THE RELATIONSHIP BETWEEN PLAYING STATUS GRADE LEVEL AND INTERPERSONAL VARIABLES AMONG FEMALE ATHLETES AND NON-ATHLETES

By

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CHAPTER I

INTRODUCTION

For many years psychologists and coaches have been interested in the interpersonal styles of highly skilled and successful athletes. This research has been primarily directed at those who have reached Olympic playing status. However, Robert M. Nideffer (1981) points out that:

> In the past, personality traits or needs such as need for control or the trait of extroversion have failed to have as much predictive value as we might have liked. By looking at the personality traits as needs, desires, and attitudes, and then seeing how these interact with attentional abilities we should be able to be more responsive to situational factors.

Since athletes are viewed as having personalities different from those who are not involved in sports, it seems appropriate to investigate these defferences between athletes and non-athletes. Schendel (1965) found that high school athletes were more poised, ascendant, and self-assured than their peers. As early as 1954, Johnson, Hutton, and Johnson found outstanding athletes to exhibit extreme aggressiveness, freedom from inhibition, and feelings of exceptional self-assurance.

Some researchers have also studied the relationship between maturation and interpersonal style. A study by Kane (1962) found that the control of anxiety, self-control, assertiveness, and extroversion increased with age. However, John Dickenson (1977) found that stable attitudes tend to be formed by puberty and to remain relatively consistent thereafter. Thus, the literature appears to

reveal conflicting results. There is a need to further investigate how age and playing status might interact with these interpersonal variables in the field of athletics.

Statement of the Problem

The primary purpose of this study was to determine if a significant difference existed in interpersonal style between female athletes and non-athletes. The secondary purpose was to determine if significant differences existed in interpersonal style between junior high, high school and college females.

Hypotheses

The following hypotheses were tested at the .05 level of significance:

1. There would be no significant difference in interpersonal styles among starters, other team members, and non-participants.
2. There would be no significant difference in interpersonal styles among junior high school, high school, and college age females.
3. There would be no significant interactions in interpersonal styles between participant status and level of competition.

Delimitations

The study was delimited to:

1. A sample of 160 students from the Central Oklahoma area.
2. Varsity athletic competition as measured by number of starts.
3. Team members who do not qualify as starters.
4. Selected levels of interpersonal style as measured by the Test of Attention and Interpersonal Style.

Limitations

The result of this study may have been affected by the following limitations:

1. The non-athlete's self reports were used to determine prior participation in athletics.

2. The Test of Attention and Interpersonal Style was used as the sole determinant of interpersonal style.

Assumptions

This study was based on the following underlying assumptions:

1. Subjects who did not participate in interscholastic athletics had not previously been involved in athletics for an extended period of time.

2. All responses from the participants during the testing procedures were given as accurately and honestly as possible.

Definitions

For the purpose of this study, definitions have been divided into two categories: conceptual and functional. The conceptual definitions are those used by R.M. Nideffer (1976). The functional definitions are those which hold significance for this study and are defined by the author.

Conceptual Definitions

Behavior control - The degree to which a person tends to be impulsive.

Self-esteem - The degree to which a person values himself or herself

as a person.

Physical Orientation - The degree to which a person participates and enjoys competitive athletics.

Obsessiveness - The degree to which a person worries and ruminates about one particular thing.

Extroversion - The degree to which a person enjoys being with others.

Introversion - The degree to which a person likes to be alone and enjoy quiet times.

Intellectual Expression - The degree to which a person allows his or her thoughts and ideas to be expressed to others.

Negative Affect Expression - The degree to which a person expresses his/her anger and negative feelings to others.

Positive Affect Expression - The degree to which a person expresses his/her feelings of affection to others in both physical and verbal ways.

Functional Definitions

Varsity Starter - A female who participates in a school sponsored interscholastic athletic activity (in this study the sport was basketball) and who is in the starting lineup at least 50% of the time.

Team Member - A female who participates in interscholastic basketball who does not meet the requirements of varsity starter.

Non-athlete - A female who does not participate in a school sponsored interscholastic athletic activity.

Need for the Study

Coaches, educators, and sport psychologists, when working with

athletes, would find it beneficial to better understand these athletes. Confusion exists as to what psychological factors separate the outstanding athletes from the average or part time player or from the non-participant. Few psychological studies have been directed at the junior high, high school or college level. This information could be very helpful to those in the coaching and teaching profession as well as to the athletes themselves.

CHAPTER II

RELATED LITERATURE REVIEW

Interpersonal Style

The purpose of this chapter is to review the literature important to the present study. The review will cover two key areas: influence of grade level on interpersonal style and influence of playing status on interpersonal style.

In the literature regarding the interpersonal style of athletes, many ideas have been hypothesized. Some of these have been reinforced and many others rejected. Richard Suinn (1980) believes that "The need for stimulation is found in the obsessive attention which we devote to sports and especially team activities." This supports the theory that sporting activities are seen as an outlet by many or all of those who compete. Pertinent questions are: What draws a person to athletics or keeps them away, and how is an exceptional athlete different from her peers?

Although there has been extensive research on the characteristics of successful athletes, in 1980 Williams pointed out that the overwhelming majority of this research has been on the male athlete. However, it has yet to be proven that the findings on the male athlete can be generalized to the female athlete. This could be done only if it is believed there are no differences in personality, females have the same needs and motivations as males, and females will respond

the same way to sport and coaching as males (Williams, 1980).

