, 1998, p.229). It seems only natural to think that as the time the group spends together increases, the bonds that are formed will also increase in strength. So, a group in a sport setting would be likely to show high cohesion levels because of the large amounts of time these groups spend together throughout the course of a year.

Unfortunately, time spent together is not the only factor affecting team cohesion level within a sport setting. In discussion of perceived team cohesion levels, four other related areas are often mentioned (Figure 3): environment, leadership, team, and personal factors.

Figure 3—Framework for Correlates of Cohesion



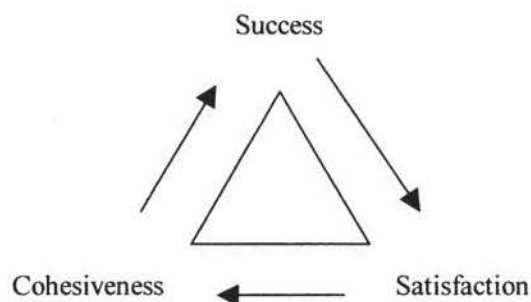
The environmental factor suggests an influence of group and institution size on team cohesion and dynamics (Roberts, Spink, & Pemberton, 1999). Carron & Hausenblas (1998) also state that competition level, normative pressures, and contractual responsibilities affect the decision of athletes to remain part of the team structure. Pressures to remain united can stem from peers, parents, or coaches and can vary from

elementary to high school to college levels. Normative pressures are based on the low level of societal regard for quitters, so the pressure to continue with the team increases. Contractual responsibilities are present wherever there are eligibility and transfer rules as designated in a mutual contract agreement.

The leadership factor includes the areas of coach-athlete compatibility and leadership styles (Gill, 2000). Coach-athlete compatibility, centers on the question of why this relationship does not always seem to be effective in two areas: the coach's perception of athlete capability and the athlete's satisfaction with coach leadership (Carron & Bennett, 1977). The style in which decisions are made, also influences athlete responses. The perception of the coach's leadership is central to the coaching philosophy and integral to coach-athlete satisfaction. Carron & Hausenblas (1998) suggest the amount athlete are involved in the decision-making process within a team structure is dependent upon the leadership behaviors as promoted by the head coach.

The personal factor includes the area of athlete satisfaction and its relationship with team cohesion levels as one of the most important correlations (Carron & Hausenblas, 1998). The points of the triangle shown in Figure 4, the Team Performance Model, represent the factors that lead to optimum performance level.

Figure 4—Team Performance Model



Carron & Hausenblas (1998) mentions a cause and effect relationship among the elements of the model as cohesiveness contributes to success, which in turn, creates a sense of satisfaction, thus creating high levels of team cohesion. An important point to address is that success does not mean producing a winning record. A team's success level is exclusive to the accomplishment of the specific goals for a specific team at a specific level.

Carron & Hausenblas (1998) illustrate the four aspects in the team factor of group structure as position, status, roles, and norms. Position has not yet been researched as it specifically relates to the area of team cohesion, according to Carron & Hausenblas (1998). Status refers an athlete as a starter or a non-starter, while focusing on the various levels of cohesion that generally is associated with each position. Defining roles within the team structure help both the coaches and the athletes realize exactly where they will provide the best fit. Roles clarity is important because roles are constantly changing. If there is confusion about roles then there will be less of a chance of acceptance of the role, thus lowering the team cohesion levels (Carron & Hausenblas, 1998).

Purpose

The major purpose of this study was to determine if a match in coach-athlete philosophic orientation in a female sport setting (women's basketball) as measured by the Philosophic Affiliation Team Survey (PATS), influenced team cohesion levels perceived by athletes.

The second purpose of this study was to test the concurrent validity of the PATS with a parent test called 'What do I believe' developed by Ziegler (1989). By providing

evidence for concurrent validity, support would be provided for systematic use of the PATS to assess coach-athlete communication, athlete satisfaction, and development of team cohesion.

Rationale

The topic of why the coach-athlete relationship may not always be effective remains of interest because of the vast array of theories developed trying to explain the mysteries of the coach-athlete relationship. One study examining the personality traits of coaches and athletes (Carron & Bennett, 1977) concluded coach-athlete interaction was dependent on the interpersonal need for inclusion behavior because it appeared to be most critical in the differentiation between compatible and incompatible relationships.

Although minimal research has been done in the area of coach-athlete philosophy, the subject of team cohesion has been extensively studied. Most conclusions from research concerning team cohesion and winning and losing offer controversial cause-effect questions, such as 'Does winning create a high level of team cohesion or does a high level of team cohesion create a win?'

According to the moral development of the Group Environment Questionnaire (GEQ) (Carron et al., 1985), an individual's perceptions regarding what is of central importance in an athletic setting defines aspects of team cohesion, while one's philosophic orientation remains the central aspect of one's perceptions. Matheson, Mathes, & Murray (1997) concluded that team cohesion levels can and do fluctuate throughout the course of a season based on specific occurrences, like winning or losing, suggesting winning may contribute to high levels of team cohesion.

Team cohesion, itself, is dependent upon other things, such as the right coach with the right combination of athletes being used in the right situations at the right time. By introducing philosophic aspects to sport by use of the Philosophic Affiliation Team Survey (PATS), there will be increased ability to objectively assess those outcomes of coach-athlete compatibility in philosophy.

Hypotheses

Hypothesis 1

If the philosophical orientation of the head coach matches that of an athlete as measured by the PATS, then team cohesion levels perceived by that athlete and as measured by the Group Environment Questionnaire (GEQ) will be higher than athletes who do not share in a consistent, philosophic orientation with the head coach.

Hypothesis 2

It is hypothesized that the PATS will demonstrate high levels of concurrent validity when compared with a parent test (Ziegler, 1989) of general philosophic orientation as evidenced by higher ($r > .80$) concurrent validity correlations. In doing so, it will provide a valid and theoretically sound assessment device and will invite further investigation in the area of coach-athlete philosophy.

Delimitations

Subjects of the study were women's junior college, Division II, and Division I level basketball players and their head coaches (2 female and 2 male) from three schools

in Illinois (Lake Land College, Quincy University, and Eastern Illinois University) and one school in Wisconsin (University of Wisconsin-Madison).

The results of the PATS determined the classic philosophic school of thought a coach or athlete most identified with, by assigning a score to each of the four philosophic categories through a Likert scale. Since the PATS was in a developmental phase, revisions of this measurement tool could be an outcome of this study.

The evaluation of the data from the GEQ (Carron et al., 1985) was used in the assessments of each of the collegiate levels to determine the subject's perception of the team cohesion level at the end of their season.

Definitions of Terms

1. Philosophy: a branch of learning which investigates, evaluates, and integrates knowledge of reality as best as possible into one or more systems embodying all available wisdom about the universe (Zeigler, 1964, p. 12).
2. Team Cohesion: A dynamic process which is reflected in the tendency for a group to stick together and remain united in the pursuit of its instrumental objectives and/or for the satisfaction of member affective needs (Carron & Hausenblas, 1998, p.229).

3. Social Cohesion: A general orientation toward developing and maintaining social relationships within the group, including relationships with the team as a whole and/or with individual players on the team (Carron, Widmeyer, & Brawley, 1985, p.248).

4. Task Cohesion: A general orientation toward achieving the group's goals and objectives, including an understanding of the team goals and/or identifying with others' individual goals (Carron, Widmeyer, & Brawley, 1985, p.248).

Chapter 2

REVIEW OF LITERATURE

Philosophy Origins

Despite the ancient nature of philosophy, the ideas of classic philosophers, such as Socrates, Plato, and Aristotle, are still able to offer relevant concepts applicable to modern philosophy. Arguably, the most famous ancient philosophic teacher/student lineage is portrayed by Socrates, Plato, and Aristotle. Socrates searched for concepts, Plato developed them, and Aristotle applied them (Reichel, 1962). These three philosophers could also make the best modern day coaching staff in the country. Clearly, they were a compliment to each other's strengths and weaknesses. Their relationship and their philosophic premises could be directly paralleled to the teacher-student relationship and could be extended to parallel the coach-athlete relationship of modern times.

According to Socrates, "a king is ruler of willing subjects according to the laws, a tyrant is ruler of subjects against their will, not according to the laws, but arbitrarily" (Hyslop, 1903, p. xv). This statement could be used to describe a successful coach. The difference is based on their ability to relay their sport philosophy, including team rules (laws), to their athletes. If a coach is an excellent communicator/teacher, then those athletes who prefer this type of behavior will respond more positively, than those who do not prefer this style, causing less of a response from the athletes.

The sport leadership literature supports this idea (Reimer & Chelladurai, 1995) by suggesting that coaches can maximize the satisfaction of their athletes by behaving according to the preferred leadership styles of their athletes. Reimer & Chelladurai (1995) investigated the difference between offensive and defensive personnel of football

teams in preferred versus perceived leadership and athlete satisfaction with the leadership. The results suggest that coaches, who emphasize training, instruction, and positive feedback behaviors in compliance with athlete performance, rather than with athlete preferences, will be “better off” (Reimer & Chelladurai, 1995, pg. 290). The phrase “better off,” used to describe the coaches, leaves room for interpretation and discussion.

Just as Socrates has been seen “tormenting every man he could meet with questions or discussions about conceptions, or knowledge” (Hyslop, 1903, p. 34), so have coaches. Coaches develop a network consisting of their colleagues. They continuously discuss the concepts of their game and what works and what does not. The “Final Four” is not just about the NCAA championship basketball game; it is a way to meet with new and old coaching friends to discuss the past season and the upcoming one. The dialogue between coaches could help to reveal new ideas about the development of a new strategy, or offer advice on a specific coach-athlete relationship; a phenomenon that perhaps would make Socrates proud.

Just as Socrates preferred that his ideas not be interpreted, but to be used to form individual ideas (Hyslop, 1903), so does a coach. Ideally a coach believes, just as Socrates believed, that it is more important to make people think for themselves. Socrates also believed in making himself a student as much as his students were (Blum, 1978). The ability for a coach to realize that they can learn from their athletes, just as their athletes learn from them, is important for a good coach to not only understand, but also put into practice.

What kept Socrates interested in philosophy is what keeps most coaches involved in their profession: a search for individual Truth. Truth can be different for each coach and for each individual athletic program. Truth can be found in seeing athletes improve. It can be as simple as winning or losing. It can be as complex as Socrates' idea of gathering the youth together and creating an enthusiastic atmosphere, because it was to the youth to whom he was connected (Cross, 1914). Socrates' high regard for youth involvement in thinking could justify him as the earliest form of a coach through his recognition of the importance of the youth and their views.

His ability to define philosophy proves him an integral part of history. But, his ability to provide philosophic views that still can be applied not only in society, but also in athletics, maintains his stature as a true philosopher.

Four Classic Philosophic Schools of Thought

Idealism, naturalism, pragmatism, and realism are considered the four classic philosophic schools of thought in the study of philosophy. Each of these philosophic schools represents a learning process, not only to gain knowledge about the philosophic tenets, but also to understand the distinct tenets of one's inner self. The limits of philosophic study are endless for two reasons: 1) because it involves the study of people's thoughts, feelings, and perceptions and 2) because these entities are continuously changing. All aspects of a given philosophy do not have to be agreed upon by an individual to create a distinguishable philosophic orientation, only a strong identification with one philosophy's main principles over another philosophy's main principles.

Idealism

Davis (1963) suggests the philosophy of idealism began with the studies of Socrates and Plato. Since this time, idealistic qualities have remained a prominent part of societal norms, since idealism includes the principles of the 'idealistic' ways. People want to act in a way that is deemed appropriate and respectable by their peers, often times this is considered the ideal way. As with the idealistic philosophy, an ideal-centered way of life is often what is strived for, rather than the reality. Once the ideals become the reality then the idealist sees the need for new ideals to be set.

The idealistic phenomenon of setting ideals could be compared to the goal setting techniques often used in competitive athletics. Jessup (1992) reiterates the four components of the team growth process developed by B.W. Tuckman: forming, storming, norming, and performing. Forming includes the actual goals meeting where all ideas are expressed freely. Storming requires the placing of the broad range of initial goals into more specific categories. Norming is making the goals clear, realistic, and specific to the current team's abilities and team members. Performing includes achieving the previously set goals and also evaluating progress toward goals that have not yet been reached.

Although these four steps are designed for the corporate world, they can be easily and idealistically applied to the athletic realm. The chronologically ordered components begin with the forming stage, where the morale remains high while developing the desired goals. The second stage, storming, includes competition for roles, creating a possibility of animosity between the team members because their limitations may be revealed. In the norming stage, roles and procedures are established. The performing

stage allows for the achievement of pre-determined goals, while raising morale based on these accomplishments.

Naturalism

The competitive system automatically instilled in Nature is not as predominant in the naturalist's philosophic belief system (Melograno, 1996). Naturalists would prefer to compete against themselves as a form of self-improvement, therefore enforcing the idea that Naturalists would not be involved in collegiate level athletics, due to the high level of competition. The research is limited in the area of collegiate level studies concerning issues that can be related specifically to naturalistic individuals. In examining the supporting research targeting their lack of competitive nature, the argument could be made that there are a minimal number of naturalists involved in athletics at such a high, competitive level.

The previously discussed naturalistic qualities define a pure naturalist, but naturalism also has a second division called hedonism. A hedonistic naturalist by definition is "the doctrine or theory of ethics in which pleasure is regarded as the chief good, or the proper end of action" (Oxford English Dictionary, 1989, p. 98). Unfortunately, hedonism is part of collegiate level athletics, as long as it is viewed as a form of entertainment (Sage, 1998). Any form of entertainment is based on hedonistic premises. Although not all of the forms of hedonistic entertainment are negatively influential, it may still be worth the consideration of keeping the hedonistic influences in the stands and not on the playing field.

