

A STUDY OF THE ATTRIBUTIONAL STYLE AND PERFORMANCE
OF ELITE NCAA DIVERS

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recommend that it be accepted as fulfilling the dissertation requirement.

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SIGNED: Michele A. Mitchell

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DEDICATION

I dedicate this dissertation to my children, Ariana and Dakota.
My advanced education has taken the better part of their short lives.
In their eyes, education never ends...at least not for their mother.
I hope in the future, they will follow my example.

TABLE OF CONTENTS

ABSTRACT.....	8
INTRODUCTION	10
Diving: An Art Form	10
Divisional structure of the NCAA	15
NCAA Swimming/Diving Participation Rates	17
Understanding Diving: Rules.....	18
NCAA Qualification Procedures	21
Statement of the Problem.....	22
Definitions of terms	24
Overview of the remainder of the paper	24
LITERATURE REVIEW.....	25
Weiner’s Cognitive Model of Attribution	26
Overview of Motivation.....	32
Intrinsic Motivation Theories	33
Overview of Attributional Theory	36
Gender Differences in Attribution	38
Flow theory	45
Perceived Motivational Climate	47
The Coaches’ Role in Motivation.....	56
Attributions in Sport	58
Personal Perceptions of Success and Failure	62
The Attributional Style Questionnaire.....	66
Summary.....	68
RESEARCH METHODS AND PROCEDURES	70
Research Questions.....	70
Research Design/Data Collection	71
Population Identification.....	73
Assurance of Anonymity	73
Sample Population	73
Instrumentation	73
Validity and Reliability.....	76
Data Analysis	78
RESULTS AND DISCUSSION	81
Research Findings.....	82
Survey Response.....	82
CONCLUSIONS.....	111
Results of this study.....	112
Generalizability.....	116
Recommendations for future research	118
Summary of results and findings	120
APPENDIX A: MEN’S NCAA SPONSORSHIP AND PARTICIPATION REPORT	122
APPENDIX B: WOMEN’S NCAA SPONSORSHIP AND PARTICIPATION REPORT	124

TABLE OF CONTENTS - Continued

APPENDIX C: DIVE GROUPS.....	126
APPENDIX D: DIVING BODY POSITIONS	127
APPENDIX E: DIVING DEGREE OF DIFFICULTY TABLE	128
APPENDIX F: DIVING SHEET WITH SCORES	131
APPENDIX G: JUDGING SCORE RATING.....	132
APPENDIX H: MEN’S AND WOMEN’S NCAA CHAMPIONSHIP HANDBOOK	134
APPENDIX I: 2005 NCAA MEN’S AND WOMEN’S DIVING CHAMPIONSHIP RESULTS	139
APPENDIX J: ATTRIBUTIONAL STYLE QUESTIONNAIRE.....	145
APPENDIX K: COACH’S EMAIL OF EXPLANATORY OF STUDY	149
APPENDIX L: NCAA DIRECTOR OF CHAMPIONSHIPS APPROVAL LETTER.....	150
APPENDIX M: QUALIFIED DIVERS’ EMAIL OF EXPLANATION OF STUDY	151
APPENDIX N: SUBJECTS’ CONSENT FORM AND APPROVAL.....	152
APPENDIX O: PERMISSION LETTER FROM DR. MARTIN E. P. SELIGMAN.....	155
APPENDIX P: SCORING KEY FOR ASQ.....	156
APPENDIX Q: FREQUENCIES.....	157
APPENDIX R: FREQUENCIES.....	169
APPENDIX S: CROSSTABULATIONS	193
APPENDIX T: DESCRIPTIVES	202
APPENDIX U: MEANS.....	203
APPENDIX V: GENERAL LINEAR MODEL.....	204
APPENDIX W: CORRELATIONS	206
REFERENCES	208

ABSTRACT

In the sport of springboard and platform diving, subjective scoring is used. Based on a ten point scale, judges give immediate scores which reflect the diver's performance. Each diver performs a proscribed number of dives and the total of all dives is tallied to decide final placement. While final placement in a competition is determined by physical skill, a diver's mental state often determines how successful the athlete will in the competition. While there is a plethora of literature that has examined attributions of physical education classes and other sports, there is a dearth of studies addressing the attributional style of elite NCAA male and female divers.

Diving requires extreme athleticism, fearlessness and a heightened kinesthetic awareness in becoming both skill-proficient and competitive. This in turn requires intrinsic motivation to meet those challenges as well as being able to make causal attributions from one competition to the next. The purpose of this study is to determine the attributional style of elite NCAA male and female divers as well as to determine if there is a difference in attributional style between male and female divers. Further, this study will determine if the attributive style is related to performance and whether there is a difference between elite NCAA male and female divers.

The study will take place at the 2005 NCAA Men's and Women's Diving Championships. At each event and at the completion of his/her final diving event, each athlete will be asked to complete a self-report questionnaire – the Attributional Style

Questionnaire. An objective rating of each diver's performance will be paired with his or her attributional style, as measured by the questionnaire. These data will be analyzed statistically to determine if gender has an effect on the attributional style of elite NCAA male and female divers.

INTRODUCTION

Diving: An Art Form

Fancy diving is both an art and a sport. As an art, it has the beauty and grace of ballet. As a sport, it is gymnastics performed over water. Diving is a valid art form. The athlete must begin with a basic dive. The diver then creates a personal interpretation of that move, mentally prepares, and transforms these thoughts into physical action while thrusting from the springboard or platform (Lee, 1979).

Diving is a highly specialized aquatic sport that utilizes principles of physics and body mechanics to attain patterns of bodily flight as the diver rises and descends through the air (Fairbanks, 1963). Ease of performance is a measure of perfection, and the more effortless it appears, the more a dive can be appreciated. The sport is quite thrilling – from the beginner’s anticipation and fear when attempting a new dive to the adrenalin flowing through the body of an Olympic diver preparing to execute a dive practiced for years, hoping to win a gold medal (Lee, 1979).

There is an intangible poignancy about beautiful physical performance in diving, as well as in dancing, skating, swimming, or even walking. Over and above the effects of smooth efficient mechanics, there are added the human elements of unique style, personality, sense of achievement, and the performer’s own cognizance of the skill and action so quickly directed, enacted, visualized, and evaluated. All of this communicates

the excitement and enhances the beauty of the few seconds of movement we call a dive
(Fairbanks, 1963).

Diving: Sport History

The origin of fancy diving goes as far back as the 17th century in connection with the great gymnastic movement in Germany and Sweden. In the summertime, gymnasts moved their equipment to the beaches, and acrobatics over the water became a part of their activities. Diving then is more related to gymnastics than to swimming (O'Brien, 1996).

The sport of diving has been in the Olympic program since 1904. The men's platform event (10 meters/33 feet) was first included as a competitive Olympic event as part of the swimming competition at the 1904 St. Louis Games. . The men's springboard diving event (3 meters/11 feet) was then included in the 1908 London Games. The women's platform event was added to the competitive roster in 1928. It took another 12 years before the first women's springboard competition took place.

Mike Peppe, the swimming and diving coach at Ohio State from 1931 to 1963 is considered the father of collegiate diving in the United States. He did more to promote and develop diving in this country than any other person. By maintaining a strong squad of divers on the collegiate swimming teams and treating diving and swimming with equal importance, Peppe encouraged other schools to emphasize diving in order to compete with his teams evenly (O'Brien, 1996). His influence has resulted in improved facilities for diving, more practice time being made available, greater respect for the sport and the growth of a new profession – that of a “diving” coach. Due to Peppe's influence, the

sport of diving has been included as a scored event within the swimming format at the collegiate level for over 70 years.

Title IX Legislative Impact

Title IX of the Educational Amendments of 1972 was landmark federal legislation banning sex discrimination in schools, whether in academics or athletics. It states, “No person in the United States shall, on the basis of sex, be excluded from participation in, or denied the benefits of, or be subjected to discrimination under any education program or activity receiving federal aid.”

In regard to intercollegiate athletics, there are three primary areas that determine if an institution is in compliance with Title IX:

1. athletic financial assistance
2. accommodation of athletic interests and abilities
3. other program needs

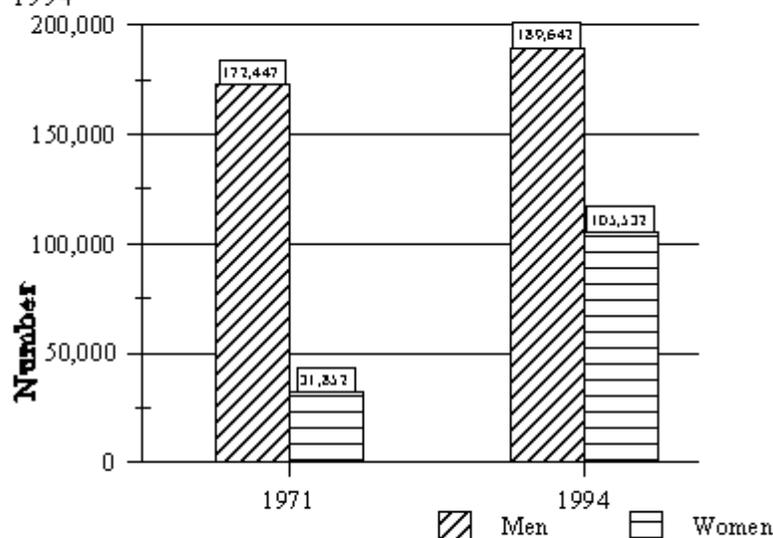
Appraisal of compliance is on a program-wide basis, not on a sport-by-sport basis (see Figure 1).

Before the passage of Title IX, athletic scholarships for college women were rare, no matter how great their talent. After winning two gold medals in the 1964 Olympics, swimmer, Donna deVarona, could not obtain a college swimming scholarship: for women they did not exist. It took time and effort to improve the opportunities for young women: two years after Title IX was voted into law, an estimated 50,000 men were attending U.S. colleges and universities on athletic scholarships – and fewer than 50

women. In 1973, the University of Miami (Florida) awarded the first athletic scholarships to women – a total of 15 in golf, swimming, diving and tennis. Today, college women receive about one-third of all athletic scholarship dollars

(<http://www.ed.gov/pubs/TitleIX/part5.html>).

Figure 7.— Intercollegiate Athletics Participation in NCAA Member Institutions, by Sex: 1971 and 1994



SOURCE: U.S. General Accounting Office, *Intercollegiate Athletics: Status of Efforts to Promote Gender Equity*, October 25, 1996; *Federal Register*, December 11, 1979.

Due to Title IX mandates in the 1970's, women's diving was added to the NCAA roster of sports in 1980. The NCAA began administering women's athletics programs in 1980 when Divisions II and III established 10 championships for 1981-1982. A year later, the historic 75th Convention adopted an extensive governance plan to include women's athletics programs, services and representation. The delegates expanded the women's championships program with the addition of 19 events, swimming and diving being one of them. During the 2005-2006 season, the NCAA celebrated the 25th

anniversary of the inclusion of women's swimming and diving championships as nationally contested sports.

Divisional structure of the NCAA

There are three divisions of the NCAA: Division I, which is then subdivided into Division I-A for institutions that are the larger football-playing schools in Division I and Division I-AA for institutions playing football at the next level down from Division I-A, Division II and Division III.