Regarding the article by Williams and Carron (1984), they state that every person, male and female, has the desire to achieve success and avoid failure. These desires are independent and it is possible to be high in one and low in the other, high in both, or low in both. The exact combination which is present in a sports participant places limits on his/her response.

In 1972, Ogilvie studied twenty-four female volunteers from the Olympic games. He found that more than one-half were first born children or first born girls. They exhibited a strong drive to excel, early goal setting, positive self-image, a family atmosphere, and were motivated by their parents and their coach. This research has been supported by earlier studies by Peterson, Wever, and Trousdale (1965).

In attempting to determine what draws a person to sports, many researchers have investigated the possibility that there may be a personality type common to athletes. In 1977, Dickenson found that the inherited characteristics of an individual serve to interact with the reinforcement contingencies to produce a choice of sport rather than a choice between participation and non-participation. He did report, however, that distinct personality types appear to select particular sports with greater frequency and that there also appears to be a personality type who participates in sports in general. In a related study, Neal and Tutko (1975) found that female team athletes scored significantly higher on group dependency than individual athletes. They believed this to indicate that there was greater variability among the athletes, but less skilled women athletes are more extroverted.

The developmental rate for males has been found to be a significant

factor in the success of athletes but Dickenson (1977) noted that the relationship between developmental rate for females and future participation may be lower than for males. Transition from one relationship to another may be accompanied by a process of self adaption. This suggests that there may be a self-concept which is specific for women in the sport situation. Perhaps the self-concept has the most significant impact on the female ahtlete's basic attitudes toward athletic participation (Neal and Tutko, 1975).

Many studies have been aimed at the introversion-extroversion factor for athletes. Dickenson (1977) stated that since sports provide stimulation, it is to be anticipated that this will provide greater reinforcement for extroverts. This is logical and the evidence that extroversion is common among sportsmen is supportive. Dickenson also found that women athletes are most often described as being like the male athletes on the extroversion dimension.

Interpersonal style is in many ways influenced by our family, friends, and society in general. The methos in which one expresses himself/herself may be partly biological but is more than likely a learned experience (Salmela, 1980). If a child is taught to express himself/herself in positive, goal-directed ways, then the result may be an adult who possesses these same characteristics (Harris, 1973). However, if a family does not set high standards, allow the child to compete, or allow the child to choose for himself/herself, then they could not be expected to benefit from the experiences associated with successful or unsuccessful athletic endeavors. Smoll and Smith (1978) report that:

> The extensive social evaluation that can be incurred regarding motor ability makes sports competition an important social process to most youngsters.

Athletics can be seen as a very positive socializing agent at any level. The body becomes the means of achieving purpose (Neal, 1972). However, in 1976 Nelson investigated the relationship between self-concept, ideal self-concept, and motor ability in eighth grade girls and reported that there was no significant difference in self-concept among varying levels of motor performance.

Many researchers and theorists believe that becoming involved in an athletic program influences the interpersonal style of the participant (Slusher, 1967). Many others believe that those with specific personality traits are drawn into athletics (Fisher, 1976). John Dickenson (1977) states: "Those who like sport indulge in it and those who do not, fail to participate." Murphy and White (1978) believe that athletes, like meditators, need to engage in a sport activity on a regular basis for one-half hour in order to achieve a state of heightened well-being.

Influence of Grade Level on Interpersonal Style

Studies which have related age and grade level to interpersonal style have shown mixed results. In 1986, Paludi and Fankell-Hauser studied 80 females and their personality characteristics. They found that compared to older women, younger women were more concerned with interpersonal relationships and less concerned with competitive achievement. In a similar study, Scanlan and Lewthwaite (1986) found that younger children and those who perceived themselves to be more able, experienced more enjoyment than their counterparts. They believed this

to correlate with declining participation at the older age levels.

With age and experience, there are decreases in the anxiety levels of sports participants (Carron, 1984). This may not be true of other areas of the personality. Dickenson (1977) was one of the researchers who investigated personality variables related to age and maturation. He found that stable attitudes tend to be formed by puberty and remain relatively consistent thereafter.

A 1965 study by Schendel found that athletes and non-athletes differed from the outset since both the younger and the older groups differed. This supported his hypothesis that athletic activities would not influence a person's interpersonal style, but rather a person's interpersonal style would influence whether or not they became involved in athletics.

A study by Kane (1962) revealed that control of anxiety, self-esteem, assertiveness, and extroversion all increase with age regardless of whether or not the participants were a member of an athletic team. This would indicate that participation in and of itself is not responsible for the development of these traits.

Influence of Playing Status on Interpersonal Style

Johnson, Hutton, and Johnson (1954) were among the first to study the personality factors of outstanding athletes. They found that these athletes exhibited extreme aggressiveness, freedom from inhibitions, and feelings of exceptional self-assurance. This data indicated that these subjects were significantly extroverted as compared to a non-participating group. They did not hypothesize as to whether these subjects, at the outset, possessed these characteristics.

In 1958, Broth studied college athletes and found that they were lower in anxiety than non-athletes. He also reported that basketball players seemed to be higher in depression than other athletes. This would indicate that some of all of the personality traits may be sport specific. Each sport may entail its own set of interpersonal styles which are positively or negatively affecting success.