Sage (1998) suggests that the National Collegiate Athletic Association (NCAA) is to blame for the hedonistic qualities that may be present in collegiate level athletes because they make them out to compete solely for the pleasure of the sport. There may indeed be hedonistic individuals involved in college athletics, but there also may not be as many as what the NCAA thinks there are. Based on the knowledge gained through personal experiences with collegiate level athletics, there are many more factors (money, academics, institution size, tradition, etc.) that motivate one to continue, than just the love of the game.

Pragmatism

Even the primary philosophers of pragmatism, Charles Peirce, William James, and John Dewey, could not agree on a similar interpretation of pragmatism and what it represents (Thayer, 1968). The nature of pragmatism as it stands supports the disagreements of the founding philosophers. Pragmatism's truth is defined by the usefulness of the information or findings (Thayer, 1968). The practicality of these findings can vary among pragmatists, despite their similarity in philosophic beliefs. Pragmatists would, in general, encourage variation in beliefs, as long as there is a systematic method to prove the personal relevance of the findings.

Shields, Gardner, Bredemeier, & Bostro (1997) found it more important for athletes to agree with their coach on what the coach is currently doing, rather than what the coach should be doing. A pragmatic finding, in that, it focuses on the present and not the future; so what is working or not working in an athletic system can be adjusted to make it work for not only the coach, but also for the athletes. A pragmatist tries to

develop a workable theory because it is the only true theory, and will be the only way to success (Melograno, 1996).

Realism

Realism originated out of a revolution against the philosophy of idealism based on the belief that the idea of something's existence is not as good as its actual existence (Davis, 1963), and that individual's philosophies constantly change. Realism is not the same as it was in the 16th century because its sole purpose is no longer to refute idealism (Davis, 1963). Realists place more of an emphasis on outcome than idealists do because idealists are often concerned with the process required to reach that outcome (Melograno, 1996). Despite realism's simplistic design, it currently exists because it offers a philosophic framework that can stand on its own and create positive tenets appealing to the realistic mind frame.

Realism was one of the philosophies to give recognition to the subject of physical education (Davis, 1963). So, it is no surprise that it is still being taught based on those principles. The debatable issue of physical education being taught through a realistic philosophic premise could be argued that it should be taught that way because that is just the way that it has to be. The realistic beliefs, although dominant in physical education, are not as evident in sport. A coach who tries to explain their philosophy based on the phrase "that is just the way that it has to be", would need to surround themselves with other realists who would also accept this justification.

Sport Philosophy

While a majority of the various articles written concerning the relatively new field of sport philosophy seem to provide worthwhile thoughts through valid philosophical viewpoints, they often fail to provide a measure of quantitative data to reinforce their preliminary theories. This view was reinforced (Steel, 1977) by suggesting the theories present in science are merely theories until they can be proven in an experimental context. It is the same idea in philosophy and sport. It is time for this field of study to gain credibility through quantitative validation of its formal theories.

The beauty of philosophy is that through intense thought processes any definition of sport can be related to any other definition. The variations in these definitions of sport come from the individual's philosophic beliefs. Morgan (1977) provides a step-by-step theory on how to define sport. Through this definition of sport, Morgan (1977) suggests there is one primary meaning that would be the starting point of all other inter-related meanings, thus concluding the definitions of sport are related indefinitely but in actuality there is no definite conclusion on this matter. A conclusion may never arise because of the depth of the subject of sport and the unlimited psychological and philosophic studies involved within it.

In both sport and philosophy, it seems a topic discussed most often is individual value systems because it is the main component of the axiological premise that defines philosophic orientation. The debate in this area continues because there are conflicting views on what value systems are appropriate. Fraleigh (1986) states the need for the establishment of the 'important' values in sport so the understanding of philosophy in sport can be increased. The 'important' values Fraleigh (1986) refers to are specific to

each individual and their placement of values based on their individual priorities. The importance of the values that are described as 'important' will vary among individuals, their views, and their philosophies. The idea that he addresses serves as the underlying premise of this study: the same individual point of view will equal similar standards, which will equal a similar values system, which will equal a greater bonding effect of people with the same values.

Delattre (1975) reflected an idea that is sometimes lost in today's world of sport is brought back to life: the idea of the worthy opponent.

It matters whether we win or lose. It also matters whether we play the game well or badly, given our own potential and preparation. It matters whom we play against and whether they are worthy of us, whether they can press us to call up our final resources. Satisfaction in victory is warranted only when we have played well against a worthy opponent. Otherwise victory is no achievement, and pride in it is false (Delattre, 1975, p.192).

The underlying idea of Delattre's statement remains idealistic in that it focuses on feelings of satisfaction in playing well and the pride in victory but only against an opponent who is worthy. But yet he relays the message in a very pragmatic way, increasing its clarity by stating that it does matter if a team wins or loses, because it does matter.

Behind the idea of winning and losing comes the extent to which one will go to be on the winning end of a competition. The need to win sometimes seems to influence the

ethical standards of individuals pushing them to the extreme boundaries of their philosophic belief system, even pushing them over the edge closer to a realistic set of philosophic beliefs. Loland & McNamee (2000) are avid in defining the different ethical definitions of the term 'playing to win'. The term does not mean that an attitude of winning at the cost of including unfair play or actions is acceptable, but yet implies that competition should remain true by remaining fair to sweeten the win. This is not to say that a cheater cannot ever win, but they would not be 'playing to win', at least if they were an idealist.

An established values system, especially within athletic teams, creates an interest in the issues associated with athletics by branching off into the success versus failure limb. Despite the vast number of reflective writings in philosophy, the number of empirical studies is virtually non-existent. This is likely because the nature of philosophic inquiry precludes any type of empirical analyses.

Coaching Philosophy

Coaches, regardless of level, have their own individual philosophic tenets. Even though the focus has been on the four classic philosophic schools of thought, the variations that can occur within those schools are endless. There are extremes at both ends of the spectrum within these philosophies making each coach, their philosophy, and their entire system unique and workable within their own priority lists. These individual coaching philosophies could also determine what type of player is going to be the most useful and the best fit for a particular program, according to their ability and reliability.

It has been argued (King, 1981) that coaches who are realists and idealists will be most effective. She suggests that it is important for coaches to realize the connection between the real ability of players in order to put them in the ideal positions, so they can meet the ideal standards knowing the standards can never be reached. This explanation sounds more like an excerpt from a job description. Yet, it is the job of any coach, no matter what philosophy, to recruit players for their ability knowing where they will realistically fit into the overall system, then allow those players to set idealistic goals both individual and team, then give them the proper guidance to try to reach them.

In contrast to the idea of setting ideal standards, is the philosophy of Pat Summitt, head women's basketball coach at Tennessee University. Her system, although it rests on the ideal standards called the "Definite Dozen" from her book, Reach for the Summit, expects nothing less than reaching these ideals (Summitt, 1998). The Definite Dozen consists of 12 key points for succeeding at whatever you do 1) Respect Yourself and Others, 2) Take Full Responsibility, 3) Develop and Demonstrate Loyalty, 4) Learn to be a Great Communicator, 5) Discipline Yourself So No One Else Has To, 6) Make Hard Work Your Passion, 7) Don't Just Work Hard, Work Smart, 8) Put the Team Before Yourself, 9) Make Winning an Attitude, 10) Be a Competitor, 11) Change is a Must, and 12) Handle Success Like You Handle Failure. She expects nothing less than the best, as outlined in the Definite Dozen, from herself, her staff, and her athletes. The less than debatable methods of Coach Summitt have proven to be effective many times over in her successful career.

Summit's philosophy of competing against males in practice has become a topic of coaching discussions in programs across the country; that is if it fits into the realm of

the coach's philosophic beliefs. Muffet McGraw, head coach for the women's basketball team at Notre Dame, uses the idea with enthusiasm in her practices because "they're (the practice men) good enough that they can be that player (the opponent), and that's what we don't get from our bench players" (Suggs, 2001, p. A44). Ceal Berry, head coach of the women's basketball team at University of Colorado-Boulder, adamantly disagrees with this philosophy by taking a more idealistic approach. What she found was that "seven to eight scholarship women were standing on the sidelines, not getting playing time...hurting their development and confidence" (Suggs, 2001, A44).

In McGraw's system, the practice setting will include practicing against males as the basis of what will best prepare the athletes for beating the best and ultimately, being the best. McGraw's philosophy takes a very realistic approach to a very pragmatically proven method of using males in practice. The growing reality of this trend creates the realistic statement that males just provide what the female bench players do not. Coach Berry's practices will focus on the players' development and confidence level, so practicing against men will not be an evident strategy. Not only will the practices at Colorado-Boulder be based on idealistic tendencies, but also a safe assumption would be that the entire women's basketball program is run on these idealistic tendencies. A focus on personal issues such as player confidence, above training to beat the best, suggests definite idealistic philosophic beliefs.

The comparison between McGraw and Berry shows two very different philosophies on the same subject, both with valid points, and these coaches' use or lack of use of practice men comes from the beliefs they build their programs around. These individual coaching philosophies may or may not be understood by an athlete before

entering into a system, but should be, so they know if their time at a particular college will be the best personal decision for them to make in accordance with their own personal philosophy.

How does a coach begin to develop their philosophy and even farther yet, how does a coach get their athletes to buy into that philosophy? Horwood (1997) suggests the development of coaching principles comes from their own environment and their experiences. Successful principles will remain engrained in a coach's belief system, while those principles that bring unsuccessful results will either be modified or disposed of entirely. Success is not defined by win/loss record alone and is exclusive to the established task oriented goals, whether these goals are set to make the final four or to make the conference tournament.

This pragmatic method of testing and changing what brings success and what does not, offers a fundamental of coaching. The development of a philosophy occurs through a very pragmatic process, which all coaches have experienced at some point in their career. No matter what the predominant philosophic orientation is, a coach must go through the pragmatic process of not only discovering what works for them, but also coordinating this with their philosophic beliefs. However, this does not make most coaches pragmatists. Somewhere in the process of developing a philosophy coaches are able to identify more with certain aspects of what they have found works for them; these ideas then become their philosophy.

Gould, Hodge, Peterson, & Petlichkoff (1987) suggest the need for extensive investigation into the psychological realm of coaching through use of an in-depth qualitative data collection. A self-review of coaching strategies and psychological skills

of intercollegiate wrestling coaches was performed, including mental preparation, communication, and motivation, and their success within their own athletic programs. Although the term 'strategies' is used in this particular study, what the research is determining by looking at specific aspects qualitatively is an overall coaching philosophy. The need for a quantitative measurement of these aspects remains essential in furthering the investigations involved in the growing field of sport philosophy.

What Gould et al. (1987) provided was a start to a growing sport research topic, by relating philosophical aspects to 21 different, measurable psychological skills involved with the coaching profession. Psychological factors were shown to be key in coaching at all levels of athletics, not just at the higher levels of competition. The actual use of these mental techniques remains more important than simply evaluating the use of them. Coaches should possess the ability to know when to use specific mental training strategies with specific athletes in specific situations (Gould et al., 1987). A conclusion of this study is that some of these mental factors can be easily changed or improved by coaches, including team cohesion, communication, sportsmanship-character, goal setting, and poor practice behavior.

One of the ways coaches can improve psychological strategies for coaching is through clinics and workshops designed specifically for this developmental purpose. Gould et al. (1987) found certified coaches were better able to change aspects of mental toughness and preparation than non-certified coaches who did not attend USA wrestling certification clinics. A contradictory finding showed the ratings of the non-certified coaches to be higher in their ability to increase team cohesion, than the educated, certified

coaches. Findings such as these within the same study just reiterate the need for further research in both the area of team cohesion, and sport psychology.

Coach-Athlete Relationships

In making a choice of what athletic program provides the best fit, an athlete must consider their future relationship with the head coach. The head coach's philosophy will be the center of all actions taken in a practice, on a road trip, and in the classroom. The philosophy of the head coach is likely to be adopted by the athlete, at least in their time in that system. Jowett & Meek (2000) refer to this philosophic consistency as a co-oriented view that develops through communication lines and through shared experiences.

Despite their focus on coach-athlete relationship from a married coach-athlete perspective, it provides astonishing parallels to a standard coach-athlete relationship.

A similarity between the Jowett & Meek (2000) study and results from Gould et al. (1987) was the analogy between the coach and athlete to that of a husband and wife. Although a married couple may have this naturally from the amount of time they spend together, these qualities are crucial in the development of the trustworthy relationship needed in athletics. A second parallel is that the married coach-athlete dyad found that common goals maintained their already complimentary behaviors, as previously shaped by any situational demands (Gould et al., 1987). This finding emphasizes the importance of developing team goals specific to the current team's needs and abilities, and also bringing in recruits who will compliment the returning athletes.

Gould et al. (1987) described the coach-athlete dyad as a give and take relationship with significant effects on not only the coaching process, but also on

performance, satisfaction, attrition, burnout, self-esteem, self-perceptions, and self-worth. Despite the impact of these self-defining attributes on the coach-athlete relationship, they are also defined by philosophic orientation. A match in the ability of the head coach to provide the attributes needed by their athletes describes a conducive coach-athlete relationship that could ultimately result in an agreement of philosophic orientation. If this philosophic agreement between the head coach and the athlete does not occur, then the athlete may choose to transfer into a system that better fits their philosophy, or discontinue their basketball career in its entirety.