Membership in any division requires an institution to sponsor a minimum number of sport programs and it is held to certain restrictions in terms of athletic scholarship funding to student-athletes. Additional membership requirements include football stadium size, attendance at home football contests, and scheduling of competitions against other division member schools. Each division also has its own philosophical statement providing operational guidelines to the member institutions within that division.

Division I universities recognize the dual objective of serving its university or college community along with serving the general public. Division I athletic departments are usually larger in terms of numbers of sports sponsored, amount of scholarships available for each sport, number of coaches and numbers of administrators. They also have larger budgets due to larger teams, more coaches and higher travel costs. These schools believe in offering and financing extensive opportunities for participation in varsity intercollegiate athletics for both men and women. They sponsor one or both of

the traditional spectator-oriented, income-producing sports of football and basketball and believe in scheduling competitions with other Division I members. For all of this, the schools in this division strive to finance their athletics program insofar as possible from revenues generated by the program. To that end, these institutions strive to have teams compete and be seen in the highest regional and national championships offered.

Division II schools generally have a smaller student population than Division I. Thus, their athletic department budgets are smaller than those of Division I. Division II schools believe in permitting athletically related financial aid for their athletes but on a more modest basis than the Division I schools. They too recognize the dual objective of serving its university or college community along with serving the general public.

Division III schools place special importance on the impact of athletics on the participants rather than on the spectators and place greater emphasis on the internal constituency than on the general public and its entertainment needs. Division III schools do not offer athletically related financial aid to any student. Rather they encourage the development of sportsmanship and positive social attitudes in all constituents, including student-athletes, coaches, administrative personnel and spectators. They offer as many sports as it possible within the budget (equally between men and women) and they treat athletes the same as the rest of the student body. The emphasis of Division III schools is on regional in-season competitions and conference championships.

NCAA Swimming/Diving Participation Rates

According to the NCAA 1981-82 – 2004-2005 Sponsorship and Participation Rates Report (Appendix A) of Men's Division I teams, there are 327 university members, with 141 swimming/diving teams and 3564 student-athlete participants; of Division II NCAA institutions', there are 284 university members, with 50 swimming/diving teams and 899 student-athlete participants; of Division III NCAA institutions', there are 434 university members, with 190 swimming/diving teams and 3183 student-athlete participants.

According to the NCAA 1981-82 – 2004-2005 Sponsorship and Participation Rates Report (Appendix B) of Women's Division I NCAA institutions', there are 327 university members with 188 swimming/diving teams and 4899 student-athlete participants; of Division II NCAA institutions', there are 284 university members, with 66 swimming/diving teams and 1283 student-athlete participants; of Division III NCAA institutions', there are 434 university members, with 235 swimming/diving teams and 4663 student-athlete participants.

Understanding Diving: Rules

At the collegiate level, divers compete in one-meter and three-meter springboard events and also on the platform. When competing on the platform, divers may perform from five, seven and one-half, or ten meters. There are six groups of dives (Appendix C): Forward – forward take-off (facing the water), with forward rotation; Backward – backward take-off (back to the water) with backward rotation; Reverse – forward take-off with backward rotation; Inward – backward take-off with forward rotation; Twist – Any of the groups with $\frac{1}{2}$ to 4 twists added; Armstand – (from the platform only) dives performed from a handstand at the end of the platform.

There are four body positions that can be utilized during the flight of the dive (Appendix D): Straight – body not bent; Pike – body bent at the hips only; Tuck – body bent at the hips and knees; and Free – combination of the other positions (used for twist dives)

Each dive carries with it a degree of difficulty rating, based on its direction, number of rotations, position, and height from which it is executed. The degree of difficulty is predetermined with a table range from 1.2 to 3.7 in one-tenth increments. (Appendix E).). The degree of difficulty scale is unique to diving, though somewhat similar to scales used in the sports of gymnastics and ice skating.

At the NCAA elite level, the divers complete six optional dives on the springboards, and five optional dives on the platform. Optional dives are those without a limit on the degree of difficulty. The divers also complete five voluntary dives on the

springboards, and four voluntary dives on the platform (those with a limited degree of difficulty) The total scores of both the limited and unlimited degree of difficulty are added together to generate a final dive total and placement results (Appendix F).

An aesthetic sport such as diving has innate characteristics that focus on the attainment of perfectly executed performances. As a subjectively scored athletic event, there is a set “perfect” score, for which divers aim (Sinclair et al, 2006). At the NCAA championships a dive is scored by seven judges between zero and 10 points (full or half point increments) by each judge (Appendix G). Certain parts of each dive must be analyzed and evaluated, and an overall score given. All phases of the performance are considered and the dive is scored in its entirety, without concern for difficulty as each dive has an assigned Degree of Difficulty to reward the athletes for complicated skills.

The parts of the dive are:

1. Approach: Three or more steps forward to the end of the board before the hurdle and takeoff. It should be smooth and forceful showing good form.
2. Takeoff: A diver’s lift from the board prior to execution of the dive. He/she must show control and balance, plus the proper angle of landing and leaving for the particular dive being attempted.
3. Elevation: The amount of spring or lift a diver receives from the takeoff greatly affects the appearance of the dive. Since more height means more time in the air, a higher dive generally affords greater accuracy and smoothness of movement.

4. Execution: A judge watches the dive itself for proper mechanical performance, technique, form and grace.
5. Entry: The entry into the water is very significant because it is the last thing the judge sees and the part probably remembered best. The two criteria to be evaluated are the angle of entry, which should be near vertical, and the amount of splash, which should be as little as possible.

The highest and lowest judges' scores are eliminated and the remaining scores are added. The cumulative score is then multiplied by the degree of difficulty of each dive to produce the final score for each dive. The scores for each dive are added to give the total score for the event and thus placement of finish. Though the number of somersaults and twists performed by the athletes has increased over the years, the methods of judging and scoring has not changed since their adoption in the early 1900's.

NCAA Qualification Procedures

According to the Division I Men's and Women's Swimming & Diving Championships Handbook (Appendix H) to qualify to compete at the Division I NCAA Men's or Women's Championships a student-athlete diver must first qualify by a total point score garnered at a dual meet (a competition between two or three college teams), an invitational meet (a competition open to all college teams) or a conference championship (teams within an established college conference such as the Pac 10, SEC, Big 10, etc.). Once the qualifying score is secured the diver must then compete in one of five "Zone" competitions. Placement at the Zone competition secures a spot to compete at the NCAA Championships. A total of 35 male and 41 female competitors qualify through to the Men's or Women's NCAA Championships each year. These athletes make up the most elite class of collegiate divers in the United States.

Most divers that participate in the NCAA championships have had years, if not decades of preparation in the sport. They have trained for hours, often daily and for many years. They have competed in numerous competitions through their years in elementary school, high school and college. Thus, they have created a personal history of their successes and failures, in terms of competition results.

Statement of the Problem

Frequent participation in sport competitions in similar conditions favors the formulation of assumptions as to the causes of sport results (Rotter, Seeman, Liverant, 1962). It is further assumed that those assumptions, called attributive models (i.e. ascribing causes to their effects), are the basis of formulating by athletes their objectives as well as the assessment of psychosomatic capabilities of achieving them. This, in effect, determines the athletes' behavior and eventually their actual achievements (Rotter, 1966).

While researchers have studied many different sports (Seligman, Nolen-Hoeksema, Thornton & Thornton, 1990; Dabrowska, 1991; Newton & Duda, 1993) there is a dearth of information with regard to attributions made by NCAA athletes in a national championship competition, specifically, in the sport of springboard and platform diving. Even less is known of the similarities and differences of gender attributions of elite NCAA female and male divers. Thus the following are research questions to be answered by this study:

Research Question 1: How do elite college divers respond to twelve hypothetical situations?

Research Question 2: Is the response to twelve different hypothetical situations of elite college divers different for males and females?

Research Question 3: What is the attributional style of elite college divers?

Research Question 4: Is the attributional style of elite college divers different

for males and females?

Research Question 5: Is the attributional style of elite college divers related to their performance?

Research Question 6: Is the attributional style of elite female college divers related to their performance?

Research Question 7: Is the attributional style of elite male college divers related to their performance.

Definitions of terms

NCAA – National Collegiate Athletic Association. The national governing body for all collegiate institutions in the United States.

USAD – United States Diving. The national governing body for the sport of diving in the United States.

Overview of the remainder of the paper

Chapter 2 will explore the literature that pertains to attributional theory, motivation and gender. It will include the theoretical framework on which the study is based and explain the need for the study. The approach of the study as well as the measurement techniques will be addressed.

Chapter 3 will explain the overview of this study, delineate the relevant variable being studied, describe the population and sampling procedures and the research design. It will explain the research procedures, describe the participants and analyze the data from the survey.

Chapter 4 will present the data analyses and results. It will summarize all tables of the data and results. It will also give a explanation of the study's results.

Chapter 5 will summarize the results and finding. It will list the study's limitations and implications. It will also evaluate the research questions and make recommendations for future studies.

LITERATURE REVIEW

Forsyth (1980) noted that attributions serve various functions which at times may operate in a simultaneous fashion. Research in sport and physical activity settings utilizing attribution theory has become increasingly popular in recent years. Many studies have been conducted to investigate the process whereby individuals determine the cause of their own and other people's success and failure in competitive sports situations. Rather than focus on the disproof of one perspective in favor of the other, it may be more valuable for researchers to understand how motives and cognitive process affect the form of attributions. Once actors cognitively appraise a situation, do they intentionally adjust attributions to fulfill social rules, or honestly evaluate their recalled actions and provide unintentional egocentric attributions, or both? Further, do women differ from men, and if so, to what extent, when faced with the necessity to compete?

This review of the literature will first present an overview of Weiner's Cognitive Model of Attribution, and its application, explore achievement motives and their theoretical foundation, look into affects of gender, and review factors affecting motivation and attribution such as flow theory, perceived motivational climate and coaching influences. It will then focus on attributions in sport, athletes' perceptions of ability and how different competitive formats may affect attributions. Finally, a discussion of the Attributional Style Questionnaire and its history is discussed.

Weiner's Cognitive Model of Attribution

The most commonly used elements investigators have asked athletes to ascribe their attributions come from the four basic causal categories identified by Weiner (1974). Attribution theory focuses on the perceived causes of an event, the manner in which these causal inferences are reached and the consequences of causal beliefs (Weiner, 1986). It states that individuals continually make causal judgments when analyzing various sources of information available to them (Freize, 1976; Weiner, 1974). Weiner developed an attribution categorization system consisting of a 3 x 2 matrix incorporating the three causal dimensions of locus of causality, controllability, and stability (Santamaria & Furst, 1994).

Weiner's (1979) cognitive model classified attributions following success or failure in achievement-related events as the outcome of four dominant causal attributions: ability, long term effort, task difficulty, and luck. That is, if a person or a team defeats another individual or team, the likely causal attributes are ability (we are a good team), effort (I/we trained hard and concentrated during the match), task ease (the opposition was not very good), and luck (we just happened to get the right bounces). In a similar manner failure generally is ascribed to low ability, lack of effort, the difficulty of the task, or bad luck (Weiner, 1975) (Table 1).