In a later study, Black (1961) found a high relationship between self-assurance and attained level of competition. This finding could be a two-way indicator. Increased level of competition could enhance self-assurance or increased level of self-assurance could enhance the level of competition.

Schendel (1965) reported that high school athletes were more poised, ascendent, and self-assured than their peers. This supports the findings of Black (1961) by indicating that athletic competition and self-assurance are interrelated.

In a similar study, Peterson, Wever, and Trousdale (1965) studied female athletes at the Olympic and AAU levels and found them to be more intelligent, conscientious, persevering, and aggressive than their non-athlete counterparts. These were slightly different characteristics, with the exception of aggression, than those reported by Johnson, Hutton, and Johnson in 1954.

In a recent study, 59 athletes and non-athletes evidenced similar psychological patterns. Non-athletes who perceived themselves as having higher satisfaction and success in their physical activity had lower anxiety levels and better feelings about their bodies than those non-athletes who expressed a lower amount of satisfaction. For athletes, those with higher satisfaction had lower anxiety but the same

feelings about their bodies as those athletes who expressed lower satisfaction (Tenenbaum and Furst, 1984).

Best (1986) studied 1,799 high school athletes and non-athletes. He found that athletes value physical development and religion significantly more than non-athletes. For high school students, the athletic environment does not appear to play a distinctly unique role in the formation of the social values. Athletes appear to have the same values as their non-athlete counterparts. Carron (1984) also found no evidence for athletes having different anxiety levels than non-athletes.

CHAPTER III

METHODS AND PROCEDURES

The purpose of this study was to determine if significant differences in interpersonal variables existed between female athletes and non-athletes. It was also the purpose of this study to determine if differences in interpersonal variables existed across age groups.

Selection of the Subjects

The subjects in this study were female junior high basketball players (grades 7-9), high school female basketball players (grades 10-12), and college age female basketball players. The non-athlete group consisted of junior high, high school, and college females. The schools included were: Ripley Junior High and High School, Dale Junior High and High School, and Perkins Junior High and High School. The non-athlete participants attended the same schools. The college age females were selected from area small colleges which included Central State University, St. Gregory's College, and Oklahoma Baptist University. Athletes were deliberately selected from those participating on the women's basketball teams. For the college subjects, non-athletes were selected from introductory health and physical education classes coinciding with practice time for varsity athletics. These were predominantly lower division students. Availabilityof athletic teams and classes was contingent upon the schedules made available by

the participating school's principals and coaches.

A total of 160 subjects participated in the study. This included 56 varsity starters, 44 team members, and 60 non-participants. By grade classification, this included 69 junior high girls, 50 high school age girls, and 41 college age women.

Selection of the Instrument

The Test of Attentional and Interpersonal Style (Nideffer, 1976) was used to determine the levels of the subjects on interpersonal variables. Selected variables were used and scored for this research. These included: behavior control, self-esteem, physical orientation, obsessiveness, extroversion, introversion, intellectual expression, negative affect expression, and positive affect expression. Reliability coefficients for the Test of Attentional and Interpersonal Style ranged from .60 to .93 with a median of .83.

Test Administration

Conditions and Procedures

The Test of Attentional and Interpersonal Style was administered according to the directions to 160 athletes and non-athletes in three junior high schools, three high schools, and three colleges. The administration of the instrument was conducted by the author during May, 1986. Permission was obtained from the parent or guardian of each junior high and high school girl participating. Each subject read each question and responded on the test booklet. During the testing procedure, there was no verbal interaction among subjects. No time limit was imposed for test completion

Methods and Procedures for Statistical Analysis

A 3 x 3 analysis of variance was used to determine if significant differences existed for each dependent variable between varsity starters, other team members, and non-athletes as well as among junior high, high school, and college age females. The .05 level of significance was used to test all hypotheses. Where significance was noted, the Newman-Keuls multiple range test was used for the multiple comparison of means. The statistical computations were carried out using the IBM 3081D computer and the SPSSX statistical computing programs at Oklahoma State University.

CHAPTER IV

RESULTS AND DISCUSSION

This chapter presents the results and discussion of the statistical data relative to the previously stated hypotheses. This chapter contains the following sections: (a) statement of results, (b) analysis of data according to grade level, (c) analysis of data according to playing status, and (d) discussion of the results.

Statement of Results

Significant differences in interpersonal style were found to exist between the different grade levels and also in relation to playing status. Table I indicates means and standard deviations for the dependent variables of interest.

Variables Significant According to Grade

Five variables showed no significant differences according to grade level. These were: extroversion, introversion, intellectual expression, negative affect expression, and positive affect expression.

Variables which did show a significant difference according to grade level included: self-esteem, physical orientation, and behavior control. The reported F values for the main effect are found in the analysis and post hoc results on Table II.