Carron & Bennett (1977) investigated coach-athlete compatibility factors in both male and female athletes and found that the athletes were either more or less receptive based on what the athletes preferred their coach's behavioral tendencies to be. The important result of Carron & Bennett's study (1977) showed that while the coach can exhibit a behavior that has proven to be effective, it is only effective if their athletes are responsive to it.

A "blanket" behavioral approach to coaching has been shown to be less effective than a more individualized approach. They must cater to the needs of each individual athlete, thus using the idea that all athletes need to be coached differently and individually to allow for the highest level of performance and satisfaction possible. This idea suggests that athletes who think the way a coach might in their philosophic approach, would be able to develop a better relationship within the coach-athlete dyad, thus feeling more satisfied.

With regard to sport contexts, much of what goes on in athletics revolves around communication. Communication affects motivation, team dynamics, internalization of

team goals and objectives, and expectations coaches and athletes have for one another. It can affect teaching of sport skills, strategy and skill acquisition, concentration, as well as individual attitudes, feelings, and behaviors. Resources regarding communication in athletic settings primarily emphasized the importance of leadership and communication styles as they relate to a number of variables including participation motivation, task and social cohesion, principles of feedback and reinforcement, and techniques to resolve conflict (Carron & Hausenblas, 1998). Although styles of communication vary from coach to coach, it is important to communicate in a manner consistent with ones own personality and coaching philosophy (Wooten, 1992).

Measurement of Athlete Satisfaction and Success

Melnick (1981) suggests the previous obsession with investigating winning, and the factors contributing to it, took precedence over the more recent investigations involving athlete satisfaction. The significance of coaches recognizing an athletes “underlying personal needs, be they task-, affiliation-, or self-based, which motivate athlete to think, feel, and act the way they do” is becoming more evident with the increase in research on the topic (Melnick, 1981, p. 213).

Only when the coach can understand athlete-motivating factors, can they begin to coach them and truly comprehend the importance of building a working coach-athlete relationship based on a mutual understanding of philosophic beliefs. When this understanding is reached and is continuous, then the athlete can determine their satisfaction levels within the team structure by considering, not only the relationship with their coach, but also with their teammates.

Weiss & Friedrichs (1986) state that a coach's effectiveness is commonly measured by individual or team performance and athlete satisfaction. Despite the belief system of a head coach, they may be evaluated on the same bases as their colleague who holds a completely different philosophic belief. For example, a head coach who is an idealist and is most interested in increasing sportsmanship, the athlete's confidence levels, and views winning as a process, may be evaluated prematurely on their win/loss record. An idealist would need more time to develop their program to get to a point where they were consistently producing wins, because their initial interest is not on outcome, as much as athlete welfare and character.

Any collegiate head coach is required to produce the results required of them by their athletic department. Most likely these results are based on a winning percentage and a time limit, so there is a definite concern for winning in order to keep a job. Based on philosophic premise, a coach must find a work environment that fits their coaching philosophy needs. For example, an idealistic coach who may need more time to meet the requirements of the athletic department, should work for a boss who is not set on working within a strict time frame.

Only when there are satisfied coaches, working in conducive work environments where there are mutually understood philosophies, can there be an athletic environment that produces satisfied athletes. In a study involving 23 National Association of Intercollegiate Athletics (NAIA) collegiate level men's basketball teams and their assessment of their coaches' leadership behaviors, Weiss & Friedrichs (1986) found specific leader behaviors, such as training and instruction, democratic and autocratic behaviors, social support, and rewarding behaviors, to reflect more satisfied and

intrinsically motivated athletes and less of a significant effect on team performance.

Despite both the opposition of the words democratic and autocratic, both behaviors were named to increase athlete satisfaction, but democratic behaviors created the highest levels of individual athlete satisfaction (Weiss & Friedrichs, 1986); the key is for the coach to know when to use each behavior. By exhibiting a democratic style and involving athletes at the college level in goal setting and strategy decisions, it may help with increasing their confidence, skill, and knowledge levels.

The topic of athlete satisfaction is part of the personal correlate of group cohesion, thus has been indicated as important to building team cohesion (Carron & Hausenblas, 1998). One personal factor cited as a correlate of cohesiveness is similarity—similarity in attitudes, philosophy, aspirations, commitments, and ability (Williams, 2001). Widmeyer & Williams (1991) studied golf teams and noted that similarity in playing background and years of experiences on the team did not correlate with cohesiveness. Similarity in all aspects may not be critical in sport teams. On most teams, differences in personality, ethnicity, race, economic ability, and philosophy are inevitable. What the coach must do is work to develop a similarity in attitude toward philosophy, the team's performance goals, expectations for individual behavior, and codes of conduct.

The most important personal factor associated with development of both task and social cohesiveness in sport teams is individual satisfaction. Satisfaction is derived from many sources in sport (Widmeyer & Williams, 1991). Some elements of satisfaction include: 1) the quality of the competition, 2) having the opportunities for social interaction, 3) the athletes' need to feel they are improving in skill, 4) recognition of others including parents, coaches, and teammates, and 5) the athletes' relationship with

his or her coach. The existence or non-existence of these elements is a powerful potential source of satisfaction or dissatisfaction, respectively. When these elements are present and are rendered satisfying, then cohesion is enhanced.

Team Cohesion

Team cohesion refers to the “tendency of groups to stick together and remain united” (Carron & Hausenblas, 1998, p.229). The first factor of team cohesion is situational and tests the ability of the team to stick together through the various situations that arise throughout a season. The second factor, remaining together, is a long-term goal and consists of maintaining the high team cohesion levels once reached. The amount of time teams spend together, throughout the duration of season, forces the first aspect of team cohesion, sticking together, to occur. The second aspect, remaining together, is the defining part of team cohesion. Time spent together is not the only factor affecting team cohesion level within a sport setting, as the research in the area shows.

In discussion of perceived team cohesion levels, four other related areas (Figure 3) are often mentioned: environment, leadership, team, and personal factors. The environmental factor suggests an influence of group size on team cohesion and dynamics (Roberts, Spink, & Pemberton, 1999). Weiss & Friedrichs (1986) found that institutional size affected athlete satisfactions levels, in that athletes from larger institutions showed greater satisfaction than those athletes from smaller institutions. Athlete satisfaction, and its relation to team cohesion, suggests that team cohesion levels may also be higher at larger institutions. Also, at larger institutions the athletes are provided with more ‘extras’, like clothes, travel, and food, than at smaller institutions, so these athletes could

remain united with the team structure for the extra benefits, rather than the other factors of team cohesion.

The leadership factor includes the areas of coach-athlete compatibility and leadership styles (Gill, 2000). Coach-athlete compatibility, centers on the question of why this relationship does not always seem to be effective in two areas: the coach's perception of athlete capability and the athlete's satisfaction with coach leadership (Carron & Bennett, 1977). Coach-athlete compatibility has been related to the personality traits and behaviors of coaches in previous studies, but the opportunity for examination of coach-athlete philosophy remains unexplored.

Carron & Bennett (1977) found that a coach's personality traits affected coaching behaviors, which in turn directly affect coach-athlete compatibility. Both the interpretation of the coach's behavior as it pertains to the individual athlete, and the needs of the athlete based on their own personality, or philosophy, also determine valuable information in evaluating the effectiveness or ineffectiveness of the coach-athlete relationship.

For example, if a coach exhibited an authoritarian style, then the coach would be more compatible with the athletes who exhibited a high need to be controlled and would be incompatible with those athletes who shared the same authoritarian style (Carron & Bennett, 1977). However, in research studying coach-athlete philosophic consistency, the result may be the exact opposite. For example, a coach who exhibited idealistic qualities may find they are more compatible with someone who shares those same idealistic qualities, and less compatible with an athlete who identifies more strongly with another philosophic school of thought.

The personal factor includes the area of athlete satisfaction and its relationship with team cohesion levels as one of the most important correlations (Carron & Hausenblas, 1998). Carron & Hausenblas (1998) mention a cause and effect relationship among the elements of the model as cohesiveness contributes to success, which in turn, creates a sense of satisfaction, thus creating high levels of team cohesion. An important point is that success does not mean producing a winning record. A team's success level is exclusive to the accomplishment of the specific goals for a specific team at a specific level. In support of the theory, Weiss & Friedrichs (1986) found that teams with greater win/loss records, did not necessarily constitute a high rating for their coaches in the leader behaviors of training and instruction. In fact, the highest ratings of the leader behavior in the area of social support were associated with those teams who had low performance records.

The team factor involves group goal setting, communication skills, and overall group dynamics, including productivity and ability (Gill, 2000). Boyce & Wayda (1994) found that goal setting in females taking college level weightlifting classes provided greater self-confidence if the goals were assigned by the instructor, rather than self-set goals. Ultimately it is the function of the coach to unify the team through task oriented goal setting, especially in highly competitive sports (Shields, Gardner, Bredemeier & Bostro, 1997). According to these findings, a more traditional goal setting technique used by athletic teams, where the team goals are a group decision, may need to be revised to a more autocratic development style. This phenomenon of coach assigned goals could not only increase self-confidence in athletes, but also, ultimately, increase team cohesion, and not just in individual athletic settings.

Silva (1984) found team cohesion was the most important critical problem as stated by the coaches surveyed. Despite the dated finding of this study, this problem is still an epidemic in the field study of sport due to the many effects team cohesion has on all aspects of athletics: athlete satisfaction, performance, and coaching philosophies. Silva (1984) also, revealed that coaches felt sport psychology should be an integral part of athletic programs. With the growing need of sport research, it is important to have the support of the coaches and their athletic programs in order to continue pertinent studies in this area.

Shields et al. (1997) examined leadership behaviors and group cohesion in team sports and showed the cause and effect relationships to be questionable, as with most studies and team cohesion. Which comes first, ideal leadership behaviors, or team cohesion? The question is the same when studying philosophy as it relates to team cohesion. Does high team cohesion bring high levels of philosophic consistency within a team or does a philosophic match bring high levels of team cohesion? Shields et al. (1997) suggests that task cohesion is influenced more by a leadership style that includes instructive, supportive, democratic, and positive feedback, while social cohesion does not show the same influential ability.

Henderson, Bourgeois, & Meyers (1998) explored team cohesion as it relates to purely athletes, coaches excluded, to see if team cohesion might be affected more by the other factors affecting athletes besides coaches. The only significant results that were found were in the GI-S and GI-T subscales of the GEQ. When athletes scored high on these two variables, they reported lower levels of total stress as measured by the Social and Athletic Readjustment Rating Scale (SARRS). When athletes scored high on the GI-

S, they experienced less stress only in the areas of personal, academic, coaching, sport and injury-related stress. The high GI-S scores offer insight into what can make a sport experience successful by relating it to stress level, because when athletes are stressed these variables are often also affected, and in turn can negatively affect their social involvement with the group as a whole, thus affecting overall team cohesion levels.

More importantly, a question of research should be to see if team cohesion levels can predict if athletes will return for a following season or not, in a study performed by Spink (1995). If athletes were leaving, although it may be a combination of reasons, and low team cohesion levels are the reason, then it would be an important issue for coaches to have the knowledge to address. Unfortunately the areas, both ATG-S and GI-S, are the areas that those athletes who indicated they would not return next season scored the lowest. A study such as this would be hard to perform at a collegiate level because of its controversial nature and the scholarship aspect involved, so research in this specific area is limited to a more recreational setting as with Spink (1995).

From the beginning of research involving the topic of group cohesion, it has always been a challenging topic not only to study, but also to promote within the team. Ultimately, it is the coaches' responsibility to make sure they have a cohesive team who can get along with each other and who can understand the team goals.

Chapter 3

METHOD

The first purpose of the study was to determine if a consistency in coach-athlete philosophic orientation in a female sport setting (women's basketball) would result in a higher level of perceived team cohesion by the athletes. The first instrument that was used is the Philosophic-Affiliation Team Survey (PATS). The PATS was developed specifically for this study and was used to determine and coaches and athletes' philosophic orientation. The second instrument used was the Group Environment Questionnaire, GEQ (Carron, Widmeyer, & Brawley, 1985). The GEQ was used to assess the level of team cohesion in the various collegiate levels of women's basketball teams (Carron, Widmeyer, & Brawley, 1985).

The second purpose of the study was to examine the utility of a sport-specific measure of philosophy by assessing concurrent validity of the PATS with a parent test (Zeigler, 1989) called 'What do I Believe'. By providing evidence for concurrent validity, it would provide a quantitative way to classify the philosophic orientation of both the head coach and the athletes based on axiological premises and would provide an important tool for developing cohesive teams.

Subjects

Four collegiate level women's basketball teams were chosen to participate in the study based on convenience sampling. Due to the length of the research surveys, the importance of a previous connection to someone involved with the program proved to be

useful. A total of 43 collegiate level female basketball athletes participated along with each team's respective head coach (n= 4). The schools selected to participate in the study included Lake Land College (n = 14), Quincy University (n = 11), Eastern Illinois University (n = 11), and University of Wisconsin-Madison (n = 11). The schools were members of various levels of collegiate women's basketball: Junior college, Division II, Division I (mid-major), and Division I (major), respectively.

Subject selection across different levels of collegiate women's basketball would allow for generalizations to be made from the results regarding differences across ability and program level. Also, it would allow comparisons to be made beyond the original scope of the study and further validate the results of this study.

Measures

What Do I Believe?