Table 1. Event Outcome by Causal Attribute

		<u>Controllable</u>	<u>Uncontrollable</u>
Internal	Stable	Typical effort exerted/general ability	Specific skills or aptitudes
	Unstable	Temporary effort exerted for this task	Physical and mental conditions
External	Stable	Physical constraints	Task difficulty
	Unstable	Unusual help from others	Luck (chance)

This model provides a valuable method with which researchers can better explore the different causal attributions that people tend to give for the outcomes of events. Weiner's theory (1974) posits the linkages for success as: ability-competence and confidence, effort-relaxation, others-gratitude, and luck-surprise. For failure, the attribution-affect associations are: ability-incompetence, effort-guilt and shame, other-anger and luck-surprise (Table 2)

An attribution approach suggests some specific relations between thought and affect, including the antecedents of positive feeling states (Weiner, 1980). Researchers believe that attributional style can help provide a better understanding of behaviors and consequences that affect one's performance and actions (Peterson, 1990).

Table 2. Relation Between Causal Attributions and Feelings

<u>Attribution</u>	<u>Success Emotions</u>	<u>Failure Emotions</u>
Ability	Confidence/Competence	Incompetent
Effort	Relaxation	Guilt (shame)
Others	Gratitude	Anger
Luck	Surprise	Surprise

Furthermore, causal dimensions (Table 3) play an essential role in one's affective life. One such dimension is the locus of causality, or whether the cause resides within or is external to the actor (Weiner, 1980). It is associated with a group of distinct emotional reactions. Affects associated with self-esteem and self-worth requires unity formation of the outcome to the self. Given internal attributions for success, such as confidence and competence, effort, ability and satisfaction are more experienced than the given external attributions for success. For failure, internal attributions magnify guilt, whereas external attributions give rise to anger and surprise (Weiner, 1980). Although people feel good after succeeding and bad after failing, they do not feel angry unless they can attribute the cause to others, such as perceived biased judging in the sport of diving.

Table 3. Relation Between Locus of Causality and Feelings

<i>Locus</i>	<i>Outcome</i>	
	<i>Success</i>	<i>Failure</i>
Internal	Pride Confident Competent Satisfaction	Guilt
External	Grateful Thankful	Anger Surprise

Finally, causal stability and controllability also influences affective emotional reactions. According to Weiner (1980), to distinguish the functional from the dysfunctional qualities of an attribution requires an examination of the underlying properties of causal dimensions. Table 4 compares ability and effort attributions on the three dimensions of causality already identified: Locus (a cause can be internal or external to the person), stability (a cause can be fixed, long lasting or variable over time: i.e. stable vs. unstable) and controllability (a cause can be subject to volitional control or independent of personal will: i.e. controllable vs. uncontrollable).

Table 4. Ability/Effort Ascriptions Related to Causal Dimensions

<i>Causal Dimensions</i>	<i>Causes</i>	
	<i>Ability</i>	<i>Effort</i>
Locus	Internal	Internal
Stability	Stable	Unstable
Controllability	Uncontrollable	Controllable

Weiner (1974, 1985) posited that past history and social comparisons are two cues which influence inferences of ability. Repeated successes or failures in conjunction with social comparison allow one to infer one's level of ability. Therefore, if a person was always successful in the past and is successful again, the perceived cause is the ease of task and/or the ability of the person. Conversely, when there are discrepancies between present and past performances, this leads to ascriptions of causation as luck and/or effort. Effort is likely to be viewed as controllable, whereas ability, or the difficulty of the task, are not subject to one's control.

Frieze (1980) suggests that once expectancy for success has been developed for a particular task, the expectancy is difficult to change. This suggests that expectancy is attributed to stable factors and may be situational. If an unexpected outcome occurs, an attribution to an unstable factor would be made and this particular outcome would not be

expected to continue. Therefore, those who expect to succeed will continue to have high expectations, and those who expect failure or low achievement will maintain low expectations regardless of how they actually perform.

Moreover, Weiner (1979) found that when internal attributions (ability, effort, personality) are made for success, the affects of pride, competence, confidence and satisfaction are experienced more frequently than when external attributions (luck, task, others' help) are made for the same outcome. When internal and stable attributions (lack of ability, lack of typical effort, personality deficit) are made for failure, the affects of depression, apathy, and resignation are reported to be strongly experienced. This suggests that attributions conveying negative outcomes will not change in the future, generate feelings of helplessness, giving up and even depression. Tests of this relationship gender differences and the affect of individual motivations, have spanned a wide variety of achievement settings including academic, work and athletic settings.

Overview of Motivation

Achievement motive and its incentives are powerful constructs in the world of physical activity and sports. Whether the involvement occurs in team or individual sports, numerous studies have shown that achievement motives (Goudas, 1998; Kavussanu, & Roberts, 1996; Seifriz, Duda, & Chi, 1992; Theebom, Knop, & Weiss, 1995) and intrinsic and extrinsic motivation (Deci, & Ryan, 1985; Duda, Chi, Newton, Walling, & Catley, 1995; Papaioannou, 1995; Pelletier, Tuson, Fortier, Briere, & Blaise, 1995) weigh heavily on both children's and adults' enjoyment of physical activities and sports.

In 1959, White published *Motivation Reconsidered: The Concept of Competence* in which he proposed that people are driven by a need to be competent, or effective in mastering all aspects of the environment. He suggested that when attempts to master the challenges of our surroundings were successful, the result was positive – a “feeling of efficacy” (p. 329) – which, in turn, served intrinsically to motivate further behavior. White's monograph led to other studies on intrinsic motivation, and in that respect it can be seen as the foundation of those subsequent studies.

Intrinsic Motivation Theories

A major development of White's (1959) proposal is that it stimulated a formal statement of "cognitive evaluation theory," (Deci & Ryan, 1985). According to Deci and Ryan's theory, intrinsic motivation is based on the organism's needs for competence and self-determination. Any event that affects one's perceived competence or perceived self-determination will affect intrinsic motivation. Thus, intrinsic motivation is driven by an innate need for competence and self-determination in dealing with one's surroundings. The intrinsic rewards for the behaviors motivated by this need are the satisfaction of competence and autonomy, positive emotions such as enjoyment and excitement, and possibly the "sensation of flow" (complete absorption in the activity).

The drive to participate in a goal-oriented activity, which is usually associated with the expectation of beneficial experiences stemming from that participation, is "motivation." Motivation is categorized in two strands that focus on both intrinsic and extrinsic motivation separately. Intrinsic motivation is widely referred to as 'engaging in an activity for the simple pleasures, with no expectation of material rewards or external constraints' (Pelletier et al., 1995). Extrinsic motivation pertains to a wide variety of behaviors that are performed as a means to an end (Pelletier et al., 1995).

External events influence perceived competence via their informational aspect; they also influence perceived self-determination via their controlling aspect. The informational aspect provides either positive or negative effect-relevant information. When positive, it enhances intrinsic motivation; when negative, it diminishes intrinsic

motivation. The controlling aspect diminishes people's self-determination by pressuring them to think, feel, or believe in particular ways. When experienced as controlling, an event promotes an external perceived locus of causality (deCharms, 1968; Heider, 1958) and undermines intrinsic motivation. Results consistent with cognitive evaluation theory revealed that external events such as monetary rewards (Deci, 1971) prizes, (Harackiewicz, 1979), deadlines (Amabile, DeJong & Lepper, 1976), and surveillance (Lepper & Greene, 1975) undermined intrinsic motivation, presumably because they were considered controlling.

An event that is not experienced as controlling is referred to as non-controlling. According to the cognitive evaluative theory, it is only when an event is non-controlling that its informational aspect will have an impact on intrinsic motivation. In the midst of growing evidence that extrinsic incentive pressures could undermine motivation to perform even inherently interesting activities, Deci & Ryan (1985) proposed self-determination theory in which they integrated two perspectives on human motivation: (1) humans are motivated to maintain an optimal stimulation (Hebb, 1955), and (2) humans have basic needs for competence (White, 1959).

Deci & Ryan (1985) argued that people seek out optimal stimulations and challenging activities and find these activities intrinsically motivating because they have a basic need for competence. In addition, they argued that intrinsic motivation is maintained only when actors feel competent and self-determined. Evidence that intrinsic motivation is reduced by exerting external control, or by giving negative competence

feedback, supports this hypothesis (Cameron & Pierce, 1995; Deci & Ryan, 1985; Deci, Koestner & Ryan, 1999).

Deci & Ryan (1985) suggest that the basic need for competence and self-determination play a role in more extrinsically motivated behavior. They postulated that a basic need for interpersonal relatedness explains why people turn external goals into internal goals through internalization.

Deci & Ryan (2000) have extended the extrinsic - intrinsic motivation dichotomy in their discussion of internalization - the process of transferring the regulation of behavior from outside to inside the individual. When individuals are self-determined, their reasons for engaging in behavior are fully internalized (Grolnick, Gurland, Jacob, & Decourcey, 2000). Deci (1995) and colleagues defined several levels in the process of going from external to more internalized regulation. These are: external, (regulation coming from outside the individual); interjected internal (regulation based on feelings that one has to do the behavior); identified (internal regulation based on the utility of that behavior e.g. studying hard to get grades to get into college): and finally, interjected (regulation based on what the individual thinks is valuable and important to the self).

Overview of Attributional Theory

Attributions in sport beg the question, “To what do you attribute success (or failure)?” They give insight into what motivational factors are most salient for an athlete. So important is this process of trying to determine causes for various outcomes in our lives that an entire area of study called Causal Attribution Theory emerged out of the field of psychology to more thoroughly understand it (Santamaria, et al.,1994).

Attribution theory developed over time from the theories of Heider (1958), Jones & Davis (1965), Kelly (1973), and Weiner (1986). Heider believed that people act on their beliefs. Therefore, beliefs must be considered if psychologists were to account for human behavior. Heider postulated a set of rules of inference by which a person might attribute responsibility to another person (an “actor”) for an action. Based within the principles of motivation, he distinguished between internal and external attributions, arguing that both personal forces and environmental factors operate on the “actor,” and the balance of these determines the attribution of responsibility (Lewis and Daltroy, 1990). This held true whether the beliefs were valid or not. Heider (1958) also suggested that one could learn a great deal from commonsense psychology and stressed the importance of taking the ordinary person’s explanations and understanding of events and behaviors seriously. He called this “Naïve” psychology.

In the '70's and 80's attributional psychologists dominated the field of social psychology. According to attributional theory (Weiner, 1986), it is only when an individual performs according to expectations that the outcome is attributed to skill.

When a person performs inconsistent with expectations, the outcome is attributed to factors such as luck, task difficulty, effort or the situational factors that enable success.

Even when the performance outcome is successful, interpretations of that success differ when the one who performed it is female or male. When equally successful, a woman is perceived as less skilled than a man (Deaux & Emswiller, 1974). Some researchers (Wigfield & Karpathian, 1991) have found that females are less likely than males to attribute success to ability and more likely to attribute failure to lack of ability. Sex differentiated attributions can impact males' and females' subsequent motivation in a certain domain of interest, and can influence cognitive outcomes such as achievement.

Gender Differences in Attribution

Research concerning effects of gender on attributions in both non-sport and sport situations has produced conflicting data. Most theoretical models (Rotter, Seeman & Liverant, 1962; Weiner, 1985) and the underlying assumptions of attribution theory as it relates to athletics, pertain to men, without considering the sex-related differences resulting from different biological functions and potential, and the different social position and role, of men and women.