The behavior control scale showed that college age females were

TABLE I

GROUP MEANS AND STANDARD DEVIATIONS
OF INTERPERSONAL STYLE SCORES

	Junior High	High School	College	Varsity Starters	Team Members	Non-Participants	Total
BEHAVIOR CONTROL (BCON)	60.8 ±13.61	58.4 ±12.06	49.9 ±13.39	58.2 ±13.08	55.6 ±15.06	57.5 ±13.47	57.3 ±13.74
SELF-ESTEEM (SES)	50.08 ±15.85	48.1 ±18.04	61.5 ±15.45	57.0 ±14.54	55.7 ±17.46	46.8 ±17.77	52.7 ±17.22
PHYSICAL ORIENTATION (P/O)	55.2 ±11.64	53.6 ±12.43	58.6 ± 9.07	62.1 ± 7.40	58.1 ± 7.70	47.5 ±12.02	55.8 ±11.40
OBSESSIVENESS (OBS)	58.4 ±12.85	54.2 ±16.40	52.3 ±13.56	52.6 ±16.78	54.5 ±15.81	59.0 ±12.44	55.5 ±15.18
EXTROVERSION (EXT)	59.3 ±14.23	60.2 ±11.68	60.0 ±12.29	64.1 ±11.21	59.7 ±12.91	55.8 ±13.27	59.8 ±12.90
INTROVERSION (INT)	47.4 ±11.85	48.7 ±12.77	45.7 ± 9.60	46.3 ±12.23	46.9 ±16.08	48.8 ±12.12	47.4 ±11.62
INTELLECTUAL EXPRESSION (IEX)	50.3 ±12.61	48.7 ±11.45	47.5 ±11.42	49.7 ±10.98	52.5 ±12.07	45.9 ±13.23	49.0 ±12.38
NEGATIVE AFFECT EXPRESSION (NAE)	57.3 ±13.06	57.5 ±13.57	51.5 ±15.24	54.9 ±12.85	54.6 ±16.49	56.7 ±12.93	55.9 ±13.96
POSITIVE AFFECT EXPRESSION (PAE)	56.9 ±10.88	58.5 ±11.97	57.3 ± 9.98	59.8 ±10.64	56.4 ±12.58	56.3 ± 9.81	57.5 ±10.97

significantly lower than both high school and junior high school girls. Self-esteem also showed a significant difference according to grade level. College age females scored higher on self-esteem than did either junior high or high school age girls. Higher degrees of physical orientation were expressed by college females than by high school or junior high girls.

TABLE II

PARTIAL ANALYSIS OF VARIANCE RESULTS
FOR GRADE LEVELS

Dependent Variable	Sum of Squares	DF	Mean Square	F	Signif of F
Self-Esteem	4821.173	2	2410.586	9.613	0.000
Physical Orientation	722.022	2	361.011	4.210	0.017
Behavior Control	3220.432	2	1610.215	9.439	0.000

Variables Significant According to Playing Status

Four variables were found to have no significant differences according to playing status. These were: behavior control, introversion, negative affect expression, and positive affect expression.

Four variables were found to have a significant difference according to playing status. These included: self-esteem, physical orientation, extroversion, and intellectual expression. With regard to self-esteem, non-participants scored lower than members or starters. Physical orientation scores showed that non-participants scored lower than team members and varsity starters. Non-participants also showed

scores lower on intellectual expression than did starters and team members. Lastly, non-participants scored lower than starters on extroversion. The reported F values for the main effect are found in the analysis and post hoc results on Table III.

TABLE III

PARTIAL ANALYSIS OF VARIANCE RESULTS
FOR PLAYING STATUS

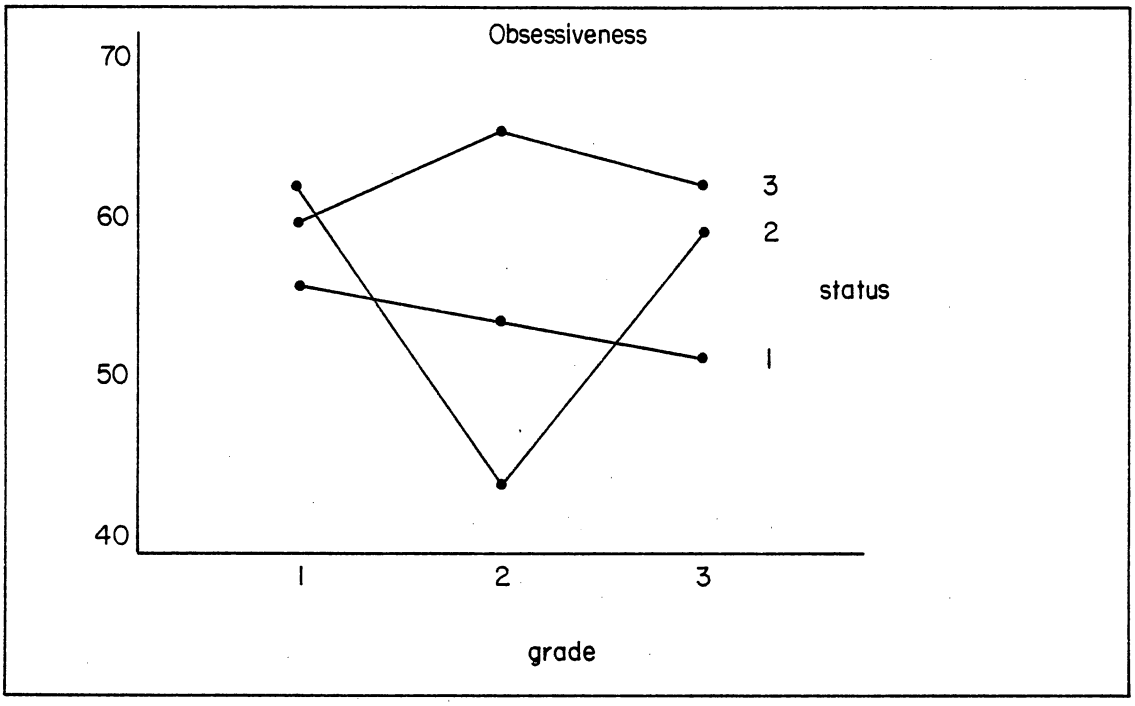
Dependent Variables	Sum of Squares	DF	Mean Square	F	Signif of F
Self-Esteem	4066.507	2	2033.253	8.108	0.000
Physical Orientation	6728.275	2	3364.137	39.230	0.000
Extroversion	2019.580	2	1009.790	6.384	0.002
Intellectual Expression	1081.524	2	540.762	3.618	0.029