'What do I believe?' was a general philosophy survey previously developed by Zeigler (1989). It included five specific categories: 1) The Nature of Reality (Metaphysics), 2) Ethics and Morality (Axiology), 3) Educational Aims and Objectives, 4) The Educative Process (Epistemology), and 5) Values on Specialized Fields (Sport and Physical Education). Each choice within a category represented a philosophic school: progressive (naturalism), traditional (idealism), strongly traditional (realism), or analytic (pragmatism). Zeigler (1989) also considered the occurrence of a subject who may have identified evenly with the different philosophies being examined, and placed them in a separate category referred to as eclectic. The philosophical schools Ziegler used, and their similarity to the four philosophic schools, stated in parentheses in the previous

sentence, was determined through content validity with the knowledge of the primary researcher and a secondary source, a physical education professor at Eastern Illinois University.

Since the original survey suffered from comprehension difficulty, it was adapted from its original format to a shortened Likert scale format (Appendix A). The intent of the adaptations was to shorten the survey, improve the reader comprehension, and to adapt content to make it specific to coaches and athletes. Although this survey (Zeigler, 1989) was not event-specific, it was able to serve as both a starting point in developing a more a sport-specific version to test philosophic orientation and as a comparative survey to test concurrent validity with future philosophic determination surveys.

Philosophic Affiliation Team Survey (PATS)

The development of the Philosophic Affiliation Team Survey (PATS) was based upon a sport-specific assessment of four previously identified classic philosophic orientations (idealism, naturalism, pragmatism, and realism) proposed within the sport philosophy literature (Zeigler, 1964). The PATS consisted of two different surveys with a similar focus developed regarding philosophic orientation determination: one for head coaches and the other for athletes (Appendix B and Appendix C, respectively). The PATS was designed to determine individual coaches and athletes' philosophic orientation.

Section 1—This section assessed the first three subdivisions of Zeigler's philosophical model: metaphysics, epistemology, and logic and assessed relevant demographic data.

The metaphysical questions focused on the demographics of the subjects, for both the coaches and the athletes' survey. Demographics of both the coach and the athlete included background concerning their hometown, high school, family, and religion.

The epistemology questions in the both the coaches and athletes' survey focused on how their interest in basketball started and where their knowledge of the game originated. The coaches' survey asked questions regarding playing experience, recruiting procedures, and previous coaching jobs. The athletes were asked similar questions concerned with becoming part of a team at the college level, college exposure, and listing other schools by which they were recruited.

The logic questions focused on the reasoning behind why both the coach and the athlete chose to be at the institution they are currently and also their motivations for college level athletic participation. Question 16 on the PATS was designed to determine if a single survey question could determine philosophic orientation.

The axiology section required more in depth questioning because it was the part where the Action Formula (Figure 1) was put to use. In determining what the philosophic belief system of an individual is, it was thought that the basis of their values, or axiology, and eventually their actions would be the primary determinants of their philosophic orientation.

Section 2—This section recorded information regarding the last section of Zeigler's philosophical model (Figure 1): axiology. The survey was designed to ask the subjects what level they agree or disagree with a given statement related to a specific time, either during a game, during practice, or during the off-season. A Likert scale ranging from 1-4 with 1 = Strongly Disagree and 4 = Strongly Agree was used to assess

the level of philosophic orientation with that particular statement. There were eight questions in each of the three categories with two questions that represented beliefs associated with each of the four classic philosophic schools of thought.

A score for the degree of belief in each of the four classic philosophical schools of thought was given for each subject. The philosophic category with the highest score determined the main philosophic orientation of the particular subject. By giving a score to each philosophic category, more extensive comparisons would be able to be made between the coach and the athlete to see exactly where the consistencies or inconsistencies occurred in philosophic orientation.

Group Environment Questionnaire (GEQ)

The Group Environment Questionnaire (GEQ) was used to assess the levels of team cohesion in a collegiate level female sport setting (women's basketball) as perceived by the athletes (Appendix D). The GEQ is an 18-item, four-scale instrument using a nine point Likert scale response format (Carron et al., 1985). The multidimensional perceptions of a team setting are organized and integrated by individuals into two categories, group integration and individual attractions to the group. Both of these categories describe the degree of unity within the group and are measured in two dimensions in relation to the group's task and in terms of the social aspect of the group. Therefore, the GEQ assessed four specific dimensions. Individual Attractions to Group-Social (ATG-S) assesses the athletes' ability to form individual connections with other members of the group. Individual Attractions to Group-Task (ATG-T) assesses the level the athletes' identify with their teammates' individual goals. Group Integration-

Social (GI-S) assesses the level the athletes' identify with the entire team in a social setting. Group Integration-Task (GI-T) assesses the level of the athletes' comprehension of and the identification with the team goals. These four scales of measurement have shown the alpha reliability coefficients (n=247) are .75, .64, .70, and .76, respectively (Carron et al., 1985). The GEQ is based upon Carron et al.'s (1985) multidimensional model of team cohesion that indicates that cohesion in athletic settings is a function of an athlete's appraisal of how well-defined the team is (group integration) and the individual athlete's appraisal of other individual athletes (individual attraction).

Procedures

A pilot study was performed including the original version of the Philosophic Affiliation Team Survey (PATS) and the adapted parent test (Zeigler, 1989). These two pilot surveys were given to two former female college level basketball athletes and one male non-collegiate level basketball athlete to check for clarity in both the wording of the directions and questions, and the clarity of the meanings of the philosophic based surveys, particularly the Zeigler (1989) survey. Only minor adjustments were made to the surveys regarding clarity and rewording of a minimal number of questions.

The head coach of each team was contacted through a letter (Appendix E) following the end of their season explaining the purpose and process of the study and required a phone call or e-mail response confirming the participation of their team. During the confirmation call or e-mail, a date was determined for an on-campus visit to administer the assessments.

The head coach and the athletes were told in a brief paragraph format the intent of the study and signed a consent form for their participation (Appendix F). After signing the consent form on the top of the survey packet, athletes completed the surveys. Surveys were counterbalanced in order to prevent response bias due to order of tests. The primary investigator remained with the subjects throughout the administration to answer questions and to ensure the responses of the all subjects will be confidential and would not be shared with the coach or with the other athletes.

Data Analysis

In order to test the first hypothesis that coach-athlete philosophic match resulted in higher perceived team cohesion from athletes, a multivariate analysis of variance (MANOVA) was performed, using coach-athlete match as the categorical independent variable (match, no match) and separate subscales of the GEQ (ATG-Social, ATG-Task, GI-Social, GI-Task, and Total GEQ score) as the dependent variables. Evidence in favor of the first research hypothesis would be supported if athletes matching their coach's philosophy scored significantly higher on GEQ subscales than those athletes who did not match their coach's philosophy as indicated by the PATS.

In order to examine the second hypothesis that the PATS would be a valid sport-specific measure of philosophic orientation, the concurrent validity of the PATS was examined by use of a parent test (Zeigler, 1989). The evidence for concurrent validity would be supported by high concurrent validity coefficients ($r > .80$) between the PATS and parent test (Zeigler, 1989).

In addition, there was also empirical interest in examining if there was a relationship between philosophic orientation on the PATS and the response to Question 16 on the PATS (main reason for athletes' participation). It was hypothesized that athletes who scored highest on a given philosophic scale on the PATS would score the same on the corresponding answer to Question 16.

Chapter 4

RESULTS

There were two major research hypotheses examined in this study. The first hypothesis examined whether there was a significant relationship between coach-athletes philosophic orientation match and perceived team cohesion from athletes. The second research hypothesis sought to examine the validity of the PATS with a general measure of philosophic orientation by examining the concurrent validity coefficients between the two scales. Means and standard deviations for the entire athlete sample on philosophic orientation and team cohesion measures are displayed in Table 1. The means and standard deviations for both the parent test and the PATS for all four of the female college level basketball teams are shown in Table 2.

PATS Demographic Results

The metaphysics, epistemology, and logic subdivisions included in the PATS were able to provide some demographic information from the athlete subject sample. Demographic information was originally part of the PATS to help in the determination of the coaches and athletes' philosophic orientations in the metaphysical, epistemological, and logic subdivisions. The demographic information proved to be hard to quantify, except for percentages, in ways that proved to be useful in the determination of philosophic orientation. The most easily quantified and useful subdivision of the PATS proved to be the axiological section that included the Likert scale format.

Table 1**Means and Standard Deviations for Athlete Philosophic Orientation and Team****Cohesion**

<u>Measure</u>	<u>M</u>	<u>SD</u>
Parent Ideal	17.14	1.49
Parent Natural	14.95	1.45
Parent Prag	16.63	1.25
<u>Parent Real</u>	<u>15.60</u>	<u>1.97</u>
PATS Ideal	21.74	2.02
PATS Natural	13.72	2.15
PATS Prag	18.88	2.26
<u>PATS Real</u>	<u>19.58</u>	<u>1.78</u>
ATG-S	33.95	6.79
ATG-T	25.05	7.40
GI-S	24.72	6.93
GI-T	30.28	8.70
GEQ Total	114.00	23.35

Table 2

Philosophic Means and Standard Deviations Across College Basketball Teams on the Parent Test and the PATS

<u>Team</u>	<u>Measure</u>	<u>M</u>	<u>SD</u>	<u>Measure</u>	<u>M</u>	<u>SD</u>
<u>Jr. College</u>	Parent Ideal	16.86	1.61	PATS Ideal	19.93	5.46
	Parent Nat	14.36	1.22	PATS Nat	14.21	2.69
	Parent Prag	16.50	1.45	PATS Prag	19.29	1.94
	Parent Real	16.00	1.71	PATS Real	20.14	1.66
<u>Division II</u>	Parent Ideal	18.27	0.90	PATS Ideal	22.45	.82
	Parent Nat	15.64	1.21	PATS Nat	12.91	1.70
	Parent Prag	16.91	1.45	PATS Prag	18.55	2.21
	Parent Real	16.45	1.63	PATS Real	19.27	1.79
<u>Division I (mid-major)</u>	Parent Ideal	17.36	1.21	PATS Ideal	21.55	2.50
	Parent Nat	14.45	1.69	PATS Nat	13.45	1.63
	Parent Prag	17.00	0.89	PATS Prag	18.91	3.30
	Parent Real	15.45	2.84	PATS Real	19.91	1.22
<u>Division I (major)</u>	Parent Ideal	15.91	1.30	PATS Ideal	22.09	2.43
	Parent Nat	15.91	1.30	PATS Nat	13.55	3.08
	Parent Prag	15.64	1.75	PATS Prag	19.73	1.95
	Parent Real	14.82	1.78	PATS Real	18.73	2.33

Metaphysics Section (Questions 1- 8)

The majority of athletes were from either a rural community (23.2%) or from a medium-sized town (25.6%), went to a public high school (95.3%), and attended a high school of 500 (or less) students (41.9%). A majority of the athlete sample came from a two-parent married home (93.0%) and described their upbringing as strict (86.0%). Most of the athletes described the importance of their religious beliefs as very important (48.8%) or somewhat important (41.9%).

Epistemology Section (Questions 9- 14)

Most athletes initially learned about the game of basketball from their parents (69.8%), but a majority said they learned the most about the game of basketball from a coach (48.8%). A majority of the athletes surveyed were recruited (86.0%) from the high school level prior to playing at their current college (93.0%). Most of the athletes felt that AAU games (27.9%), summer camps (27.9%), and high school games (30.2%) helped them the most in pursuing their goal to play basketball at the college level.

Logic Section (Questions 15- 16)

A majority of the athletes said they chose to attend their current college because of a scholarship opportunity (53.4%), but a majority said they participate in college athletics because they believed it would help them reach their full potential as a person, as an athlete, and as a student (65.1%). The philosophic orientation of this response conflicted with athletes' response to Question 15. The answer to question 15, scholarship opportunity, is a very realistic answer for an athlete to give, while the answer to question

16 is a very idealistic way of thinking. The inconsistency between these two answers reiterates the need for a more in-depth format including questions with an axiological basis.

Hypothesis 1—Coach-Athlete Philosophic Match and Perceived Team Cohesion

In order to test the first hypothesis, a one-way multivariate analysis of variance was performed using match category as the independent variable and GEQ subscales as multiple dependent variables. The one-way multivariate analysis for GEQ scales yielded a significant overall effect ($F(4, 38) = 12.27, p < .0001$). The Wilk's Lambda for this effect was .44, indicating that 56% of the variance in team cohesion as measured by GEQ scores could be accounted for by philosophic match. Team cohesion means and standard deviations across philosophic match categories are displayed in Table 4. To estimate the relative contribution of the dependent variables in the significant overall effect, the MANOVA was followed-up by a descriptive discriminant analysis.

The discriminant function may be used to calculate a discriminant score for each athlete. These scores were then correlated with each athlete's original scores on team cohesion subscales. Correlations, referred to as structure coefficients, can be used to assess the relative importance of each dependent variable in discriminating between levels of the independent variable. Structure coefficients greater than .30 are considered meaningful (Pedhazur, 1997). For this study, total structure coefficients for GEQ subscales were $r = .99$ (GI-T), $r = .87$ (GEQ Total), $r = .71$ (GI-S), $r = .48$ (ATG-T), and $r = .45$ (ATG-S). Thus, there was strong support for Hypothesis 1 in that athletes who matched their coach's philosophy had significantly higher team cohesion scores as

measured by the Group Environment Questionnaire (GEQ). Examination of the total structure coefficients indicated that while all GEQ subscales could significantly differentiate athletes that matched their head coach's philosophy, Group Integration-Task ($r = .99$) and Group Integration-Social ($r = .71$) were especially meaningful in this relationship.