A meta-analysis of numerous research, conducted by Frieze, Whitley, Hanusa, McHugh (in press), indicates that successful females are more likely than successful males to attribute the outcome to luck rather than ability while male athletes did not evidence this trend. Furthermore, females are more likely than males to attribute an unsuccessful outcome to lack of effort or ability. This attribution pattern on the part of females may be partially explained by their tendency to have lower expectancies of success than males (cf. Crandall, 1969). Frieze, Parsons, Johnson, Ruble, & Zellman (1978) explain that the socialization process contributes to these sex differences in expectancies for success. Boys tend to receive a great deal of encouragement on achievement-related tasks, while for girls, such encouragement is much less likely.

Margaret Matlin (1987) performed a comprehensive review of the literature as well, and mentions three major circumstances in which men are more likely than women to attribute their success to ability, and men are less likely than women to attribute their failure to ability: (a) sex differences in attributional style seem most likely to emerge on

tasks that are considered to be masculine; (b) attributional patterns seem to be influenced by whether the responses are made publicly or privately, when people are aware that they are being evaluated by others; and (c) women and men show different attributional patterns when they have certain kinds of personal characteristics. Women who hold more traditional gender roles show attributional styles more typical to feminine sex-role (avoid ability explanation for their failures), as opposed to women who are nontraditional, and show attributional patterns more typical to men (use of ability explanation for success, and avoid ability explanation for failure).

Self-perceived sex role refers to how individuals perceive themselves relative to the roles society has set for them. Sex-role may be defined as behaviors, traits, attitudes, or expectations characteristically thought to differentiate the sexes (Nash, 1979). In fact, sex stereotypes are those widely shared expectations about people in social categories that exert pressure on its members to display behaviors, traits, and attitudes consistent with it. Sex-role stereotype then becomes a well defined concept that dictates how each sex should perform. These standards or behavior (in fact stereotypes) are refined developmentally (Aloise, 1993). Since socialization shapes an individuals' goals and values, men and women undoubtedly acquire different values through the sex-role socialization.

Sex-role studies on female competitors prior to 1975 reported low scores on traditional measures of femininity – suggesting a masculine sex-role perception for those females studied (Harris, 1975). Some sports have been identified as more appropriate for girls and women because the behaviors involved are more consistent with prescribed

roles and behaviors of the American female image. The primary components of the sports that have been deemed acceptable for the female over the years have included or emphasized fine motor skill, aesthetically pleasing patterns of motion, and no physical contact with an opponent (Metheny, 1965). Sports reflecting the traditional feminine image have included tennis, golf, gymnastics, swimming and diving (Rohrbaugh, 1979). Sports involving strength, bodily contact and endurance have traditionally held little social approval for the female (Malumphy, 1968; Metheny, 1965, Rohrbaugh, 1979). Team sports in general as well as long distance running events, represent those sport behaviors less desirable for females.

Clark, Ness, and Goetz (1981) undertook a study to extend the findings relating to self-perceived sex roles and female involvement in sport to existing female competitive sport situations. In part they wanted to answer the question, "Does participation in competitive sport necessitate a masculine self-perception or is it possible that sport and competitiveness have now taken on a less gender-specific meaning in our society?"

Subjects in their study were 657 females, 15 years of age or older (the average age of the subjects was 24 years old) that were actively involved in a non-to-moderate competitive (University or Community College Physical Education basic instruction class or a local recreational amateur sport club or team), intense competitive (intercollegiate team), or elite competitive (Olympic volleyball, nationally ranked swimming and diving teams, Ladies Professional Golf Association Touring professionals) sport situation. Only females participating in diving, golf, swimming or volleyball were studied.

Each completed the Bem Inventory (1979) instrument. 60 adjectives were used: 20 masculine, 20 feminine, and 20 neutral items. Masculine and feminine scales from the Bem Inventory (1979) were analyzed. Their prediction that there would be a tendency toward greater feminine orientation scores for individuals participating in the traditional feminine sports (swimming, diving, golf) than those participating in the less traditionally accepted team sport of volleyball, was not supported. The results may be partially explained by the suggestion of Harris (1975), that individuals participating in less traditional behaviors (team sports versus individual sports) require stronger feminine perceptions for general social acceptance as well as a stronger masculine perception to perform successfully in non-traditional feminine behaviors such as spiking or blocking in volleyball.

Attributional differences may also reflect society's attitude toward male and female sports participation. Athletics and masculinity have traditionally been associated with one another, but society is much more ambivalent about sports participation on the part of females (King & Chi, 1979). What about the causal affect of participation by females in "traditionally male" sports such as basketball or rowing? Would such a perception on behalf of the females manifest itself in the types of attributions they make for a given performance outcome?

To determine whether female athletes make attributions based on a belief that there is a stigma attached to participation in a "male" sport, Croxton & Klonsky (1981) studied ten members of the women's varsity basketball team, ages 18 – 21, and 12

members of the men's varsity basketball team, ages 18 – 21, at the State University of New York – College of Fredonia.

A 48-item attribution questionnaire was administered to members of both teams immediately after each team had participated in an intrasquad scrimmage prior to the start of the regular season. The wording of the items on the questionnaire differed slightly for the winning and losing teams.

The most pronounced sex differences occurred between the losing male and female athletes, particularly when the attribute was intentional and/or internal. Overall, the attributions of females who experienced a losing outcome were generally much higher than those of their male counterparts, particularly those attributions to themselves or to their own team. Females were thus apparently more willing to accept responsibility for the negative outcome or the loss. Moreover, losing males were seemingly reluctant to offer any explanation for their unsuccessful outcome.

Overall, winning male and female athletes differed primarily when making attributions to characteristics of the opposing team. Males were more inclined than females to attribute the outcome of the game to these characteristics. Losing male and female athletes differed primarily when making attributions to themselves or to their own team. Winning male and female athletes did not differ significantly in attributions when the categories were comprised of internal attributions. However, the winners did differ when making attributions to characteristics of the opposing team.

Dabrowska (1993) studied 11 female handball players and 17 male soccer players, all aged 19-25 years. In her study Dabrowska (1993) presented each athlete with

questionnaires based on the I-E scale (Internal-External scale), containing descriptions of failure and success situations in a sports event. The subjects were to attribute each situation to one of four alternative causes which were subsequently classified according to Weiner's 4-pool categorization: internal/external and stable/unstable.

The data generated proved interesting. Regarding successes, both men and women attribute them to their effort and abilities which, taken together explained at least 95% of successes. Regarding attributions of failure, significant differences between men and women were found. Men were found to attribute failures mostly to their insufficient effort and to a lesser degree to their lack of abilities. Women, on the other hand, attributed failures predominately to their lack of abilities with insufficient effort being a much less frequent cause. Both sexes indicated internal causes as the principle ones in their failures, women, however, ascribe them to the stable cause (lack of ability) and men to the unstable ones (insufficient effort).

Dabrowska (1993) concluded, "The attitude both men and women present when they achieved success is such as to put the winner in the best light, which means attributing success mostly to their effort. According to Weiner, this represents an internal, unstable factor: whether the success is to be maintained, depends solely on the subject, on how much effort he/she is ready to invest. The use of different attribution patterns by men and women makes the latter more vulnerable to misfortunes and deepens in them the feeling of helplessness, which is of particular importance in sports activities."

She next looked at the causal attribution differences of failure in endurance-trained men and women. Dabrowska (1993) looked at the sport of rowing. She studied

85 rowers (60 boys and 25 girls) ages 17-18. Each completed an I-E scale for determining causal attributions of failures in sports. Her results were similar to other studies. She found that girls attributed their failures to effort (external, unstable, controllable factor) significantly more frequently than do boys, and lack of skills (internal, stable factor) significantly less frequently. Thus she found internal and unstable but controllable causes are decidedly more frequent in girls than in boys with regard to their attribution of failures.

A few studies have been designed to look specifically at the types of attributions made by sports participants. Frieze, McHugh & Duquin (1976) created a hypothetical win-lose situation for 72 college athletes and non-athletes (45 male and 27 female), ages 18 – 21. A number of sex differences were obtained in the types of attributions made, regardless of the athlete/non-athlete distinction. For example, males tended to make more stable attributions for a success, while females tended to emphasize team attributes.

Ewing & Pascuzzi (1979) compared successful attributions of 27 college tennis players (13 male and 14 female), ages 18 – 23. There was a tendency of successful males to use more internal attributions than successful females. This difference was not robust however, and the authors emphasized that the attributional patterns of males and females were generally similar.

Flow theory

Csikszentmihalyi (1988) defined intrinsically motivated behavior in terms of the immediate subjective experience that occurs when people are engaged in the activity. In his study, runners, skaters, swimmers, and musicians describe their experiences when fully engaged in terms of an emotional state Csikszentmihalyi labeled as “flow.” Flow is characterized by: (1) an holistic feeling of being immersed in, and of being carried by, an activity; (2) a merging of action and awareness; (3) focus of attention on a limited stimulus field; (4) lack of self-conscious; and (5) feeling in control of one's actions and the environment.

Flow is only possible when a person feels that the opportunities for action in a given situation match an ability to master the challenges. The challenge of an activity may be something concrete or physical like the peak of a mountain to be scaled, or it can be something abstract and symbolic, like a set of musical notes to be performed, a story to be written, or a puzzle to be solved. Recent research has shown that both the challenges and skills must be relatively high before a flow experience becomes possible (Massimini & Carli, 1988).

Initially, the theories of Deci & Ryan (1985) and Csikszentmihalyi (1988) seem to be very different; however, the distinction between immediate and ultimate causes of behavior makes it possible to reconcile the two positions. Deci & Ryan (1985) focus on long term reasons of behavior, whereas Csikszentmihalyi (1988) focuses mainly on immediate reasons of behaviors. In another study, Csikszentmihalyi and Massimini

(1985) suggested that the experience of flow is a reward that ensures that individuals will seek to increase their competence. According to Csikszentmihalyi (1988), the repeated experience of flow is only possible when individuals seek out increasingly challenging tasks and expand their competencies to meet these challenges.

Csikszentmihalyi & Massimini (1985) define this enduring intrinsic motivational orientation in terms of: (1) preference for hard or challenging tasks; (2) learning that is driven by curiosity or interest; and (3) striving for competence and mastery. The second component is most central to the idea of intrinsic motivation. Both preference for hard tasks and striving for competence can be linked to either extrinsic or the more general need of achievement motivation.

Of immediate interest is an overview of the ways in which intrinsic motivation is enhanced in physical activities and sports and what role the effect of 'perceived motivational climate' may have on the intrinsic motivation and attributions of an athlete. Further, in what ways is it possible to influence a person's motivation in the direction of a certain activity, and what factors are important in this respect?

Perceived Motivational Climate

Perceived motivational climate refers to student perceptions of achievement goals set by instructors in learning environments. Students perceive the learning environment as a task-involved or ego-involved climate. Achievement goals are associated with a variety of motivational outcomes such as intrinsic motivation, satisfaction and persistence in both academic and physical activity domains. But research evidence suggests that these relations may be mediated by the perceived motivation climate (Kavussanu & Roberts, 1996; Seifriz, Duda & Chi, 1992; Roberts' & Treasure, 1995).