Significant Grade by Status Interaction

Only one interpersonal variable, obsessiveness, showed an interaction between playing status and grade level. This significant interaction occurred with team members at the high school level. Results of this interaction can be seen in Table IV.

TABLE IV

GRADE BY STATUS INTERACTION



Grade 1 - Junior high students

Grade 2 - High school students

Grade 3 - College age students

Status 1 - Varsity starters

Status 2 - Other team members

Status 3 - Non-participants

Discussion

The data from the study revealed significant differences in interpersonal style across age groups. Junior high, high school, and college age female basketball players showed differences in self-esteem, physical orientation, and behavior control. This finding concurred with findings by Dickenson, 1977; Carron, 1984; and Scanlan and Lewthwaite, 1986, all of which reported that age and experience affected interpersonal style. This finding is not surprising inasmuch as younger children are generally not regarded as possessing the same characteristics as high school or college age females. The fact that those college students in the study aspired to attain this level indicates this as well. One question of concern is, are these individuals at the college level different from those at the lower grades because of their attained level, or are they at the college level because they were different at the outset? If individuals do indeed differ with regard to grade level, can their interpersonal style be enhanced while they are still at the lower age levels? If factors such as behavior control, self-esteem, physical orientation and obsessiveness could be enhanced, this would be of significant importance to parents and counselors.

The younger groups tended to be somewhat more impulsive. In addition, Nideffer (1981) believes that they are more likely to engage in activities that could be considered antisocial though not necessarily harmful. In agreement with this, it was found that junior high and high school students scored higher on behavior control than did college students.

Kane's 1962 study revealed that levels of self-esteem increased with age, but Nelson (1976) reported that there was no significant difference

in self-concept among varying levels of motor performance for eighth graders. In this study, there were differences in self-esteem. Junior high and high school students scored lower than their college counterparts. This indicates that with age and maturation, self-esteem is enhanced.

Physical orientation increased over the grade levels also. This indicates that college students enjoy and participate in more competitive athletics than the average high school student.

In conflict to the study by Kane (1962) which revealed that assertiveness and extroversion increased with age, it was found that there was no difference across grade levels on extroversion, introversion, intellectual expression or positive or negative affect expression.

A significant difference was also found in interpersonal style according to playing status. This finding concurred with previous research by Peterson, Wever, and Trousdale, 1962; Schendel, 1965; and Tenebaum and Furst (1984). The subjects were divided into three groups which included varsity starters, other team members, and non-participants. All participants were members of female basketball teams. Analysis revealed that these groups differed on self-esteem, physical orientation, obsessiveness, extroversion and intellectual expression. These findings may be partially explained with regard to the season during which the testing took place. All testing was done in May, 1986, only shortly after the basketball season had ended. This could have affected both self-esteem and obsessiveness in the participants although all of the teams tested did moderately well in the playoffs.

On the behavior control scale, extremely high scores are associated with authority conflicts (Nideffer, 1981). Leaders score high. The

results of this study showed that non-participants exhibited lower scores on behavior control as compared to both team members and varsity starters. This finding may indicate that those with leadership capabilities are participating in athletic programs regardless of their motor ability.

Also found to be of significance according to playing status is self-esteem. This is in accordance with the studies by Johnson, Hutton and Johnson, 1954; Black, 1961; Schendel, 1965; Ogilvie, 1972; and Dickenson, 1977. Starters and team members exhibited higher self-esteem than those not participating. This indicates that sports participants think more of themselves and feel that others would see them as such.

Varsity starters also showed a lesser degree of obsessiveness than non-participants. This is in contrast to the statement by Suinn (1980) who said, "The need for stimulation is found in the obsessive attention which we devote to sports and especially team activities." This could be interpreted in a way such that athletes direct their obsessiveness into the sport itself whereas non-participants would not have this outlet. This would account for the higher degree of obsessiveness found in other areas of the non-athlete.

Two variables, extroversion and intellectual expression were both relevant according to playing status. These are mentioned together in that they are both part of the "team" concept. Varsity starters were found to be more extroverted than non-participants. This indicates that the athletes are more warm, outgoing, and need to be with others. Extroverts could be drawn to an athletic activity because of this, and those who do not possess these qualities could shy away from them. Intellectual expression also showed similar results. Starters indicated

that they were better able to express their thoughts and ideas to other people than were non-participants. This finding could relate to the fact that those participating in athletics also exhibited stronger levels of self-esteem and extroversion. Higher levels of self-assurance would more readily allow for students to express their thoughts and ideas without fear of ridicule.