Table 4

Team Cohesion Means and Standard Deviations Across Philosophic Match

Categories

Measure	<u>Match</u> (n = 29)		<u>No Match</u> (n = 14)	
	M	SD	M	SD
ATG-S	33.01	5.24	27.13	4.50
ATG-T	24.68	4.62	16.03	6.50
GI-S	24.90	4.96	16.46	3.73
GI-T	32.35	5.03	18.39	3.28
GEQ Total	117.77	13.94	81.55	13.56

Relationship Between Schools and Team Cohesion

Although not a main hypothesis within the current study, there was an interest to examine whether a relationship existed between college level and philosophic match on team cohesion. In order to test this relationship, a two-way (2 x 4) (philosophic match x college) MANOVA was performed on team cohesion scores. Team cohesion means and standard deviations are displayed across college and philosophic match in Table 5 and in

a graph format (Figure 5). Results of the overall MANOVA resulted in a non-significant interaction ($F(4, 33) = 3.94, p = .01$). However, there was a significant overall team main effect ($F(3, 36) = 9.08, p < .0001$).

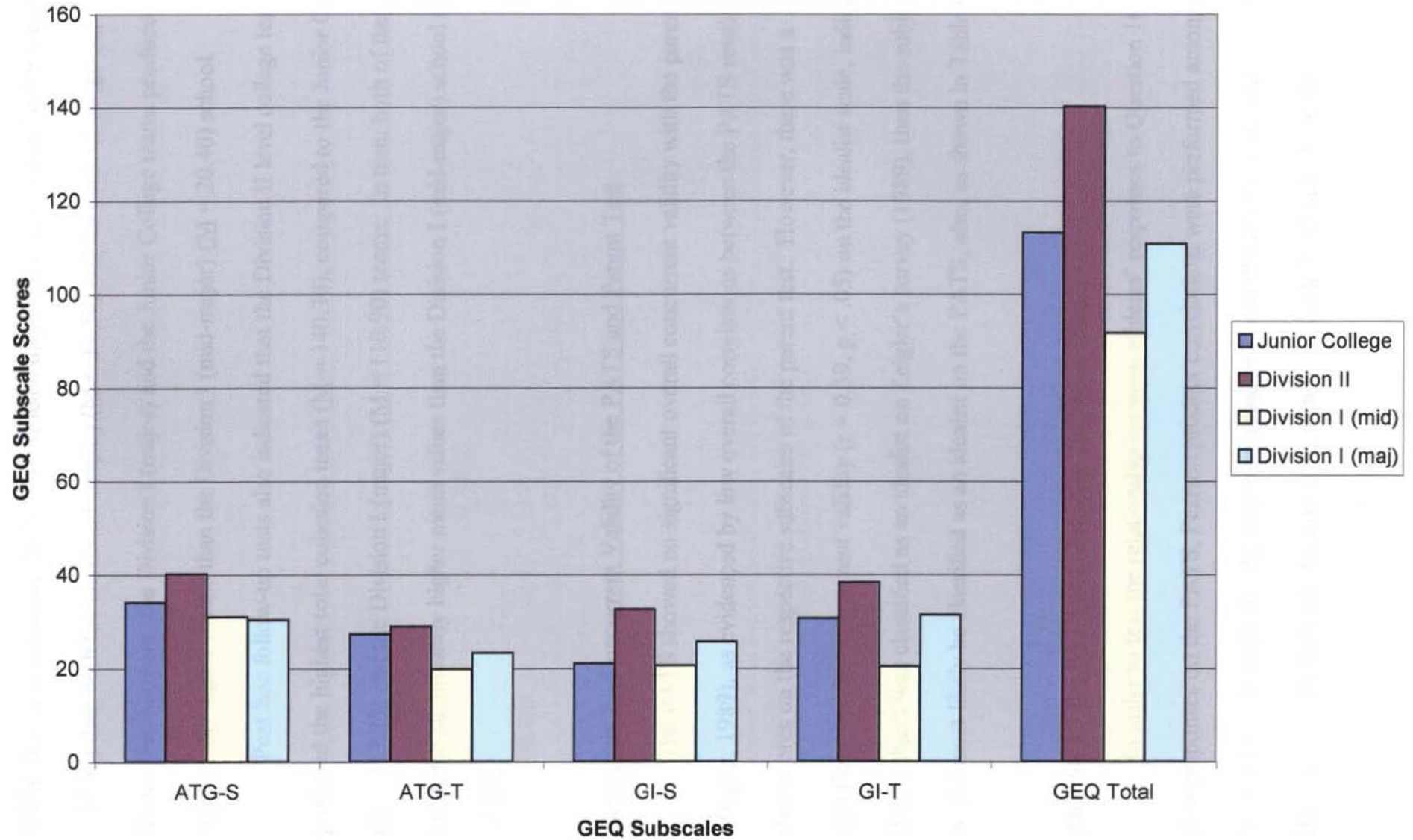
Follow-up one-way ANOVAs were performed on the significant multivariate main team effect and indicated significant results for Attraction to Group-Social ($F(3, 42) = 5.89, p < .002$), Group Integration-Social ($F(3, 42) = 12.66, p < .001$), Group Integration-Task ($F(3, 42) = 14.10, p < .0001$), and Total Team Cohesion ($F(3, 42) = 14.17, p < .0001$).

Post hoc follow-up tests ($\alpha = .05, df = 39$) were done to determine where significant differences among the various college levels in each of these subscales occurred. The Division II school displayed significantly higher scores ($M = 40.20$) in ATG-S subscale than the other three schools ($M = 34.15$, Junior College; $M = 31.00$, Division I (mid-major); $M = 30.40$, Division I (major)). Both the Division II and the Junior College teams ($M = 29.00$ and $M = 27.39$ respectively) scored significantly higher than both the Division I (major) ($M = 23.30$) and the Division I (mid-major) ($M = 19.80$) in the ATG-T subscale. The Division II level team reported a significantly higher mean score ($M = 32.70$) than the Division I (major) team ($M = 25.70$) in the GI-S subscale. Furthermore, the mean scores in the GI-S subscale for the Junior College ($M = 21.00$) and the Division I (mid-major) ($M = 20.60$) teams measured significantly lower than both the other schools.

Table 5**Team Cohesion Means and Standard Deviations Across College and Match**

<u>Team</u>	<u>Measure</u>	<u>M</u>	<u>SD</u>
<u>Junior College</u>	ATG-S	34.15	4.93
	ATG-T	27.38	4.46
	GI-S	21.00	5.73
	GI-T	30.69	7.24
	GEQ Total	113.23	16.91
<u>Division II</u>	ATG-S	40.20	6.96
	ATG-T	29.00	3.37
	GI-S	32.70	3.06
	GI-T	38.40	3.92
	GEQ Total	140.3	11.61
<u>Division I (mid-major)</u>	ATG-S	31.00	5.33
	ATG-T	19.80	9.35
	GI-S	20.60	4.99
	GI-T	20.40	4.93
	GEQ Total	91.80	14.57
<u>Division I (major)</u>	ATG-S	30.40	6.24
	ATG-T	23.30	8.42
	GI-S	25.70	5.96
	GI-T	31.50	7.74
	GEQ Total	110.90	22.12

Figure 5 - Differences Across Teams on the Team Cohesion Subscales



Within the GI-T subscale, the Division II team displayed a significantly higher mean ($M = 38.40$) than both the Division I (major) ($M = 31.50$) and the Junior College ($M = 30.69$) teams. Furthermore, the Division I (major) and the Junior College teams produced significantly higher means than the Division I (mid-major) ($M = 20.40$) school.

Post hoc follow-up tests also indicated that the Division II level college team produced the highest total cohesion mean ($M = 140.30$), compared to the Junior College ($M = 113.23$) and the Division I (major) ($M = 110.90$) teams. In turn, both of these teams measured significantly higher mean values than the Division I (mid-major) school ($M = 91.80$).

Hypothesis 2—Concurrent Validity of the PATS and Parent Test

The PATS showed no significant overall concurrent validity with the parent test (Zeigler, 1989), as evidenced by low overall correlations between the PATS results and their scores on the respective subscales of the parent test. However, there was a significant level of concurrent validity ($r = 0.39$, $p < .05$) on the idealist scale, indicating if the subject was classified as an idealist on Zeigler's survey (1989), then the subject would most likely be classified as an idealist on the PATS, also, as shown in Table 6.

Analysis for the PATS and Question 16 Answer Match

In order to test the relationship between athletes' responses to Question 16 and their responses on the PATS, Pearson product correlations were performed among athlete responses on item 16 and the responses regarding overall subscale scores on the PATS. Bivariate correlations for this analysis are shown in Table 7. Results from these

correlation analyses were insignificant and indicated that there were no significant relationships between how athletes respond on a single item regarding their philosophic orientation and how they reported on the PATS.

Table 6

Concurrent Validity Correlation Coefficients of the Parent Test and the PATS

	Parent ideal	Parent natural	Parent prag	Parent real
<u>PATS ideal</u>	.39 *(.007)			
<u>PATS natural</u>	-.15 (.30)	-.07 (.64)		
<u>PATS prag</u>	-.18 (.22)	.02 (.91)	-.06 (.67)	
<u>PATS real</u>	.17 (.43)	-.31 (.03)	.13 (.39)	.09 (.53)

Note. Parent = What do I believe (Zeigler, 1989); PATS = Philosophic Affiliation Team Survey; ideal = Idealism; nat = Naturalism; prag = Pragmatism; real = Realism.

- p-values are indicated in parentheses; $p < 0.05$.

Table 7**Correlations Among Response to Question 16 and PATS Subscales**

	Q16	PATS Ideal	PATS Nat	PATS Prag	PATS Real
<u>Main Reason Q16</u>	-----				
<u>Ideal</u>	.05 *(.74)	-----			
<u>Natural</u>	.11 (.44)	-.07 (.63)	-----		
<u>Prag</u>	-.09 (.50)	.23 (.12)	.05 (.70)	-----	
<u>Real</u>	-.10 (.53)	.03 (.84)	.27 (.07)	.06 (.66)	-----

*p values are indicated in parentheses.

Chapter 5

DISCUSSION

The main purpose of this study was to determine if a philosophic match between head coaches and their athletes would result in higher levels of team cohesion as perceived by the athletes. Mean value scores on both the Philosophic Affiliation Team Survey (PATS) and the Group Environment Questionnaire (GEQ) were used to measure the philosophic orientations of both the coaches and athletes and the team cohesion levels of the athletes. Significant differences between those athletes who matched the philosophy of their head coach and those who did not were found across all the GEQ subscales.

The secondary purpose of this study was to develop a valid, quantitative test of philosophic orientation when compared to a global measure of philosophic orientation. The concurrent validity was tested by comparing the results of a Parent Test (Zeigler, 1989) and the PATS to find a match between the results of the two surveys. The results showed no significant evidence for concurrent validity between these surveys, which may suggest a need for adaptation to the current PATS format and also a need for further empirical investigation of the PATS.

Hypothesis 1

The first hypothesis examined whether or not team cohesion was dependent upon a philosophic match between head coaches and their athletes. This hypothesis was supported by the significant relationships between coach-athlete philosophic match and

team cohesion levels in all of the GEQ subscales and the overall GEQ total score. Those athletes who matched their head coach's philosophy, as determined by the PATS, scored higher on the ATG-S, ATG-T, GI-S, GI-T, and GEQ total scales. Due to the lack of research in this specific sport philosophy area, only speculations as they relate to team cohesion literature can be made, while considering leadership factors that reinforce the notion that coach-athlete compatibility is important in enhancing team cohesion.

The first explanation is related to the origin of the idea for this study. Personal experiences in athletics and seeing first hand the effects of agreements and disagreements, created the idea of researching specific philosophies to try to explain these differences. Since philosophy is at the basis of individuals' actions and reactions, a survey to predict these actions and reactions may prove to be helpful in preventing the coach-athlete disagreements, thus improve the entire coach-athlete relationship, the team cohesion levels, and also the team success rate.

The second explanation challenges the idea presented by Mangan (1995) that coaches are currently dealing with a new generation of athletes. The highest mean value on the PATS for the athletes occurred in the idealistic division. The assumption is that idealists would be the kind of athletes that any coach would want and need on their teams, so this result would be a positive statistic. The high idealist mean may refute the idea that athletes are the problem. Perhaps, the problem (Mangan, 1995) is due to the way coaches are coaching, and not the way athletes are acting. The responsibilities of coaches have changed. The more success a coach is involved the more events they must speak at, the more books they must write, and the less time they have to give to their athletes' needs.

The third explanation is to support the idea, based on Naturalistic philosophic premises, that Naturalists would be non-existent in collegiate level women's basketball. The naturalist's score on the PATS proved to be the lowest mean value. This result supports the theory that naturalists would not participate in high-level competitive athletics. A regimen as structured as college athletics would not appeal to the boundless visions of the naturalist, so their lack of participation in competitive activities is only 'natural'.

The fourth explanation suggests that if coach-athlete compatibility is affected by self-perceived, wanted, and expressed social factors (Carron & Bennett, 1977), then philosophic orientation also will affect the coach-athlete relationship. These results also suggest that incompatible coach-athlete relationships develop from detached, withdrawn, and isolated behavior on behalf of both the coach and the athletes. The coach has the responsibility to prevent incompatibility from occurring within their team. The problem is that most coaches don't have a starting point to do so. Coaches need a way to start in developing working relationships with players, and a paper-pencil questionnaire like the PATS provides a good start based on the positive affect coach-athlete philosophic match has on team cohesion levels.

Hypothesis 2

The second hypothesis examined the concurrent validity of the PATS and an adapted version of Zeigler's (1989) 'What do I believe' survey. This hypothesis was unsupported, showing no significant level of concurrent validity, except in the idealistic

philosophic division, where a subject who was classified by the Parent test as an idealist, would also most likely be classified by the PATS as an idealist.