Kavussanu & Roberts (1996) refer to the term “motivational climate” as a situational goal structure that in context involves specific cues that relate to task driven (mastery climate) or goal driven (performance oriented) situations. Both are central constructs to achievement goal theory. Achievement goals can be contrasted as task-involved and ego-involved goals. Task-involved goals focus on learning and task mastery, while ego-involved goals concentrate on competition with others.

Kavussanu & Roberts (1996) studied the relationship between perceived motivational climate and intrinsic motivation and self-efficiency. The data were collected by distributing questionnaires to 148 Norwegian college students, ages 17 – 22, experienced in team sports. The questionnaires explored the participants' perceptions of the motivational climate in their sport, use of learning strategies, satisfaction, sources of satisfaction and perceived purpose of participating in sport. Correlation analysis revealed that the perception of the motivational climate as either mastery – or performance –

involving was related to reporting of affect, achievement strategies and perceived purposes of sport in a conceptually consistent manner.

They found athletes that perceived the motivational climate as mastery-oriented endorsed mastery as a source of satisfaction, and were less inclined to report avoiding practice. In contrast, perceiving the climate as performance-oriented was positively related to status as a perceived purpose team sport. Thus their results suggested that when athletes perceive the sport climate as task-involving, it facilitates the adoption of adaptive learning strategies, the use of controllable criteria to determine satisfaction, and enhances perceptions of sport as being important for developing lifetime skills.

Perceptions of mastery climate were positively associated with enjoyment, effort and perceived competence, and self-efficiency was inversely related to tension. The more a participant focused on task mastery as an objective, the more effort they exerted and the more they enjoyed the game. A high focus on results or performance outcomes detracted from the enjoyment of the sport and the participants were likely to be motivated for different reasons. Thus, motivational climate seems to play a significant role as a determinant of sports participation and increases the understanding of behavioral patterns in relation to the reasoning behind continuing to contribute to a particular task or sport.

Young athletes cite “fun” as a primary reason for participating in sports (Gill, Gross & Huddleston, 1983; Scanlan & Lewthwaite, 1986). Further examination has shown that this feeling of fun depends on experiencing the intrinsic satisfactions of skill improvement, personal accomplishment, and excitement – rather than being a result of extrinsic factors such as winning, getting rewards, or pleasing others (Wankel & Kreisel,

1985; Wankel & Sefton, 1989). It is the participant's "perception" of the motivational climate that is most important.

Similarly, many other researchers have examined motivational climate and the "achievement setting." Seifriz, Duda & Chi (1992) wanted to develop a sport-specific measure of 'perceived motivational climate' and to examine the relationship of this construct to intrinsic motivation as well as beliefs concerning causes of success in the athletic domain. Their study examined the degree to which intrinsic motivation and beliefs about the causes of success are predicted by perception of the situational goal structure and the dispositional goal perspective. Seifriz, et al. (1992) sampled 105 male basketball players, ages 16 – 18, who were recruited from nine high school varsity basketball teams. Four multi-section questionnaires were administered about half way through the teams' seasons. The timing of the questionnaires ensured that the coaches' and teams' motivational climate would have time to become established.

The findings indicate that perceptions of a mastery-oriented climate on intrinsic motivation positively related to enjoyment, and included that effort leads to achievement. Intrinsic motivation can be as high in a mastery-oriented environment where there is a low performance focused goal structure. The results also demonstrated that dispositional goal orientation was the only significant predictor of the players' self-reported effort, perceived competence, and attribution beliefs in basketball (Seifriz et al., 1992).

Roberts' & Treasure's (1995) study was dedicated to projecting the impact of achievement goals in creating an order of achievement beliefs and shaping consequent decision making and behavior. Their research is based primarily on social cognitive

behavior patterns in competitive sports. The hypothesis of this study was founded upon the assumption that people are goal driven individuals with direct intentions. As a result, maintaining an achievement goal determines achievement beliefs/attitudes and governs decision-making and behavior. Two distinctly opposing conceptions of ability are recognized; mastery and ego-oriented interpretations of ability.

Roberts & Treasure (1995) created The Perceptions of Success Questionnaire (POSQ) scale to measure different goal perceptions. A total of 29 questions were formulated which were directly concerned with both mastery and ego perspectives. The scale was offered first to a group of athletes, followed by further administration to more general, varying populations. The investigation concluded that the perceived achievement strategies are intertwined with an individual's goal perspective (mastery or performance). Performance driven athletes conveyed no specific focus while in practice, in comparison to mastery athletes who focused on learning and effort.

The difference detected between both perceptions is that ego-athletes believed that practice allowed them to convey their competence over other athletes, while mastery-athletes concentrated on the concept of team cohesion and skill development (Roberts & Treasure, 1995). Consequently, the study discovered a relationship between goal perspectives and actual achievement behaviors. Performance oriented adolescents were more likely to give up or drop out of competitive sport experiences than mastery oriented adolescents. Overall mastery climates demonstrate, provoke, and maintain motivation so that individuals can enhance and develop skills and technique.

Goudas (1998) examined the relationship between motivational climates and

intrinsic motivation in regard to athletes with both high and low perceived competences. Goudas hypothesized that for athletes high in perceived competence, perceptions of a motivational climate high in skill mastery or performance would be positively related to intrinsic motivation. For athletes of low competence, he hypothesized that only perceptions of a motivational climate oriented toward high mastery would be related to enhance intrinsic motivation.

Goudas (1998) analyzed 100 Greek male athletes, ages 14 – 24, who participated in a local league basketball competition. Overall Goudas' hypothesis was proven wrong. The results demonstrated that athletes with different perceptions of perceived competence did not differ on intrinsic motivation. Results also indicated that perceived competence did not interact with those on motivational climate in influencing intrinsic motivation.

These results are congruent with the study conducted by Papaioannou (1995), which examined how perceived motivational climate in physical education is related to perceptions of teachers' differential treatment toward high and low achievers. It also related the motivation and anxiety of children to their high and low perceived competence during play as well as high and low ability within the children. A total of 1393 high school students, ages 14-18, completed a number of measures. Results indicated that a climate of motivation is conducive to intrinsic motivation. In addition, evidence suggests that a mastery-orientated climate is positively related to the belief that success is dependant on putting forth maximum effort, whereas a performance-orientated climate is associated with the belief that superior ability is essential for success in sport. Students who perceived the motivational climate to be mastery-orientated reported that

they enjoyed playing sports more and also put forth more effort. Overall perceived competence had no effect on intrinsic motivation when the students adopted extremely high learning goals (Papaioannou, 1995).

Since a large proportion of those involved in sport are youth, many studies have focused on the motivational patterns of young athletes. In his opinion, McClelland (1987) repeatedly emphasizes that “doing something better” is the natural incentive for the achievement motive (p. 227). “What should be involved in the achievement motive is doing something better for its own sake, for the intrinsic satisfaction of doing something better.” (p.228). He cites the experiment conducted by French (1955) that utilized officer candidates pursuing an education at a U.S. Air Force base. French (1955) first obtained “*n*” Achievement scores from story completions via the Test of Insight under standard conditions. She then varied the incentives provided for performing better at a digit-symbol substitution task on a second occasion. Instructions were given to three groups of airmen. The first group received friendly, calm instructions that were presented in a casual manner. The second group was addressed by an airman in a formal serious manner. He told them that the tests they were taking measured “a critical ability – the ability to deal quickly and accurately with unfamiliar material” (p.228). The third group was told that the “first five men who make the best scores in five minutes will be allowed to leave right away – the others will have more practice periods and more tests” (p. 228). She then retested the groups just after the instructions were given. She found, as expected that mentioning the achievement incentive had the greatest effect on arousing achievement motivation for those high in dispositional “*n*” Achievement on the first test

(p. 228). Ultimately, the demand to do the task couched in terms of achievement incentives energized their high achievement motive disposition and aroused more achievement motivation, which expressed itself in improved performance (McClelland, 1987).

Treasure's (1997) study dealt with student perceptions concerning the motivational climate of their physical education classes. He examined the influence of the environment (motivational climate) on the development of task or ego oriented achievement goals. The data were collected through a questionnaire administered to 119 female and 114 male children, ages 8 – 13, in six elementary schools. The results showed that physical educational classes promoting a high mastery climate developed the concept of high perceptions concerning ability, hence citing effort as the cause of success. Consequently, such an environment stimulates positive affective responses. In contrast, high performance/low mastery climates compounded the feeling of boredom and sparked unfavorable feelings toward physical education. Overall, the student associated with a class high in mastery climate gained the most regardless of their personal interpretation of the nature of the climate.

Theebom, De Knop & Weiss (1995) focused their study on the effects of a performance-oriented and mastery-oriented teaching program on participant's psychological responses and motor skill development. They hypothesized that students who are in the mastery-oriented program would experience greater enjoyment and higher perceived physical competence along with higher levels of intrinsic motivation and motor skill development.

The researchers analyzed 119 participants ranging in age from 8-12 years old. The participants were part of an organized sports program. They were divided into two groups and each received separate instructions. During the study, measures were administered before and after the intervention phases. The pre-intervention measure referred to sports in general, focusing on those with which the children were already familiar. Post-intervention measures were worded specifically with respect to the sport being taught to the children. The children were taught the sport of wushu (a Chinese style of martial arts) because most of the children were not familiar with it. Results indicated that children in the mastery oriented groups reported higher levels of enjoyment and skill development in comparison to the performance oriented group. The data showed that most children demonstrated a high level of intrinsic motivation to learn wushu, and provided evidence that a mastery motivational climate can result in a more positive experience for a young athlete, whether in learning or adopting a new skill.

Intrinsic motivation is driven by an innate need for competence and self-determination in dealing with one's surroundings. Positive feedback enhances intrinsic motivation, presumably because its positive informational aspect enhanced perceived competence. When an event is perceived as controlling, it undermines intrinsic motivation.

An individual's desire to pursue a particular activity depends upon whether his or her feelings of competence, autonomy, and positive affect persist over time. Conversely, if one begins to perceive oneself as incompetent at the activity and/or under external control to do it, one's intrinsic motivation is undermined. The outcome becomes a state

of extrinsic motivation, and the activity might continue dependent on the consistency of external rewards or coercion, or may become a state of amotivation and further activity is unlikely because the perceptions of incompetence lead to a sense of futility.

The Coaches' Role in Motivation

The ultimate goal of coaches is to mold skills and talent into a winning combination. A coach may not govern the overall talent of the team but the coach determines the type of learning atmosphere created for the players. The learning climate is based on how practices and games are organized and it includes rewarded behaviors, punished behaviors, practice structure, and player relationships. Thus, when studying the impact of learning climates on athletes' motivation, we often rely on players' perception of the psychological climate because it includes what is personally meaningful to the athlete (Newton, 1996).

White, Kavassanu & Guest (1998) addressed the coach's role in influencing an athlete's motivation. This research examined the relationship between goal orientation and perception of the motivational climate. It focused on the child's perception of the expectation of the coach, parents and/or teachers and how they relate to the child's own achievement motivation.