In summary, it appears that interpersonal style differs across age groups. As grade level increased, behavior control decreased, as did obsessiveness. However, self-esteem and physical orientation increased. It also appears that interpersonal style differs according to playing status. Self-esteem, physical orientation, extroversion and intellectual expression all increase as playing status increases.

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This chapter contains a summary of the research study, the findings achieved from the analysis of the data collected, conclusions concerning the data, and recommendations for future study.

Summary

The primary purpose of this study was to determine if significant differences existed between female basketball players and non-participants with regard to playing status and grade level on interpersonal styles. Interpersonal style was determined by scores resulting from the Test of Attentional and Interpersonal Style.

A total of 160 female subjects enrolled in junior highs, high schools, and small colleges in the Central Oklahoma area were administered the Test of Attentional and Interpersonal Style. The subjects were classified according to athletic participation as either varsity starters, other team members, or non-participants. They were also studied according to grade level. These levels were junior high (grades 7-9), high school (grades 10-12), and college students.

Findings

The data collected in this study were analyzed and the following

findings were yielded:

1. H_0 There is no significant difference in interpersonal style between starters, other team members, and non-participants. Hypothesis one was rejected as significant differences were found in self-esteem, physical orientation, extroversion and intellectual expression.

2. H_0 There is no significant difference in interpersonal style between junior high, high school, and college females. Hypothesis two was rejected as there were significant differences found in behavior control, self-esteem, and physical orientation.

3. H_0 There is no significant interaction between grade level and playing status. Hypothesis three was rejected because a significant interaction was found for obsessiveness.

Conclusions

Results of the analysis indicated that differences do exist between athletes and non-athletes as well as across grade levels. Both of these were found to be unrelated to some aspects of interpersonal style which included introversion, negative affect expression and positive affect expression.

Recommendations

The literature reviewed contained many studies on the interpersonal style of athletes. Few of these, however, dealt with athletes other than those in Olympic competition.

In reviewing the methods, procedures, and results of this study, the author believes the following recommendations to be in order:

1. The sample group should be expanded to include both males and

females. This would allow for further comparisons of interpersonal style between these two groups.

2. The sample group should be expanded to include urban school systems and major universities as well as rural schools and small colleges.

3. The sample group should be expanded to include athletes from sports other than basketball.

4. The study should be replicated using other instruments for measuring interpersonal style.

5. The study should be replicated comparing those participating in team sports to those participating in individual sports.

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APPENDIX

NIDEFFERS TEST OF ATTENTIONAL AND INTERPERSONAL STYLE

	NEVER	RARELY	SOMETIMES	FREQUENTLY	ALL THE TIME
1. When people talk to me I find myself distracted by the sights and sounds around me.	☐	☐	☐	☐	☐
2. When people talk to me I find myself distracted by my own thoughts and ideas.	☐	☐	☐	☐	☐
3. All I need is a little information and I can come up with a large number of ideas.	☐	☐	☐	☐	☐
4. My thoughts are limited to the objects and people in my immediate surroundings.	☐	☐	☐	☐	☐
5. I need to have all the information before I say or do anything.	☐	☐	☐	☐	☐
6. The work I do is focused and narrow, proceeding in a logical fashion.	☐	☐	☐	☐	☐
7. I run back and forth from task to task.	☐	☐	☐	☐	☐
8. I seem to work in "fits and starts" or "bits and pieces".	☐	☐	☐	☐	☐
9. The work I do involves a wide variety of seemingly unrelated material and ideas.	☐	☐	☐	☐	☐
10. My thoughts and associations come so rapidly I can't keep up with them.	☐	☐	☐	☐	☐
11. The world seems to be a booming buzzing brilliant flash of color and confusion.	☐	☐	☐	☐	☐
12. When I make a mistake it is because I did not wait to get all of the information.	☐	☐	☐	☐	☐
13. When I make a mistake it is because I waited too long and got too much information.	☐	☐	☐	☐	☐
14. When I read it is easy to block out everything but the book.	☐	☐	☐	☐	☐
15. I focus on one small part of what a person says and miss the total message.	☐	☐	☐	☐	☐
16. In school I failed to wait for the teachers' instructions.	☐	☐	☐	☐	☐
17. I have difficulty clearing my mind of a single thought or idea.	☐	☐	☐	☐	☐
18. I think about one thing at a time.	☐	☐	☐	☐	☐
19. I get caught up in my thoughts and become oblivious to what is going on around me.	☐	☐	☐	☐	☐
20. I theorize and philosophize.	☐	☐	☐	☐	☐
21. I enjoy quiet, thoughtful times.	☐	☐	☐	☐	☐
22. I would rather be feeling and experiencing the world than my own thoughts.	☐	☐	☐	☐	☐
23. My environment is exciting and keeps me involved.	☐	☐	☐	☐	☐
24. My interests are broader than most people's.	☐	☐	☐	☐	☐