The concurrent validity of the idealist could be justified in two ways: 1) Zeigler, himself, as an idealist, may have had some idealistic foci in his test and/or 2) the idealistic choices on the surveys were the 'ideal' answers and may have been chosen by subject biases, knowing that is the way they should act or believe. The second justification would suggest a response bias by the coaches and athletes based on what the subjects knew about what they should believe, even if it is not their true philosophic orientation.

Concurrent validity of the PATS with the parent test may have also been affected by the comprehension difficulty involved with philosophy. The parent test was adapted from a long paragraph format to a one or two sentence Likert scale format to increase comprehension. However, the parent test remained hard to understand for the readers who are less familiar with philosophy.

Despite the lack of support, the PATS should not be considered unusable, but should be interpreted as a beginning to more extensive research. In support of this notion, Klaus Meier (1985) explains the existing lack of clear paradigms of sport to use as direction and validation of research conclusions in his 1985 Philosophic Society for the Study of Sport (PSSS) Presidential Address. Despite the amount of qualitative research that has been done since 1985, even now in the year 2001, the data is lacking. Through more research, the appropriate adjustments could be made to the PATS to branch out into other philosophic studies specific to sport, as Meier (1985) suggests. Although the concurrent validity of the PATS would have been important to establish, the

initial version of the PATS still has not lost the potential to be a tool with research implications in the area of sport philosophy, and future revisions that are more content-relevant may provide greater validity.

Team Level Effects for Team Cohesion

Although the results of the school and match data were not part of an original hypothesis, they still provided worthwhile and promising findings. In investigating the four subscales of the GEQ, interesting analyses were made about why one college level may have produced higher quantitative results in one area over another.

The ATG-S subscale measured the level of identification to the small group friendships that develop within the team structure. The Division II team scored significantly higher than the three other teams. The Division II team surveyed consistently, by choice, lived with other team members in modified dorm settings on campus, which could have explained the high ATG-S levels. Other schools surveyed had athletes living in various, less structured types of housing ranging from dormitories to on or off campus apartments, and may or may not have lived with other athletes from the team, thus had lower levels of cohesion in the ATG-S subscale.

Weiss & Friedrichs (1986) examined institutional variables including size, budget, scholarships, and winning tradition. They found the institutional size variable to be significant in predicting individual athlete satisfaction, thus suggesting athletes at the larger institutions would be more satisfied. However, the Division II and the Junior College team scored significantly higher than the other two larger schools on the ATG-T subscale. The ATG-T subscale measures the level of identification to the personal goals

of one's teammates. The increase of athletes, who are supportive of their teammates' goals on the court, will increase the level of satisfaction within that team structure. Also, a concern for winning seems to be more prominent at the Division I level, than at the lower divisions. The pressure to win may override the emphasis on athlete satisfaction at larger schools, refuting the findings of Weiss & Friedrichs (1986).

Athlete satisfaction is a main part of the personal subdivision of team cohesion and is present in the measurement of all four subscales of the GEQ, including the ATG-T subscale. Although the high scores of the smaller institutions on the ATG-T subscale are not supported by Weiss & Friedrichs (1986), they can be supported by a conclusion from Widmeyer & Williams (1991) who found that personal satisfaction toward the team and team members was the strongest predictor of team cohesion. An additional way to develop team cohesion would be to cultivate a match in terms of athlete satisfaction and a coach-athlete philosophic match.

The Division II team scored significantly higher than all teams surveyed in the GI-S subscale, while the Division I (major) team scored significantly higher than the Junior College and the Division I (mid-major) teams. The Group Integration for Social subscale measures the level of identification to the way the group interacts socially as a whole. The theory would be that the Division II and the Division I (major) teams have more team planned activities, including the coaching staff, than do the teams with lower GEQ scores in these subscales. The Junior College would not be expected to show significantly high levels in this area because of the high number of commuters that attend these community colleges and participate in their sport programs.

The GI-T subscale measures the level of identification to the task-oriented goals of the team as a whole. The Division I (mid-major) team scored significantly lower on GI-T than the other three teams. Success can then be said to be exclusive to the accomplishment of the pre-determined goals. For example, despite the Division II team's high levels of team cohesion, their win/loss record was under 0.500, but they made the conference tournament for the first time ever, thus their season was deemed successful. Therefore, absolute success may not be the most accurate measure of team cohesion, but rather a team's relative success, which is important to the individual team history. The Division I (major) team made the NCAA tournament for the first time since the current coach was hired. The Junior College team finished their season at the Junior College National Tournament.

All accomplishments listed so far can be justifiably successful, while the Division I (mid-major) team ended their season with a worse record than what they ended with the previous season; in most cases, this kind of a result would not be considered successful because a common goal for teams is to improve on the previous season. The significantly lower team cohesion scores for the Division I (mid-major) team would support the idea that relative success leads to team cohesion.

Analysis of Question 16 on the PATS

The analysis of the answer to Question 16 and the philosophic orientation on the PATS showed no significant results. However, in this analysis there were no significant results expected. An analysis was performed to examine the answer on Questions 16 and its match to the philosophic orientation of the athlete, as identified by the PATS. The

result would prove that an individual's philosophic orientation could not be determined solely by one question, thus reiterating the need for the axiological based section of the PATS, which consisted of 24 questions. Despite the simplicity of this analysis, its results are important because they help quantify the depth needed to even begin to comprehend sport philosophy.

Limitations

One of the main limitations of the current study is the low number in the subject sample. Due to the time involved in taking the required surveys and the time involved in survey collection, the subject pool was limited to 47 subjects. In order to successfully validate the PATS, a greater number of athletes, across different sports will need to be assessed.

Only college level female basketball athletes were used in this study, limiting the study female college athletes. The question of supporting theories from this study could be applicable in male athletic settings. Also, the study could branch out into various levels of athletics, with the appropriate adjustments made to provide the clarity needed for particular levels. The study of sport philosophy could be done with other sports besides basketball, and could be divided further into team versus individual sports. Also, this sport philosophy study could be adapted to research high school or professional level athletics. The study of sport philosophy should not be limited to collegiate level athletics.

Another limitation of this study is the lack of studies that provide precedent quantitative data. By combining the study of philosophy with various sport related topics, such as team cohesion, pertinent quantitative data can be developed and even

supported. The vast amount of qualitative data produced previously by philosophic studies provided the theories and a starting point for this study, while reiterating the need for future studies to include more statistical analyses. The problem with quantitative philosophic data is that it is difficult to comprehend without proper training in sport philosophy.

The PATS displayed concurrent validity ($r = .39, p < .05$) with the parent test only in the idealistic philosophy. This result could indicate a response bias in the answers of the coaches and athletes on the PATS. The idealistic questions are based on an idealistic way of life. The answers to the idealistic questions could have been higher because the subjects knew the idealistic way was the way they should act, so they agreed higher with those questions, even if it were not their true level of agreement.

Recommendations for Future Studies

The results of this study provide a variety of implications for not only future studies, but also for the growing sport philosophy field. The ability of this study to provide significant results between coach-athlete philosophic match and higher perceived team cohesion level scores, increases the future implications of the PATS in athletics. Unfortunately, there was no support for the concurrent validity of the PATS and the parent test. One recommendation would be to test the PATS with a different philosophic based parent test. Also, the PATS could be tested with a greater number of athletes in various sport settings to increase its usefulness and validity, in case no effective parent test can be found.

A second recommendation would be to shorten the PATS to the axiological section of questions only. This would require the demographic information in the first three sections of the PATS to be discarded. Although the questions in the metaphysical, epistemological, and logic sections provided useful demographic information, this information is harder to apply to the determination of specific philosophic orientations than the axiological section.

Another recommendation for the PATS format would be to increase the number of questions designed for each of the four philosophic schools of thought. Instead of having the subjects answer eight questions in each category, the number should at least be doubled. The addition of more questions will account for the discarding of the first three sections, and will also give a more accurate account of philosophic orientation.

A final recommendation for future studies would be to compare the length of time an athlete has been at the same institution playing for the same coach to their philosophic match and their team cohesion levels. Also, the effects of a coaching change during a collegiate athletic career on athletes' philosophic orientations and their team cohesion levels would be a worthwhile investigation.

The implications of the current results in the sport philosophy field provide invigorating speculation for future innovations. One of the main innovations is making sport philosophy an accepted field of study in a university setting. As of 1994, the only known recognized sport philosophy degree program was at the Victoria University of Technology in Australia and at the University of Western Ontario in London, Canada (Roberts, 1994). The lack of sport philosophy programs in the United States is astonishing, especially with the large emphasis placed on the all levels of athletics by

American society. The promotion of sport philosophy at university settings will not be easily accomplished, but because of the interest in athletics it may be more readily accepted.

Promotion of sport philosophy at universities will have to start with the coaching staffs because, right now, that is where the greatest amount of interest exists. If there is an understanding that can be reached by coaches, then the need for sport philosophy on the entire campus can be realized, and maybe even promoted from within. By educating coaches in the area of sport philosophy, the need for the PATS will increase. The phenomenon will spread throughout campuses via the team psychologist, and if there is not currently a team psychologist, then the need for one will be established. The psychology department will then be notified of the need for more specialization in the area of sport. Eventually a wave will be created that will flow over into the physical education and philosophy departments where a degree in sport philosophy can be formulated.

Coaches can be educated in the area of sport philosophy in a number of ways. The ways include, but are not limited to, national conferences, like the "Final Four", coaching clinics, special classes, and word of mouth. The problem is that there are not many qualified sport philosophers who are going to take the time to promote the importance of philosophic orientation and its relationship to sport. The effect of coach-athlete philosophic match on team cohesion is worth the time it takes to learn about the PATS and its philosophic premise. Despite sport philosophy being a relatively old and complex field of study, its ability to be a quantitative one is new. This idea will only be

reinforced through the continued research in the area of sport philosophy and the promotion of its practical use.

Conclusion

The development of sport philosophy research may extend psychological and personality studies already associated with athletics, because it takes both of the areas one step farther by answering the question of what makes these coaches and athletes act and react in the way they do. The use of the PATS by coaches or by sport psychologists can offer information that would increase coach-athlete compatibility, thus increasing overall aspects of team cohesion.

Results found between coach-athlete philosophic match are significant, and when added to the supportive results from the team cohesion data their significance increases. The current study offers support of previous research, which has indicated the importance of coach-athlete compatibility in athlete performance, team cohesion, and athlete satisfaction (Weiss & Friedrichs, 1986; Widmeyer & Williams, 1991; Riemer & Chelladurai, 1995).

From a practical perspective, the results of this study may be used to increase awareness of coaches of the impact of their actions and of their ability to address the athletes' needs to get the most out of their athletes, most often termed as 'playing hard'. Athletes play hard for coaches who understand them, and the discovery of not only the athletes' philosophic orientation, but also their own philosophies, will help them accomplish this feat; in turn creating a high level of team cohesion and eventually a high success level that results from properly building a team.

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APPENDIX A – WHAT DO I BELIEVE ADAPTED SURVEY

What Do I Believe? (adapted)
(A professional, self-evaluation checklist)

Instructions: Read the statements below carefully, section by section, and indicate how strong your belief in that statement is by using the Likert Scale below each of the numbered statements.

CATEGORY I

**The Nature of Reality
(Metaphysics)**

1. The scientist is in the best position to answer the ultimate questions about the nature of reality through use of the scientific method. The important question to be answered is what impact these findings have on everyday life.(P)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

2. The world is characterized by activity and change that can be observed all around us through Nature.(N)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

3. The individual person has freedom to determine which path they will take in life and to determine if they will follow moral laws or if they will turn against them.(I)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

4. Reality is best defined by my own personal perception of it. Things don't just happen; they happen for a reason based on cause and effect.(R)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

CATEGORY II
Ethics and Morality
(Axiology)

1. People's morality is determined by what they have learned from the environment they live in. (R)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

2. We should use reflective thinking to gain knowledge to work toward solving life's problems and then test them by applying them to the world around us.(N)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

3. The terms used to explain ethical standards or norms should be analyzed logically and carefully because they are always changing with time.(P)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

4. We are considered good if we can strive to share in ethical and moral laws and play an active role in our own personal ethical decisions.(I)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

CATEGORY III
Educational Aims and Objectives

1. It is important to clarify the meaning of specific terms to better explain to the listener exactly what we mean.(P)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

2. The individuals should be placed at the center of the education experience by encouraging their participation in the formation of learning objectives.(N)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

3. The primary focus of educational process should be to transmit previously verified knowledge to the learner.(R)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

4. The basic values of human living are health, character, social justice, skill, art, love, knowledge, philosophy, and religion.(I)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

CATEGORY IV

The Educative Process (Epistemology)

1. An individual can find truth by examining the past through their own mind where one's thoughts become the standard by which they judge the rest of the world.(I)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

2. The mind has evolved in a natural order that allows for its thoughts to be adapted for the particular society in which an individual lives.(N)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

3. Various types of instruction should be included in a lecture to increase the knowledge gained by individuals and to develop a better understanding of the material.(P)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

4. A subject should be taught by providing a rationale for its importance.(R)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

CATEGORY V

Values in Specialized Fields

(Sport and Physical Education)

1. Intellectual development is second to the physical development, and concern for developing top physical condition should have a priority over more recreational activities.(R)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

2. Intramural-recreational sports are much more important than highly competitive athletics.(N)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

3. Disagreements in sport can be resolved through presenting a logical way to share beliefs, facts, and knowledge in hopes of changing other's attitudes. (P)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

4. Development of individual personality is extremely important. The desirable objectives of sport should center around the development of shared responsibility, group participation, and personal growth.(I)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

CODE

I = Idealism

N = Naturalism

P = Pragmatism

R = Realism

SCORING

Using a Likert scale, a score for the degree of belief for each of the four philosophic schools of thought (Idealism, Naturalism, Pragmatism, and Realism) will be determined. Add up the total number of points based on the Likert scale values for each of the four philosophies. The philosophic codes are in parentheses after each individual question. Whichever philosophic category has the highest score will be considered the subject's philosophic orientation.