In the study, the participants, 422 middle school students, ages 11-13, completed the Task and Ego Orientation Questionnaire and two versions of the Perceived Motivational Climate Questionnaire. The results indicated that goal orientation was differentially related to the perceived motivational climate created by those seen as authority figures. Task orientation was related to perceptions of a task, involving the climate created by a coach or parent (White et al., 1998).

Verbal feedback is also an important factor relating to intrinsic motivation. Vallerand & Reid (1984, 1988) used a stabilometer (balance board) task and manipulated feedback by making verbal comments to subjects suggesting that they were performing either well or poorly. The results, like other similar experiments by other researchers, showed that success feedback led to enhanced intrinsic motivation while lack of success feedback reduced it. In other words, it was not the effect of the feedback per se, but rather it was the effect of feedback on the subjects' perceptions of competence that moderated changes in intrinsic motivation.

Attributions in Sport

Attributional trends in sports are of particular interest to researchers, coaches, and performers. Many studies (Furst, 1989; Furst & Tenenbaum, 1989; McAuley, 1985; Russel & Gross, 1985; Russel, 1982; Tenenbaum & Furst, 1986) have been conducted in sports settings and have investigated the attributions along causal dimensions that were given after competition by competitive athletes varying in both demonstrated and perceived ability. Previous findings suggest a connection between attributional patterns and perceptions of ability (Schunk, 1984; Schunk & Cox, 1986; Schunk & Gunn, 1986; Weiner, 1985). Research also shows that perceptions of ability such as self-efficacy, confidence, and expectation are powerful predictors of actual performance (Gould, Weiss & Weinberg, 1981; McAuley, 1993; Highlen & Bennett, 1979). Perceived ability may influence performance through mediators such as approach and/or avoidance of challenging situations and level of effort.

Biddle & Jamieson (1988) studied 53 Sport & Recreation undergraduates (15 females and 38 males), ages 18 – 22. The subjects took part in a single-game table tennis match decided by the first person to reach 21 points. Subjects competed against a member of their own sex and pairs were randomly selected by the experimenter. The researchers found that winners tended to make more controllable and less unstable attribution than losers, but, contrary to previous research, were less internal. Both winners and losers, however, gave internal, unstable and controllable attributions. Tenenbaum & Weingarten (1984) ran a similar study in both individual and team sports, and the results

were virtually the same. Both studies concluded that after winning, athletes attributed the causes more internally, stable, and controllable than after losing.

Another study by McAuley (1985) delved into the differences between female collegiate gymnasts after both successful and unsuccessful competitions. 52 collegiate gymnasts, ages 18 – 22, representing seven universities competed in a Midwestern University Invitational gymnastics meet. Each athlete completed a Causal Dimension Scale (CDS) questionnaire immediately upon completion of her final event.

The CDS allows the respondent to make a free-response causal attribution for performance/outcome and then to assess the attribution along the three causal dimensions of locus of causality, stability, and control. Each version of the scale was specific to one of the four Olympic events: vault, balance beam, bars, and floor exercise.

The judges' scores for each event were used as an absolute or objective measure of performance. The study was not aimed at examining "winners" vs. "losers" but rather personal success vs. perceived performance failure. Gymnasts who were classified as "high success" by virtue of their scores made more internal, stable, and controllable attributions for their performance than did those individuals who were classified as less successful. Those gymnasts in the "low success" and the low score groups made internal, controllable and unstable attributions. Similar results were obtained when attributions were analyzed by groups differing in their perception of success. Most attributions, however, were towards the internal and controllable ends of the scales.

One-on-One competitions vs. Individual competitions and Self-Serving Bias

Are attributions in sports that are considered “one-on-one” competitions different than those of individual competitiveness? DeMichele, Gansneder & Solomon (1998) set out to find the answer. These researchers wanted to study self-serving bias. Wong & Weiner (1981) suggested that a self-serving bias bolsters one’s public presentation. Weary (1979) suggested that a self-abusing bias does the same thing. An individual’s desire to protect public image and public esteem may play a part in the attributional interpretation of outcomes.

In theory, a self-serving bias maximizes perceptions of ability regardless of outcome, whereas a self-abusing bias minimizes perceptions of ability regardless of outcome (Bradley, 1978; Weary, 1979). Observation of highly successful and highly unsuccessful athletes in actual competitive situations may serve to further explain effective and ineffective attributional patterns while more thoroughly explicating attributional biases (DeMichele, Gansneder & Solomon, 1998).

It was hypothesized that advanced collegiate wrestlers would demonstrate a self-serving bias which would maximize their self-perception regardless of outcome. This would enhance or preserve their perception of ability. The sample consisted of 27 collegiate male wrestlers, ages 19 to 22. There were nine freshman, eight sophomores, three juniors and seven seniors. The score of each match was recorded based upon the official scorer’s data to identify the winner and the loser of each match. Each competitor was then given an adaptation of the Causal Dimension Scale – II (McAuley, Duncan, & Russell, 1992).

The results supported their hypothesis. Winners were significantly more internal, stable, personally controllable and externally controllable for their performance than those wrestlers who lost. With regard to external control, the attributions were significantly greater for those that won than those who lost. Since winners attributed their wins more externally than losers, it would seem that winners may have weighed their opponent's contribution to the matches' final outcome more heavily than losers. In other words, winners were more gracious in sharing the credit for their win than losers were in sharing credit for their loss.

According to the researchers, "further analyses suggested that winning wrestlers who felt more successful made more stable and personally-controlled attributions for their wins, and that losing wrestlers, who felt less successful, also made more internally caused attributions for their losses." These findings also indicated the presence of a self-serving bias and a significant relationship between perceptions and attributions.

Personal Perceptions of Success and Failure

In most studies the successful or unsuccessful performances are determined by the researchers through some type of objective criteria such as place finish, or by the subjects themselves through a rating scale. This method, while determining successful and unsuccessful performances, ignores the degree of success or under-success. The degree of success is never compared to other past successes. Is the “successful” performance a “best ever,” “average success,” or “near average?”

Santamaria & Furst (1994) set out to answer this question. They researched the attributions that competitive athletes gave for their career ‘most successful’ or ‘least successful’ performances in 38 elite long distance runners (21 males and 17 females), ages 18 – 28. The subjects competed at either the junior college, Division I, or post-graduate level and were asked to provide attributions for each race during an entire season. They were instructed to reflect back, throughout their entire competitive running career, and remember their personal best competitions as well as their personal worst competitions. They were directed to write down what they perceived to be the main cause for each. Afterwards, they completed the Causal Dimension Scale Questionnaires, one for the causal attribution given for their most successful race, and one for the causal attribution given for their least successful race.

Attributions given for a specific performance were compared between athletes differing in both perceived ability and perceived success. The results determined that runners gave more internal attributions for their most successful races than for their least

successful races. Runners making more internal attributions for their most successful races than for their least successful races parallel results previously established. More internal attributions were given for different degrees of successful athletic performance than for different degrees of unsuccessful performance.

Tenenbaum & Furst (1989) studied the differences in attributions between various team and individual sport athletes who rated themselves on perceived ability prior to a competition. The survey results demonstrated that athletes who consider themselves as having a high degree of ability in their sport gave attributions that were more internal, stable and controllable than those that previously acknowledged that they considered themselves as having a lower degree of ability in their sport.

Hamilton & Jordan (2000) studied this same issue using male high school track athletes in two different age categories. Seventeen seniors and nineteen freshmen were asked to complete the revised Causal Dimension Scale (CDS-II; McAuley, Rejeski, & Russell, 1985). The researchers concluded from the results the subjects attributed outcomes to controllable (vs. uncontrollable) factors and this controllability was significantly greater in the “best” performance attributions. Locus of causality scores were more internal (vs. external) and were significantly more internal in the “best” performance attributions, and subjects attributed outcomes to more stable (vs. unstable) factors and were significantly more stable in the “best” performance attributions. Further., the results indicated that freshman and seniors do not significantly differ from each other in their attribution making.

Belciug (1992) tested the premise of cognitive social psychological reasoning that an individual's affective reactions to achievement-related events depend in part on how the events are interpreted. In other words, once individuals infer the cause of the outcome, attribution-related affects may also be experienced. Belciug (1992) examined the emotional reactions of high-performance athletes to their personally-perceived success and failure, and the relationship between the dimensions underlying causal attributions and the athletes' affective reactions to the outcome (success or failure).

The subjects in his study were 98 South African high-performance (63 males and 35 females) track and field athletes, between the ages of 18 and 26. Each had to qualify to participate in the study by previously finishing in the first three positions in a final event of a national or provincial championship in the preceding two years. Following the participation in the athletics contest, subjects were administered several inventories consisting of measures to assess perception of athletic performance, general causal beliefs, perceptions of causal attributions, emotions, and expectancy of future success. Perceptions of causality were assessed by means of the Causal Dimension Scale (CDS) of Russell (1982).

In order to test his hypothesis that there is a significant relationship between the causal dimensions and the affective consequences of the outcome, he analyzed the data for separate sets of success and failure affects. The evidence suggested that, in high-performance competitive athletes, the personally-perceived outcome involves much affect, and the dimensions underlying causal attributions have an impact upon the

athletes' affective reactions to the outcome. As predicted, the athletes who performed poorly experienced negative affects more intensely than the successful athletes.

When success and failure affects were examined in relation to the dimensions underlying causal attributions, the results fully supported Weiner's (1979) findings. First, locus of causality emerged as the most consistent dimension in relation to the affective consequences of success and failure. The dimension of control was less consistently associated with the emotional reactions to the outcome, while the dimension of stability showed no relation to the affective consequences of athletic performance.

The Attributional Style Questionnaire

Attributional theory of achievement motivation continues to be widely used in studies of attributions in the achievement realm. According to the theory, the causes of success and failure can be subsumed within a two-dimensional taxonomy: an internal-external (locus) dimension, which locates the cause within the actor or in the environment, and a stable-unstable (stability) dimension, which identifies the cause as one that is chronic or transient (Tennen & Herzberger, 1986).

The revised model states that when faced with an uncontrollable bad event, a person will wonder why it occurred. Many naturalistic studies of people experiencing misfortune support this basic contention. The model goes on to suggest that how people answer the question “why?” will help determine their adaptation to the event. Each dimension of the Attributional Style Questionnaire (ASQ) becomes relevant to a person’s causal attributions and each dimension is associated with a particular aspect of adaptation to an uncontrollable event.

It was with this concept in mind that Seligman and his colleagues developed the ASQ. The ASQ is a self-report measure of patterns of “explanatory style” (Peterson & Seligman, 1984), which is the tendency to select certain causal explanations for good and bad events. Its intent is to measure the attributional *style* rather than an explanation for a particular event.

The scale describes 12 hypothetical events. Half of the events described are good events and half are bad events. The events are presented in questionnaire form and can

be administered to groups or individuals. The brief instructions ask each respondent to imagine they are in the situations described and that for each situation they write one cause of the outcome in the space provided. After writing a cause for the event, respondents are asked to rate on three seven-point scales 1) whether the outcome was due to something about them or something about other people or circumstances (Locus), 2) will this cause again be present? (Stability), and 3) does the cause influence just this situation or other areas of their life (Globality). The scales are anchored so that external, unstable and specific attributions receive lower scores, whereas internal, stable and global attributions receive higher scores.