	NEVER	RARELY	SOMETIMES	FREQUENTLY	ALL THE TIME
25. My interests are narrower than most people's.	☐	☐	☐	☐	☐
26. It is easy for me to direct my attention and focus narrowly on something.	☐	☐	☐	☐	☐
27. It is easy for me to focus on a number of things at the same time.	☐	☐	☐	☐	☐
28. It is easy for me to keep thoughts from interfering with something I am watching or listening to.	☐	☐	☐	☐	☐
29. It is easy for me to keep sights and sounds from interfering with my thoughts.	☐	☐	☐	☐	☐
30. Happenings or objects grab my attention.	☐	☐	☐	☐	☐
31. It is easy for me to keep my mind on a single thought or idea.	☐	☐	☐	☐	☐
32. I am good at picking a voice or instrument out of a piece of music that I am listening to.	☐	☐	☐	☐	☐
33. With so much going on around me, it's difficult for me to think about anything for any length of time.	☐	☐	☐	☐	☐
34. I am good at quickly analyzing complex situations around me, such as how a play is developing in football or which of four or five kids started a fight.	☐	☐	☐	☐	☐
35. At stores I am faced with so many choices I can't make up my mind.	☐	☐	☐	☐	☐
36. I spend a great deal of my time thinking about all kinds of ideas I have.	☐	☐	☐	☐	☐
37. I figure out how to respond to others by imagining myself in their situation.	☐	☐	☐	☐	☐
38. In school I would become distracted and didn't stick to the subject.	☐	☐	☐	☐	☐
39. When I get anxious or nervous my attention becomes narrow and I fail to see important things that are going on around me.	☐	☐	☐	☐	☐
40. Even though I am not hungry, if something I like is placed in front of me, I'll eat it.	☐	☐	☐	☐	☐
41. I am more of a doing kind of person than a thinking one.	☐	☐	☐	☐	☐
42. In a room filled with children or out on a playing field, I know what everyone is doing.	☐	☐	☐	☐	☐
43. It is easy for me to keep my mind on a single sight or sound.	☐	☐	☐	☐	☐
44. I am good at rapidly scanning crowds and picking out a particular person or face.	☐	☐	☐	☐	☐
45. I have difficulty shifting back and forth from one conversation to another.	☐	☐	☐	☐	☐
46. I get confused trying to watch activities such as a football game or circus where a number of things are happening at the same time.	☐	☐	☐	☐	☐
47. I have so many things on my mind that I become confused and forgetful.	☐	☐	☐	☐	☐
48. On essay tests my answers are (were) too narrow and don't cover the topic.	☐	☐	☐	☐	☐

	NEVER	RARELY	SOMETIMES	FREQUENTLY	ALL THE TIME
49. It is easy for me to forget about problems by watching a good movie or by listening to music.	☐	☐	☐	☐	☐
50. I can't resist temptation when it is right in front of me.	☐	☐	☐	☐	☐
51. In games I make mistakes because I am watching what one person does and forget about the others.	☐	☐	☐	☐	☐
52. I can plan several moves ahead in complicated games like bridge and chess.	☐	☐	☐	☐	☐
53. In school I was not a "thinker".	☐	☐	☐	☐	☐
54. In a roomful of people I can keep track of several conversations at the same time.	☐	☐	☐	☐	☐
55. I have difficulty telling how others feel by watching them and listening to them talk.	☐	☐	☐	☐	☐
56. People have to repeat things to me because I become distracted by irrelevant sights or sounds around me.	☐	☐	☐	☐	☐
57. I make mistakes because I try to do too many things at once.	☐	☐	☐	☐	☐
58. I am good at analyzing situations and predicting in advance what others will do.	☐	☐	☐	☐	☐
59. On essay tests my answers are (were) too broad, bringing in irrelevant information.	☐	☐	☐	☐	☐
60. People fool me because I don't bother to analyze the things that they say; I take them at face value.	☐	☐	☐	☐	☐
61. I would much rather be doing something than just sitting around thinking.	☐	☐	☐	☐	☐
62. I make mistakes because my thoughts get stuck on one idea or feeling.	☐	☐	☐	☐	☐
63. I am constantly analyzing people and situations.	☐	☐	☐	☐	☐
64. I get confused at busy intersections.	☐	☐	☐	☐	☐
65. I am good at glancing at a large area and quickly picking out several objects, such as in those hidden figure drawings in children's magazines.	☐	☐	☐	☐	☐
66. I get anxious and block out everything on tests.	☐	☐	☐	☐	☐
67. Even when I am involved in a game or sport, my mind is going a mile a minute.	☐	☐	☐	☐	☐
68. I can figure out how to respond to others just by looking at them.	☐	☐	☐	☐	☐
69. I have a tendency to get involved in a conversation and forget important things like a pot on the stove, or like leaving the motor running on the car.	☐	☐	☐	☐	☐
70. It is easy for me to bring together ideas from a number of different areas.	☐	☐	☐	☐	☐
71. Sometimes lights and sounds come at me so rapidly they make me lightheaded or dizzy.	☐	☐	☐	☐	☐
72. People have to repeat things because I get distracted by my own irrelevant thoughts.	☐	☐	☐	☐	☐