APPENDIX B – PHILOSOPHIC AFFILIATION TEAM SURVEY FOR COACHES

Philosophic Affiliation Team Survey (PATS)—Coach

Team: _____

Date: _____

This survey is designed to determine the philosophy you identify with the most. Try to be as honest as possible in your answers. Confidentiality in all responses will be maintained.

Section I—Answer the following questions to the best of your ability. The questions in this section require you to fill in the blank and/or choose the **best** answer from a multiple-choice format.

(Metaphysics)

1. How would you describe the town you grew up in?
 - a. Rural (country)
 - b. Inner city
 - c. Suburb
 - d. Small town (less than 5,000 people)
 - e. Medium-sized town (between 5,000 and 20,000 people)
 - f. Large town (more than 20,000 people)

2. What was the size of the high school you attended?
 - a. 500 students or less
 - b. 500 to 1500 students
 - c. More than 1500 students

3. How would you describe the high school you attended?
 - a. Public
 - b. Private

4. Would you describe the household in which you were raised?
 - a. Two-parents, married
 - b. Two-parents, unmarried
 - c. Single-parent, father only
 - d. Single-parent, mother only

5. Would you describe your upbringing as disciplined/strict?
 - a. Yes
 - b. No

6. How many brothers and/or sisters do you have?
 - a. Brothers # _____
 - b. Sisters # _____

7. Where do you fit into the birth order in your immediate family?

_____ (Oldest, second oldest, etc., or youngest)

_____ (Oldest girl, youngest girl, etc., or only girl)

8. How would you describe the importance of your religious beliefs?
- Very important
 - Somewhat important
 - Not really important
 - Not important at all

(Epistemology)

9. From whom/what did you first learn about the game of basketball?
- Parent(s)
 - Friends
 - Sibling(s)
 - School/Teacher
 - Coach
 - Television/ Movies
 - Books
 - Attending sporting events
10. Who/What has taught you the most about the game?
- Parent(s)
 - Friends
 - Sibling(s)
 - School/Teacher
 - Coach
 - Yourself
 - Television/ Movies
 - Books
 - Attending sporting events
11. Did you play basketball at the college level?
- Yes
 - No
12. If yes, at what size/ level institution did you play?
- Division I
 - Division II
 - Division III
 - NAIA
 - Junior College
13. Picking only one answer, where would you say you do most of your recruiting?
- AAU games/ tournaments
 - Shoot-outs
 - Summer camps
 - All-Star games
 - High school in-season games

14. List any other schools you have coached at and the division or level they were at that time.

	<u>School</u>	<u>Division/ Level</u>
a.	_____	_____
b.	_____	_____
c.	_____	_____

(Logic)

15. What is the main reason you chose to coach at the institution where you are currently serving as part of the coaching staff?

- Time requirements
- Money
- Institution size
- Work environment
- Tradition
- To move-up
- Other _____

16. What is the main reason you coach at the college level?

- I enjoy trying to get the best out of my players as people, as athletes, and as students.
- I believe the level I am at is part of the process in getting the coaching job I have been working toward.
- I just want to coach basketball because I love it.
- I coach because I feel like I don't have a choice, it is just the way it has always been and it is the way it will always be.

Section II—Rank the following choices to best of your ability.

- 1) This section reviews just a portion of the thoughts of a coach can experience in three different situations throughout the course of a year: Game situations, Practice situations, and the Off-season.
- 2) You are to answer the following questions according to your own personal beliefs, being as honest as possible. There are no right or wrong answers. The questions are to be answered using the Likert scale following each questions. **Be sure to circle the number that corresponds to your belief level about each question.**

(Axiology)

Game Situation

1. I value winning at all costs.(R)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

2. I anticipate what the plan of action will be if we lose.(P)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

3. I value how the players are feeling and responding.(I)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

4. I feel the competition aspect of games is intimidating.(PN)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

5. I am most concerned about the team's performance because I feel it is a direct reflection of me.(R)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

6. I view the game as a series of problems to correctly solve in order to get the desired result—a win.(P)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

7. I value a team's ability to not give up and to play with heart.(I)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

8. I feel it is acceptable for me to openly express my positive and negative emotions in a game situation.(HN)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

Practice Situation

1. I believe practice should be a time to develop the athletes' intellect, as well as their skills.(R)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

2. I value conditioning the most because it is important to be in better physical condition than our opponents.(R)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

3. I believe watching film is an essential element in preparation for a game.(P)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

4. I believe in allowing athletes to express their opinions.(I)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

5. I value teaching the athletes to react to various situations.(P)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

6. I believe visualization techniques should be used to help the athletes with their ability to remain focused. (PN)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

7. I believe in enforcement of ethical rules, such as no swearing and respect of others.(I)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

8. I often find my mind drifting from what is actually going on on the court to other things I still have to get done.(HN)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

The Off-Season

1. I believe that maintaining a high level of physical condition is the most important aspect of the off-season.(R)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

2. I value the athletes' participation in the intramural activities offered through the college or university.(PN)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

3. I believe athletes should take this time to pursue activities that develop them as athletes, as people, and as students.(I)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

4. I value the encouragement of athletes to pursue activities to improve their career choice and their basketball skills.(P)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

5. I value this time to work with athletes to evaluate and improve upon their skill level.(R)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

6. I value this time for myself and for my athletes to use to increase their basketball knowledge by reading about it, watching it, and /or teaching it.(P)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

7. I believe this is a time for rest where I do not have to do anything associated with basketball if I do not want to.(HN)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

8. I find myself carrying over the ethical behaviors, such as sportsmanship and fair play, that I teach my players during the season during the off-season.(I)

Strongly Disagree

1

Somewhat Disagree

2

Somewhat Agree

3

Strongly Agree

4

Code

I= Idealist

PN= Pure Naturalist

HN= Hedonistic Naturalist

P= Pragmatist

R= Realist

Evaluation

By evaluating the subject's answers for each philosophical category, a quantitative result can be given for each of the four philosophic schools of thought. The responses that receive the highest score (Strongly Agree = 4) will be associated with the individual's philosophic orientation. The responses that receive the lowest score (Strongly Disagree = 1) will be associated with the philosophy the subject least identifies with. A quantitative score will be assigned for each of the four philosophic schools of thought by adding up the total points for each of the categories. The two branches of naturalism can have their scores combined to give a total for that category. The results can then be compared to the quantitative values determined for the athletes.

APPENDIX C – PHILOSOPHIC AFFILIATION TEAM SURVEY FOR ATHLETES

Philosophic Affiliation Team Survey (PATS)—Athlete

Team: _____

Date: _____

This survey is designed to determine your philosophic orientation. Try to be as honest as possible in your answers. Confidentiality in all responses will be maintained.

Section I—Answer the following questions to the best of your ability. The questions in this section require you to fill in the blank and/or choose the **best** answer from a multiple-choice format.

(Metaphysics)

17. How would you describe the town you grew up in?
- Rural (country)
 - Inner city
 - Suburb
 - Small town (less than 5,000 people)
 - Medium-sized town (between 5,000 and 20,000 people)
 - Large town (more than 20,000 people)
18. What was the size of the high school you attended?
- 500 students or less
 - 500 to 1500 students
 - More than 1500 students
19. How would you describe the high school you attended?
- Public
 - Private
20. Would you describe the household in which you were raised?
- Two-parents, married
 - Two-parents, unmarried
 - Single-parent, father only
 - Single-parent, mother only
21. Would you describe your upbringing as disciplined/strict?
- Yes
 - No
22. How many brothers and/or sisters do you have?
- Brothers # _____
 - Sisters # _____
23. Where do you fit into the birth order in your immediate family?
- _____ (Oldest, second oldest, etc., or youngest)
- _____ (Oldest girl, youngest girl, etc., or only girl)

24. How would you describe the importance of your religious beliefs?
- Very important
 - Somewhat important
 - Not really important
 - Not important at all

(Epistemology)

25. From whom/what did you first learn about the game of basketball?
- Parent(s)
 - Friends
 - Sibling(s)
 - School/Teacher
 - Coach
 - Television/ Movies
 - Books
 - Attending sporting events
26. Who/what has taught you the most about the game?
- Parent(s)
 - Friends
 - Sibling(s)
 - School/Teacher
 - A coach
 - Yourself
 - Television/ Movies
 - Books
 - Attending sporting events
27. How did you become a part of the team you currently play for at the college level?
- Recruited
 - Walked-on
 - Transferred
28. At what level of basketball did you play before attending the college you currently do?
- High School
 - Junior College (1 year or less)
 - Junior College (Associate degree completed)
 - Division III
 - Division II
 - Division I (same conference)

29. Which activity do you feel helped you the most in pursuing your goal to play basketball at the college level?

- a. AAU games/ tournaments
- b. Shoot-outs
- c. Summer camps
- d. All-Star games
- e. High school in-season games
- f. State tournament games

30. List any other schools you were recruited by and their division or level.

	<u>School</u>	<u>Division/ Level</u>
a.	_____	_____
b.	_____	_____
c.	_____	_____

(Logic)

31. What is the main reason you chose to attend the college where you are currently playing?

- a. Scholarship opportunity
- b. People on the team
- c. The coaching staff
- d. School location
- e. Institution size
- f. Tradition
- g. Academics
- h. Other _____

32. What is the main reason you participate in college athletics?

- a. I believe it will help me reach my full potential as a person, as an athlete, and as a student.
- b. I believe it will help me in my future plans, such as coaching, playing overseas, or in the WNBA.
- c. I just want to play basketball because I love it.
- d. I play because I feel like I don't have a choice, it is just the way it has always been and it is the way it will always be.

Section II—Answer the following questions to best of your ability.

- 1) This section reviews just a portion of the thoughts of an athlete can experience in three different situations throughout the course of a year: Game situations, Practice situations, and the Off-season.
- 2) You are to answer the following questions according to your own personal beliefs, being as honest as possible. There are no right or wrong answers. The questions are to be answered using the Likert scale following each questions. **Be sure to circle the number that corresponds to your belief level about each question.**

(Axiology)

Game Situation

1. I value winning at all costs.(R)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

2. I anticipate what the plan of action will be if we lose.(P)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

3. I value how the coaches and my teammates are feeling and responding.(I)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

4. I feel the competition aspect of games is intimidating.(PN)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

5. I value my personal performance the most.(R)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

6. I view the game as a series of problems to correctly solve in order to get the desired result—a win.(P)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

7. I value the team's ability to not give up and to play with heart.(I)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

8. I feel I have a responsibility only to myself.(HN)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

Practice Situation

1. I believe practice is a process I must go through to be able to play in the games.(R)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

2. I value conditioning the most because it is important for me to be in better physical condition than my opponents.(R)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

3. I believe watching film is an essential element in preparation for a game at the collegiate level.(P)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

4. I believe practice should be a time for the team to develop its full potential.(I)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

5. I believe practice should be place where I am forced to think.(P)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

6. I believe visualization techniques are helpful to utilize during practice time.(PN)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

7. I believe in enforcement of ethical rules, such as no swearing and respect of others.(I)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

8. I believe practice is a time that should be used to plan activities with the team outside of basketball.(HN)

Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1	2	3	4

The Off-Season

1. I value this time to work on improving my strength and conditioning.(R)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

2. I value this time to participate in other activities, particularly outdoor ones, such as hiking, rafting, and/or traveling.(PN)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

3. I believe this is a time for my teammates and I to develop our personal values and beliefs.(I)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

4. I believe that I should be concerned with carefully planning activities that will better my career choice, as well as better my athletic ability.(P)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

5. I value this time to improve my skill level.(R)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

6. I believe this is a time for me to increase my basketball knowledge by reading books, watching videos, and/or working camps.(P)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

7. I believe this is a time for resting and doing whatever I want.(HN)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

8. I find myself carrying over the ethical behaviors, such as sportsmanship and fair play, that I learned throughout the season during the off-season.(I)

Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
------------------------	------------------------	---------------------	---------------------

Code

I= Idealist

PN= Pure Naturalist

HN= Hedonistic Naturalist

P= Pragmatist

R= Realist

Evaluation

By evaluating the subject's answers for each philosophical category, a quantitative result can be given for each of the four philosophic schools of thought. The responses that receive the highest score (Strongly Agree = 4) will be associated with the individual's philosophic orientation. The responses that receive the lowest score (Strongly Disagree = 1) will be associated with the philosophy the subject least identifies with. A quantitative score will be assigned for each of the four philosophic schools of thought by adding up the total points for each of the categories. The two branches of naturalism can have their scores combined to give a total for that category. The results can then be compared to the quantitative values determined for the coach.

APPENDIX D – GROUP ENVIRONMENT QUESTIONNAIRE

Group Environment Questionnaire (GEO)

Team: _____

Date: _____

This questionnaire is designed to assess your perception of your team. There are no wrong or right answers, so please give your immediate reaction. Some of the questions may seem repetitive, but please answer ALL questions. Your personal responses will be kept in the strictest confidence.

The following statements are designed to assess your feelings about YOUR PERSONAL INVOLVEMENT with this team. Please CIRCLE a number from 1 to 9 to indicate your level of agreement with each of these statements.