The ASQ has been used extensively as a research instrument for studies of depression; However, available evidence indicates that the scale can be applied to research on achievement motivation, self-esteem, responses to aversive life events, life change, gender and sex role difference in causal attributions, and parental behavior (Tennen & Herzberger, 1986).

Summary

There are many themes that have emerged from the literature regarding motivations and attributions of participants in various sports and at various ages. Whether the involvement occurs in team or individual sports, numerous studies have shown that achievement motives and intrinsic and extrinsic motivation weigh heavily on participant's enjoyment of physical activities and sports. Any event that affects one's perceived competence or perceived self-determination will thus affect intrinsic motivation.

Research concerning effects of gender on attributions in both non-sport and sport situations has produced conflicting data. Most theoretical models (Rotter, Seeman & Liverant, 1962; Weiner, 1985) and the underlying assumptions of attribution theory as it relates to athletics, pertain to men, without considering the sex-related differences resulting from different biological functions and potential, and the different social position and role, of men and women.

However, it appears from the literature that gender does play a role in an athlete's attributions especially when a female participates in a traditionally "male" sport such as basketball. Men tend to attribute failures mostly to their insufficient effort and to a lesser degree to their lack of abilities. Women, on the other hand, tend to attribute their failures predominately to their lack of abilities with insufficient effort being a much less frequent cause. Both sexes tend to indicate internal causes as the principle ones in their failures, women, however, ascribe them to the stable cause (lack of ability) and men to the

unstable ones (insufficient effort). The use of different attribution patterns by men and women makes the latter more vulnerable to misfortunes and deepens in them the feeling of helplessness, which is of particular importance in sporting activities.

Research also shows that perceptions of ability such as self-efficacy, confidence, and expectation are powerful predictors of actual performance (Gould, Weiss & Weinberg, 1981; McAuley, 1993; Highlen & Bennett, 1979). Perceived ability may influence performance through mediators such as approach and/or avoidance of challenging situations and level of effort

An athlete's sensation of flow, his/her perceived motivational climate (as created by a mentor/coach/teacher) and the "expert's" feedback, all appear to influence an athlete's attributions. Competition circumstances and competition format may also play a role in attributions. There appears to be differences in attributions between athlete reports in sports that are subjective (scored by judges) and those that are objective (results by time). An athlete's self-serving bias of his/her ability and the personal perception of performance success and failure are other influences. An individual's desire to protect public image and public esteem also seems to play a part in the attributional interpretation of outcomes.

With regard to attributions made by males and females, both personal forces and environmental factors operate on the "actor," and the balance of these determines the attribution of responsibility (Lewis & Daltroy, 1990). Researchers believe that this attributional style can help provide a better understanding of behaviors and consequences that affect one's performance and actions (Peterson, 1990).

RESEARCH METHODS AND PROCEDURES

Research Questions

Research Question 1: How do elite college divers respond to twelve hypothetical situations?

Research Question 2: Is the response to twelve different hypothetical situations of elite college divers different for males and females?

Research Question 3: What is the attributional style of elite college divers?

Research Question 4: Is the attributional style of elite college divers different for males and females?

Research Question 5: Is the attributional style of elite college divers related to their performance?

Research Question 6: Is the attributional style of elite female college divers related their performance?

Research Question 7: Is the attributional style of elite male college divers related to their performance.

Research Questions 3 through 7 will be addressed using the ASQ measures of Internal, External, Stable, Unstable, Global, Specific, Hopelessness, Hopefulness, and Composite Negative, Positive, and Difference scores.

Research Design/Data Collection

The methods for primary data collection to address the research questions posed were observation and survey distribution. The observations of the performance of the divers was their documented performance as recorded by the judges at the 2005 National Collegiate Athletic Association Men's and Women's Diving Championships (Appendix I). The other source of information was through the use of the Attributional Style Questionnaire (ASQ) (Seligman, 1982) (Appendix J). The data collected from the two sources were merged and the gender of each subject added to the data set.

Two weeks prior to the 2005 NCAA Zone Qualifying competition, all coaches of potential qualifiers received an email explaining the study subject matter (Appendix K), its approval by the NCAA Championships' Director (Appendix L) as well as Seligman's Attributional Style Questionnaire (1982). The email requested cooperation from the coaches whose athletes qualified through to the 2005 NCAA Diving Championships to encourage their divers to complete the survey after his/her last diving event at the championships.

At the completion of each of the five 2005 NCAA Zone Qualifying competitions, a list was compiled of all qualified male and female divers and their email addresses. Another email was sent to the coaches, again requesting their cooperation at the national championships. An email was also sent to all qualified divers (Appendix M) who would subsequently be competing at the national championships. The email sent to the divers explained the study subject matter, its approval by the NCAA Championships' Director,

as well as Seligman's Attributional Style Questionnaire (1982). It requested the cooperation in completing the survey after his/her last event at the 2005 NCAA Diving Championships.

At each of the 2005 NCAA Diving Championships a mandatory coaches' meeting was held, per NCAA policy, the night before the first competition. At each of those coaches' meetings, the survey was disseminated to the coaches and they were again encouraged as ask their athletes to participate by completing the survey at the conclusion of the last event.

From the competitive roster the researcher was able to discern what would be the last event for each athlete. At the conclusion of each athlete's last event, the researcher personally delivered and the requested that he/she return it as soon as possible, but at the latest, at the conclusion of the entire competition. As each athlete completed the survey, the researcher collected and coded it. The coding included "F" and "M" and numbered each completed survey. On a separate document the researcher attached a name to each code for later use in comparing final placement with survey results for each athlete. The surveys, coding documents and final results were placed in a sealed envelope at the conclusion of each championship.

Population Identification

The population of interest is elite divers participating in the National Collegiate Athletic Association Men's and Women's National Diving Championships. Although these divers are the specific population of interest the results of this research may be generalized to divers in other competition which mirror the type of training and competition that faces the athletes.

Assurance of Anonymity

Each subject was given a SUBJECTS CONSENT FORM approved by the University of Arizona's IRB (see Appendix N). The form outlined the study, what was required of the subjects and the assurance of confidentiality. After reading the outline the subjects were required to sign the form indicating their release of questionnaire results.

Sample Population

The sample of divers selected for this study were those male and female divers participating in the 2005 NCAA National Diving Championships.

Instrumentation

The instrument used in this study is the Attributional Style Questionnaire (ASQ) developed by Dr. Martin E. P. Seligman (1982) (Appendix J). Approval for the use of the questionnaire was obtained from Dr. Seligman (Appendix O). The Attributional Style

Questionnaire is composed of twelve different hypothetical situations, consisting of six good situations and six bad situations. These situations were developed by the researcher and pilot tested by administering the questionnaire to members of the University of Arizona Diving Team.

The resulting “good” situations are:

YOU PERFORM A DIFFICULT DIVE BETTER THAN YOU EVER HAVE BEFORE.

YOU BECOME ONE OF THE BEST DIVERS IN THE COUNTRY.

YOU WIN A BIG DIVING MEET AND YOU ARE HIGHLY PRAISED.

YOUR COACH HAS BEEN GIVING YOU MORE ATTENTION.

YOU COMPETE IN A BIG DIVING MEET IN WHICH YOU WANT TO FINAL, AND YOU MAKE THE FINALS.

YOU WIN A MAJOR DIVING MEET LIKE THE NCAA CHAMPIONSHIPS.

The resulting “bad” situations are:

YOU RECEIVE A LOWER SCORE ON A DIVE THAN YOU EXPECT.

A TEAMMATE COMES TO YOU WITH A PROBLEM ABOUT DIVING AND YOU DON'T TRY TO HELP HIM/HER.

YOU GIVE A TALK IN FRONT OF A GROUP OF DIVERS AND THE AUDIENCE REACTS NEGATIVELY.

YOU MEET A TEAM MATE WHO ACTS HOSTILELY TOWARDS YOU.

YOU DON'T FINISH WORKOUTS THAT OTHERS EXPECT YOU TO COMPLETE.

YOU COMPETE IN A BIG DIVING MEET AND YOU DO POORLY.

After each situation the respondent is asked to write down one major cause of the situation. This statement by the respondent is not used in the scoring of the questionnaire but simply serves as an aid to better answer the remaining questions. Following each situation and the response by the respondent are three questions. The first question measures whether the respondent's answer is internal or external; the second question whether the respondent's answer is stable or unstable; and the third question, whether the respondent's answer is global or specific.

To arrive at the Composite Positive Attributional Style (CoPos) the sum of the total of all good event scores was divided by 6 (total number of good events). The best score that can be obtained is 21; the worst score is 3. For example, a score of 21 would indicate that the respondent has a very confident and optimistic attributional style for positive situations (e.g., in case of success the person is confident in his/her abilities, thinks that he/she can be successful in diverse situations and not only in the present situation, but in future situations as well). A score of 3 would indicate for positive situations the respondent has a pessimistic and unconfident attributional style (e.g., in the case of success the respondent would attribute the success only to temporary luck, specific for that particular situation. The respondent would think that in other situations of life, he/she might not be as lucky, and perhaps would not have success at all.).

To arrive at the Composite Negative Attributional Style (CoNeg) the sum of the total of all bad event scores was divided by 6 (total number of bad events). The best

score that can be obtained is 3; the worst score is 21. For example, a score of 3 would indicate that the respondent has a realistic and optimistic attributional style for negative situations (e.g., in the case of failure, the blame would be set on the lack of effort, the respondent sees it as a specific and temporary situation that can be resolved through more effort, a better plan, or help from others). A score of 21 would indicate the respondent has a depressive attributional style for negative situations (e.g. blaming own self for failure and the failure would be considered stable over time and global across all situations of life).

Scores for three different dimensions (internal, stable and global) can also be computed separately for positive and negative events. Petersen et al. (1982) recommend using the composite scores presented above because they are more reliable in the prediction of outcomes.

The other instrument used to collect data for this performance are the results of each event at each of the diving championships (Appendix I).

Validity and Reliability

Attribution theory has a long history within social psychology (Tennen & Herzberger, 1986). The Attributional Style Questionnaire (ASQ: Peterson, et al., 1982) was developed to measure selected attributes. Initially many of the research studies that used the ASQ had to do with the attributes of people with depression. More recently the

ASQ has been used to assess the attributes of people in other areas and in particular sports psychology.

The validity of the ASQ, this is the degree to which it measures what it purports to measure, is established through the definition of its measure, i.e. Internal, Stable, Global, and Composite. With respect to depression, the ASQ has proven to be a valid predictor of depression (Encyclopedia of Psychological Assessment).

The reliability of the ASQ or the ability of the measure to repeat the scores consistently was measured by test/retest (Peterson, et al., 1982). The correlations for the scale ranged from 0.57 for Global bad events to 0.70 for Composite good events. The validity and reliability of the NCAA judging criteria has been proven through its continued use by the NCAA, and at World and Olympic level competitions.

Data Analysis

To address Research Question 1:

How do elite college divers respond to twelve different hypothetical situations?

Frequency distributions were calculated for the total sample for each of the twelve different hypothetical situations.

To address Research Question 2:

Is the response to twelve different hypothetical situations of elite college divers different for males and females?

Frequency distributions were calculated separately for the female and male samples for each of the twelve different hypothetical situations. Chi-square statistics were then calculated comparing the female and male frequency distributions. A significant level of 0.5 was used.