	NEVER	RARELY	SOMETIMES	FREQUENTLY	ALL THE TIME
73. People pull the wool over my eyes because I fail to see when they are obviously kidding by looking at the way they are smiling or listening to their joking tone.	☐	☐	☐	☐	☐
74. I can spend a lot of time just looking at things with my mind almost a complete blank except for reflecting the things that I see.	☐	☐	☐	☐	☐
75. I sometimes confuse others because I tell them too many things at once.	☐	☐	☐	☐	☐
76. I engage in physical activity.	☐	☐	☐	☐	☐
77. People describe me as serious.	☐	☐	☐	☐	☐
78. I sit alone listening to music.	☐	☐	☐	☐	☐
79. People take advantage of me.	☐	☐	☐	☐	☐
80. I keep my thoughts to myself.	☐	☐	☐	☐	☐
81. I keep my feelings to myself.	☐	☐	☐	☐	☐
82. I am good at getting my own way.	☐	☐	☐	☐	☐
83. I like to argue.	☐	☐	☐	☐	☐
84. Others see me as a loner.	☐	☐	☐	☐	☐
85. I talked a lot in class when I was in school.	☐	☐	☐	☐	☐
86. I enjoy intellectual competition with others.	☐	☐	☐	☐	☐
87. I enjoy individual athletic competition.	☐	☐	☐	☐	☐
88. I compete(d) athletically.	☐	☐	☐	☐	☐
89. I physically express my feelings of affection.	☐	☐	☐	☐	☐
90. I compete with myself intellectually.	☐	☐	☐	☐	☐
91. I compete with myself physically.	☐	☐	☐	☐	☐
92. I enjoy activities with danger or an element of the unknown in them.	☐	☐	☐	☐	☐
93. I express my opinions on issues.	☐	☐	☐	☐	☐
94. I can keep a secret.	☐	☐	☐	☐	☐
95. When I believe deeply in something I find I am a poor loser and unable to compromise.	☐	☐	☐	☐	☐
96. I am socially self-confident when interacting with those who are like myself.	☐	☐	☐	☐	☐

	NEVER	RARELY	SOMETIMES	FREQUENTLY	ALL THE TIME
97. I am socially self-confident when interacting with authority figures.	☐	☐	☐	☐	☐
98. I am socially self-confident when talking in front of large groups.	☐	☐	☐	☐	☐
99. I am socially self-confident when talking with the opposite sex.	☐	☐	☐	☐	☐
100. I express my anger.	☐	☐	☐	☐	☐
101. I dated in high school.	☐	☐	☐	☐	☐
102. People think I am a clown.	☐	☐	☐	☐	☐
103. I get mad and express it.	☐	☐	☐	☐	☐
104. I get down on myself.	☐	☐	☐	☐	☐
105. I was one of the smartest kids in school.	☐	☐	☐	☐	☐
106. I am a good person.	☐	☐	☐	☐	☐
107. My feelings are intense.	☐	☐	☐	☐	☐
108. I need to help others.	☐	☐	☐	☐	☐
109. I need to be liked.	☐	☐	☐	☐	☐
110. I enjoy planning for the future.	☐	☐	☐	☐	☐
111. I wish I lived in a different time.	☐	☐	☐	☐	☐
112. I feel guilty.	☐	☐	☐	☐	☐
113. I feel ashamed.	☐	☐	☐	☐	☐
114. I am seen as a cold person by others.	☐	☐	☐	☐	☐
115. I am a good mixer.	☐	☐	☐	☐	☐
116. I am socially outgoing.	☐	☐	☐	☐	☐
117. I have difficulty waiting for good things to happen.	☐	☐	☐	☐	☐
118. I peeked at Christmas time.	☐	☐	☐	☐	☐
119. When I am angry I lose control and say things that sometimes hurt others.	☐	☐	☐	☐	☐
120. I have been angry enough that I physically hurt someone.	☐	☐	☐	☐	☐

	NEVER	RARELY	SOMETIMES	FREQUENTLY	ALL THE TIME
121. At dances or parties I find a corner and avoid the limelight.	☐	☐	☐	☐	☐
122. I acted in dramatic productions in high school and/or college.	☐	☐	☐	☐	☐
123. In school the kids I hung around with were athletes.	☐	☐	☐	☐	☐
124. In school the kids I hung around with were intellectuals.	☐	☐	☐	☐	☐
125. In school the kids I hung around with were popular.	☐	☐	☐	☐	☐
126. In school the kids I hung around with were outcasts or loners.	☐	☐	☐	☐	☐
127. People trust me with their secrets.	☐	☐	☐	☐	☐
128. I am in control of interpersonal situations.	☐	☐	☐	☐	☐
129. I fought in school.	☐	☐	☐	☐	☐
130. I have used illegal drugs.	☐	☐	☐	☐	☐
131. In groups I am one of the leaders.	☐	☐	☐	☐	☐
132. People admire me for my intellect.	☐	☐	☐	☐	☐
133. People admire me for my physical ability.	☐	☐	☐	☐	☐
134. People admire me for my concern for others.	☐	☐	☐	☐	☐
135. People admire me for my social status.	☐	☐	☐	☐	☐
136. I ran for class offices in school.	☐	☐	☐	☐	☐
137. I feel as though I am a burden to others.	☐	☐	☐	☐	☐
138. People see me as an angry person.	☐	☐	☐	☐	☐
139. I see myself as an angry person.	☐	☐	☐	☐	☐
140. I have a lot of energy for my age.	☐	☐	☐	☐	☐
141. I am always on the go.	☐	☐	☐	☐	☐
142. I cut school in high school.	☐	☐	☐	☐	☐
143. I have engaged in activities that could get me in trouble with the police.	☐	☐	☐	☐	☐
144. I guess you could call me a poor loser.	☐	☐	☐	☐	☐

VITA

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Master of Science

Thesis: THE RELATIONSHIP BETWEEN PLAYING STATUS, GRADE LEVEL, AND INTERPERSONAL VARIABLES AMONG FEMALE ATHLETES AND NON-ATHLETES

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