1. I do not enjoy being a part of the social activities of this team.

Strongly Disagree									Strongly Agree
1	2	3	4	5	6	7	8		9

2. I'm not happy with the amount of playing time I get.

Strongly Disagree									Strongly Agree
1	2	3	4	5	6	7	8		9

3. I am not going to miss the members of this team when the season ends.

Strongly Disagree									Strongly Agree
1	2	3	4	5	6	7	8		9

4. I'm unhappy with my team's level of desire to win.

Strongly Disagree									Strongly Agree
1	2	3	4	5	6	7	8		9

5. Some of my best friends are on this team.

Strongly Disagree									Strongly Agree
1	2	3	4	5	6	7	8		9

6. This team does not give me enough opportunities to improve my personal performance.

Strongly Disagree									Strongly Agree
1	2	3	4	5	6	7	8		9

7. I enjoy other parties rather than team parties.

Strongly Disagree									Strongly Agree
1	2	3	4	5	6	7	8		9

8. I do not like the style of play on this team.

Strongly Disagree									Strongly Agree
1	2	3	4	5	6	7	8		9

18. Our team members do not communicate freely about each athlete's responsibilities during competition or practice.

Strongly Disagree Strongly Agree
 1 2 3 4 5 6 7 8 9

GEQ

The GEQ is a general, rather than situation specific, measure of cohesiveness of sport teams.

Administration

The test should be completed independently, away from distraction, and not immediately before or after a game.

Scoring

Attraction to the Group—Social (ATGS)
 Items 1*, 3*, 5, 7*, and 9

Attraction to the Group—Task (ATGT)
 Items 2*, 4*, 6*, and 8*

Group Integration—Social (GIS)
 Items 11*, 13*, 15, and 17*

Group Integration—Task (GIT)
 Items 10, 12, 14*, 16, and 18*

(*) Items are reverse scored.

Each factor is summed and then an average is taken for individuals, and then for the team.

APPENDIX E – LETTER OF PARTICIPATION TO HEAD COACHES

March 2001

Dear Coach,

I am currently a graduate student at Eastern Illinois University. I am working on completing the thesis requirement for a Master's degree in Athletic Administration under the supervision of Dr. William Russell. I am writing to you to ask for your help in completing a study examining coach-athlete philosophy as it is related to team cohesion in collegiate level women's basketball teams.

The study will examine the philosophic orientation of both the head coach and the athletes by classifying them into one of the four classic philosophies: Idealism, Naturalism, Pragmatism, or Realism. The coach-athlete philosophies will be compared to see if those athletes who share the same philosophy as the head coach perceive higher levels of team cohesion, or closeness.

It is important to look at variations in philosophies in the field of athletics because it can reveal answers to why athletes act in a certain way and can help the coach react in a more effective manner. This study will try to place scientific proof behind the term, 'team chemistry', by creating a survey that may prove to be an effective tool in increasing not only the coach-athlete relationship, but also the athlete-athlete relationship as each individual philosophy is revealed.

For the head coaches, the study requires filling out 2 philosophy surveys only. The approximate time for this is 20 minutes. For the athletes, the study requires filling out a team cohesion survey, in addition to the 2 philosophy surveys. The total time for the completion of the athlete surveys is approximately 30 minutes. I know you are very busy this time of year, but the survey portion of this study will not have to be completed until your basketball season has ended.

At this time, I am asking you to do two things: 1) to let me know if you and your team's participation in this study is possible and 2) to give me an approximate date that you and your team would be available to complete the surveys. You can respond either by phone or by e-mail to begin planning a date for me to come to campus and administer the surveys.

Angie Patzner
(217) 348-1243
apatzner20@hotmail.com

Dr. William Russell
(217) 581-2418

Thanks for your time,

Angela R. Patzner

APPENDIX F – COACH AND ATHLETE CONSENT FORM

Topic: Coach-Athlete Philosophy and Team Cohesion Levels in Collegiate Level Women's Basketball

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 e-mail: apatzner20@hotmail.com

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 Phone: (217) 581-2418
 e-mail: cwdr@eiu.edu

CONSENT

1. Upon signing this consent form, I agree to take part in the research conducted by Angie Patzner and any other persons assisting or associated with the study.
2. I understand the purpose of this project is to assess my philosophic orientation, or beliefs, as they relate to those of the head coach and also as they relate to my perceived levels of team cohesion, or closeness.
3. By participating in this study, I understand the importance of being as honest as possible in all responses to the questions.
4. I understand that my participation in this project is voluntary and I may refuse participation at any time throughout the survey process.
5. I realize the results of this study could be published, but I understand that I will not be identified individually in any such population.
6. If there is a question I feel strongly about not completing, I understand I have the right to leave it unanswered.

 Participant Name(print)

 Signature

 Date

 Witness Signature

APPENDIX G: RAW DATA


```
options linesize=79;
```

```
/* This data set examines the concurrent validity of the PATS in comparison to a parent test on basic schools of philosophy developed by Ziegler. This data set also examines the relationship between athletes who match their coach on personal philosophy related to basketball and perceptions of team coach cohesion as measured by the Group environment Questionnaire*/
```

```
data pats1;
```

```
/* 01-02 subject number
```

```
04 subject condition (1=coach, 2=athlete)
```

```
06 school (1=eastern illinois, 2=quincy, 3=wisconsin, 4=lakeland)
```

```
08-09 Parent test - Idealism total
```

```
11-12 Parent test - Naturalism total
```

```
14-15 Parent test - Pragmatism total
```

```
17-18 Parent test - Realism total
```

```
20-21 PATS test - Idealism total
```

```
23-24 PATS test - Naturalism total
```

```
26-27 PATS test - Pragmatism total
```

```
29-30 PATS test - Realism total
```

```
32 philosophy match (1=yes, 2=no)
```

```
34 Question 16 - (1=Idealism, 2=Naturalism, 3=Pragmatism, 4=Realism)
```

```
36-37 GEQ - ATG-social score
```

```
39-40 GEQ - ATG-task score
```

```
42-43 GEQ - GI-social score
```

```
45-46 GEQ - GI-task score
```

```
48-50 GEQ total
```

```
*/
```

```
data pats1;
```

```
input subj 1-2 condition 4 school 6 parentIDEAL 8-9 parentNATURAL 11-12 parentPRAG 14-15 parentREAL 17-18
  patsIDEAL 20-21 patsNATURAL 23-24 patsPRAG 26-27 patsREAL 29-30 match 32 Q16 34 GEQatgs 36-37
  GEQatgt 39-40 GEQgis 42-43 GEQgit 45-46 GEQtotal 48-50;
```

```
label subj = 'subject'
```

```
condition = 'subject condition'
```

```
school = 'university team'
```

```
parentIDEAL = 'parent test-idealism'
```

```
parentNATURAL = 'parent test-naturalism'
```

```
parentPRAG = 'parent test-pragmatism'
```

```
parentREAL = 'parent test-realism'
```

```
patsIDEAL = 'pats-idealism'
```

```
patsNATURAL = 'pats-naturalism'
```

```
patsPRAG = 'pats-pragmatism'
```

```
patsREAL = 'pats-realism'
```

```
match = 'philosophical match'
```

```
Q16 = 'main reason for basketball participation'
```

```
GEQatgs = 'attraction to group-social'
```

```
GEQatgt = 'attraction to group-task'
```

```
GEQgis = 'group integration-social'
```

```
GEQgit = 'group integration-task'
```

```
GEQtotal = 'team cohesion-total'
```

cards:

01 1 4 14 15 14 16 02 15 20 20 1 1
 02 2 4 17 14 17 17 17 16 17 18 2 1 36 29 21 25 111
 03 2 4 18 13 18 18 21 13 19 17 1 1 42 28 27 43 140
 04 2 4 19 15 19 18 23 10 21 21 1 1 35 32 27 39 133
 05 2 4 18 16 17 16 24 13 18 20 1 1 31 31 17 32 111
 06 2 4 16 15 16 12 20 10 17 20 1 1 38 23 30 40 131
 07 2 4 16 14 15 15 20 16 21 21 2 1 39 31 28 27 125
 08 2 4 16 14 16 17 20 12 19 19 1 1 31 36 18 34 119
 09 2 4 18 15 16 17 22 13 20 21 1 2 36 28 19 31 114
 10 2 4 19 17 19 17 23 16 18 19 1 4 29 25 16 34 104
 11 2 4 18 13 17 14 21 13 16 22 2 2 28 21 14 25 088
 12 2 4 16 13 15 17 22 15 21 22 1 2 29 27 13 18 087
 13 2 4 14 14 16 14 23 18 23 19 1 3 41 23 25 27 116
 14 2 4 17 13 16 16 21 19 20 23 2 1 29 22 18 24 093
 15 1 2 18 18 19 18 23 13 22 19 1 2
 16 2 2 18 15 16 16 23 15 20 22 1 2 22 32 27 41 122
 17 2 2 17 14 16 16 22 14 19 21 1 1 38 32 33 39 142
 18 2 2 18 17 18 19 21 15 16 20 1 2 45 25 31 38 139
 19 2 2 18 16 16 17 22 12 16 17 1 2 43 35 36 44 158
 20 2 2 17 15 17 15 23 11 19 19 1 1 38 25 32 30 125
 21 2 2 20 14 15 16 23 12 20 16 1 1 40 27 30 37 134
 22 2 2 19 16 15 13 23 12 17 20 1 1 42 28 31 35 136
 23 2 2 18 16 17 17 23 13 20 18 1 2 44 26 36 38 144
 24 2 2 19 16 19 16 21 10 20 21 1 1 45 30 35 40 150
 25 2 2 19 15 18 18 23 15 15 19 1 1 45 30 36 42 153
 26 1 1 18 14 16 20 22 14 24 22 1 1
 27 2 1 19 16 17 13 23 15 17 20 2 2 38 23 28 23 112
 28 2 1 17 14 17 17 23 12 22 19 2 1 29 25 16 19 089
 29 2 1 15 15 16 16 16 14 14 21 2 2 20 21 21 17 079
 30 2 1 17 14 18 14 21 14 21 18 1 1 31 13 27 28 099
 31 2 1 18 12 17 13 21 11 19 20 2 1 34 17 20 28 099
 32 2 1 19 12 17 13 18 11 15 20 2 1 35 09 17 14 075
 33 2 1 16 15 19 19 24 16 22 20 2 1 27 14 16 21 078
 34 2 1 17 15 17 17 22 13 15 20 2 4 29 08 21 16 074
 35 2 1 17 18 17 11 24 15 20 18 2 1 30 33 26 16 105
 36 2 1 18 14 16 17 23 13 19 21 2 1 37 35 14 22 108
 37 1 3 16 17 12 13 24 06 21 16 1 1
 38 2 3 14 14 14 15 22 12 21 20 1 1 31 31 30 28 120
 39 2 3 16 14 16 12 22 15 18 21 1 1 35 33 31 36 135
 40 2 3 17 16 17 14 24 14 20 20 1 1 33 21 26 35 115
 41 2 3 15 16 16 13 17 16 15 16 1 1 32 23 31 37 123
 42 2 3 18 15 17 17 23 16 22 19 1 2 24 20 27 42 113
 43 2 3 15 16 16 15 22 14 21 16 1 2 34 35 30 33 132
 44 2 3 15 17 18 17 23 13 21 21 1 3 40 19 21 20 100
 45 2 3 15 18 14 17 18 11 19 16 2 4 19 09 12 17 057
 46 2 3 16 15 17 16 24 15 19 19 1 1 32 14 22 33 101
 47 2 3 18 17 15 14 24 17 20 22 1 1 24 28 27 34 113

```

proc means data=pats1;
  var parentIDEAL parentNATURAL parentPRAG parentREAL patsIDEAL patsNATURAL
  patsPRAG patsREAL GEQatgs GEQatgt GEQgis GEQgit GEQtotal;

proc sort; by condition;
proc means; by condition;
  var parentIDEAL parentNATURAL parentPRAG parentREAL patsIDEAL patsNATURAL patsPRAG patsRE

proc sort; by school;
proc means; by school;
  var parentIDEAL parentNATURAL parentPRAG parentREAL patsIDEAL patsNATURAL patsPRAG patsRE
  GEQatgs GEQatgt GEQgis GEQgit GEQtotal;

proc corr;
  var parentIDEAL parentNATURAL parentPRAG parentREAL patsIDEAL patsNATURAL patsPRAG patsRE.

proc ttest;
  class match;
  var GEQatgs;

proc ttest;
  class match;
  var GEQatgt;

proc ttest;
  class match;
  var GEQgis;

proc ttest;
  class match;
  var GEQgit;

proc ttest;
  class match;
  var GEQtotal;

/*two-way MANOVA (philosophy match * School) on team cohesion*/

proc glm data=pats1;
  class match school;
  model GEQatgs GEQatgt GEQgis GEQgit GEQtotal = match school match*school;
  MANOVA H = match / canonical;
  MANOVA H = match*school;

```

```
proc anova;
  title'follow-up on main effect for team on GEQ scores';
  classes school;
  model GEQatgs GEQatgt GEQgis GEQgit GEQtotal = school;
  means school / duncan;

proc glm data=pats1;
  class match;
  model GEQatgs GEQatgt GEQgis GEQgit GEQtotal = match/nouni;
  MANOVA H = match / canonical;

proc glm data=pats1;
  class school;
  model GEQatgs GEQatgt GEQgis GEQgit GEQtotal = school/nouni;
  MANOVA H = school / canonical;

/*chi-square for question #16 - what was the relationship between philosophical match and response to
question #16
*/
proc freq;
  tables q16 match;
  tables q16*match / chisq;

proc corr;
  var q16 patsIDEAL patsNATURAL patsPRAG patsREAL;
```