To address Research Questions 3 through 7:

What is the attributional style of elite college divers?

Is the attributional style of elite female college divers different for males and females?

Is the attributional style of elite college divers related to their performance?

Is the attributional style of elite female college divers related to their performance?

Is the attributional style of elite male college divers related to their performance?

The ASQ was used. The scoring key for the ASQ composite scores was furnished by the author, Dr. Martin E. P. Seligman (see Appendix P). Composite scores were calculated for each of the subjects. The composite scores are:

Composite Negative Attributional Style

Composite Positive Attributional Style

Composite Positive minus Composite Negative Attributional Style

Internal Negative

Stable Negative

Global Negative

Internal Positive

Stable Positive

Global Positive

Hopelessness

Hopefulness

Means were calculated for each of the composite scores to address Research Question 3 and 4. A MANOVA was used to compare the mean scores for female and male divers for each of the composite scores to address Research Question 4. A Wilks' Lambda statistic was calculated. The level of significance used for the statistical test was 0.05. Pearson correlation coefficients were calculated between the diver's composite scores and their One Meter and Three Meter finishes in the 2005 NCAA Diving Championships to answer Research Question 5. These correlation coefficients were then statistically tested, using a student's t test at a 0.05 level of significance with n-

2 degrees of freedom. Based on the results of Research Question 4, Research Questions 6 and 7 are addressed using the Pearson correlation coefficients calculated between the diver's Attributional Style composite scores and their finish in the 2005 NCAA Diving Championships for female and male divers. These correlation coefficients were then statistically tested, using a Student's t test at a 0.05 level of significance with n-2 degrees of freedom.

RESULTS AND DISCUSSION

A meta-analysis of numerous research, conducted by Frieze, Whitley, Hanusa, & McHugh (in press), indicates that successful females are more likely than successful males to attribute the outcome to luck rather than ability while male athletes did not evidence this trend. This attribution pattern on the part of females may be partially explained by their tendency to have lower expectancies of success than males (cf. Crandall, 1969). Frieze, Parsons, Johnson, Ruble, & Zellman (1978) explain that the socialization process contributes to these sex differences in expectancies for success. Any attributional differences between male and female athletes may reflect a difference in their general orientations toward sports participation. Boys tend to receive a great deal of encouragement on achievement-related tasks, while for girls, such encouragement is much less likely.

The prevailing results in the literature are that males adopt an internal focus and women an external focus with regard to their attributions of success and failure. The results of this study were not consistent with the literature. No significant differences were found between male and female divers and the alpha was inconsequential.

Research Findings

This chapter presents the analysis of data obtained from the Attributional Style Questionnaire (1982) administered to male and female divers participating in the 2005 NCAA Diving Championships. The analysis addressing each of the research questions is presented following the research question. Statistical significant differences will be noted with the analysis.

Survey Response

As noted in Chapter 3, at each of the 2005 NCAA Diving Championships a mandatory coaches' meeting was held, per NCAA policy, the night before the first competition. At each of those coaches' meetings, the survey was disseminated to the coaches and they were again encouraged as ask their athletes to participate by completing the survey at the conclusion of the last event. From the competitive roster the researcher was able to discern what would be the last event for each athlete. At the conclusion of each athlete's last event, the researcher personally delivered the survey and requested that he/she return it as soon as possible, but at the latest, at the conclusion of the entire competition. A total of 76 surveys were administered. Fifty-five surveys were returned; 27 surveys were returned by female subjects and 27 by male. One survey did not have an indication of male or female.

Research Question 1: How do elite college divers respond to twelve different hypothetical situations?

Twelve hypothetical situations were presented to the subjects. The subject was asked to write down the major cause of the situation and to respond to three questions. The questions differed somewhat in language but were directed toward:

Is the cause due to you or other circumstances?

In the future, will this cause be present?

Is the cause just for this situation or does it influence other areas of your life?

The subjects were asked to respond to each question using a seven point Lickert scale from: “Will never again be present” (1), to “Will always be present” (7), and

“Influences just this particular situation” to “Influences all situations in my life” (7).

Frequency distributions were determined for the responses by the subjects to the questions directed toward each cause of the hypothetical situations (Appendix Q). The subjects' responses to each of the 36 questions were combined, 1 through 3, 4, and 5 through 7. A response of 1 through 3 indicated the cause was due to other people or circumstances, will not be present, and influences this situation; a response of 4 indicated the subject was undecided; and, a response of 5 through 7 indicated the cause was due to the subject, will be present, and influences situations in the subjects' life. For each hypothetical situation the subject's combined responses to each question are presented.

YOU RECEIVE A LOWER SCORE ON A DIVE THAN YOU EXPECT.

Is the cause of the lower score due to something about you or something about other people or circumstances?

Combined response	1-3	4	5-7
Percent responding	18.2	7.3	72.7

In the future, will this cause again be present?

Combined response	1-3	4	5-7
Percent responding	9.1	32.7	56.4

Is the cause something that just affects your individual scores on competitive dives, or does it also influence other areas of your life?

Combined response	1-3	4	5-7
Percent responding	65.5	10.9	20.0

The sport of diving is subjective with the judges' scores of a dive based on performance quality of specific elements for each dive. Judges' scores are instantaneous feedback which allows the athlete to make causal judgments immediately following each performance of a dive. The results of this question are not surprising to the researcher due to the nature of the sport.

A significant percentage of responses (72.7%) located the locus of control as internal (ability and effort) based on the subject's performance of the dive. In other words, from repeated performances of each dive, an athlete has a general sense (through kinematic and kinesthetic cues) of how he/she performed the dive. The diver actually comes up from under the water, after completion of the dive, already knowing the range

of scores (poor: a score of 1- 4; average to good: a score of 4.5 - 6.5; superior: a score of 7 - 8; and excellent to perfect: a score 8.5 - 10) he/she will receive.

The mixed nature of the responses (32.7% undecided and 56.4% due to self) to the second part of the question, “In the future, will this cause again be present,” are again, possibly due to the nature of the sport. The athletes understand their performance will determine the “range” of scores they will receive. The higher “undecided” response to this question may be interpreted as the athletes understanding that in the future, they may or may not perform a dive at the same standard (instability of effort and ability) and are therefore “undecided” as to whether or not the lower score is expected.

The high attribution to third part of the question, “Is the cause something that just affects your scoring on competitive dive, or does it also influence other parts of your life,” (65.5%, influences this situation) speaks to the causal dimension of controllability. This may mean the athletes understand judging is only relevant to their performance and not other aspects of their lives or performances on another day or in a different competition, although, as evidenced in other studies, mastery orientation versus performance oriented goals may effect motivation in the future.

YOU PERFORM A DIFFICULT DIVE BETTER THAN YOU EVER HAVE BEFORE:

Is the cause of the performance due to something about you or something about other people or circumstances?

Combined response	1-3	4	5-7
Percent responding	7.3	9.1	81.8

In the future, when performing this dive again, will this cause be present?

Combined response	1-3	4	5-7
Percent responding	1.8	27.3	67.3

Is the cause something that just affects your performance, or does it also influence other areas of your life?

Combined response	1-3	4	5-7
Percent responding	27.3	25.5	45.5

The causal attributions to the first two parts of Question 2 (81.8% due to self and 67.3% will be present in future situations) place the locus of control internally for both ability and effort. Athletes understand the nature of the sport requires the judges to judge what they see. While the judges may fall within a tight range of scores on a particular dive, they do not generally go outside of that range when awarding a score. Therefore, if an athlete performs a difficult dive better than ever before, he/she would expect that, due to his/her effort and ability in performing that specific dive, he/she has *earned* or *deserves* the score. Responses to the second part of this question parallel that thought with the athletes expressing their understanding that the locus of control is within themselves and the range of scores are based on the performance of the dive.

The rather mixed response to the third part of the question (27.3%, influences this situation only, 25.5 % undecided and 45.5 %, influences other situations) is interesting to the researcher. This may reflect the relation between the locus of causality and feelings. When a diver performs a difficult dive well in competition, the scores reflect that performance. The mixed response may be interpreted as the athletes gaining confidence, feeling a sense of pride, satisfaction or competency (all internal attributions) with regard to the future performance of that dive. This may also reflect the stability and controllability ascriptions related to the causal dimensions.

YOU BECOME ONE OF THE BEST DIVERS IN THE COUNTRY.

Is the cause of your becoming one of the best divers in the country due to something about you or something about other people or circumstances?

Combined response	1-3	4	5-7
Percent responding	7.3	29.1	61.8

In the future, will this cause again be present?

Combined response	1-3	4	5-7
Percent responding	1.8	16.4	80.0

Is the cause something that just affects your diving success, or does it also influence other areas of your life?

Combined response	1-3	4	5-7
Percent responding	9.1	10.9	78.2

The very high attribution to “self” (61.8 %,) reflects the athletes’ placement of the locus of control as internal (based on effort) and stable (based on ability). The responses indicate the divers take responsibility for success and attribute it to controllable factors such as effort and ability, which parallels Weiner’s (1974) theory for linkages for success. Their responses place the cause within the “actor” which again parallels Weiner’s (1980) theory. The 80.0% response to the cause being present in the future speaks to the athletes’ level of ability-competence. 78.2% answered the third portion of the question that success (becoming one of the best divers in the country) as influencing other parts of their lives and being present in other situations. This response can be interpreted as the divers’ global nature of their sense of competence in their abilities.

A TEAMMATE COMES TO YOU WITH A PROBLEM ABOUT DIVING AND YOU DON'T TRY TO HELP HIM/HER.

Is the cause of your not helping your team mate due to something about you or something about other people or circumstances?

Combined response	1-3	4	5-7
Percent responding	29.1	16.4	47.3

In the future, when a team mate comes to you with a problem, will this cause again be present?

Combined response	1-3	4	5-7
Percent responding	30.9	40.0	20.0

Is the cause something that just affects what happens when a team mate comes to you with a problem or does it also influence other areas of your life?

Combined response	1-3	4	5-7
Percent responding	32.7	34.5	23.6

The responses to this situation were the most mixed of all of the hypothetical situations given. The 47.3 % attribution to the first part of the question indicates that not helping a teammate is due to the subject and reflects the subject's controllable effort. There may be many reasons the subject does not want to help with the problem: dislike of the team mate, competition from the team mate, the subject doesn't know how to help or what suggestions to give, etc. The "undecided" response (40.0 %) to how the situation will play out in the future, speaks to the situational nature of the relationship between the athletes and the ability of each to have control of the effort to help with the problem in

the future. Future circumstance and the team mate's disposition seem to play a large role in the responses to the third part of the question with regard to the cause of future involvement. Whether or not the athlete will let this situation influence other areas of his/her life is embedded in the stability of the problem which may be fixed, long lasting or variable over time. The balanced responses reflect the instability of that future potential.

YOU GIVE A TALK IN FRONT OF A GROUP OF DIVERS AND THE AUDIENCE REACTS NEGATIVELY.

Is the cause of the audience's negative reaction due to something about you or something about other people or circumstances?

Combined response	1-3	4	5-7
Percent responding	10.9	41.8	43.6

In the future, when you give talks, will this cause again be present?

Combined response	1-3	4	5-7
Percent responding	16.4	47.3	32.7

Is the cause something that just influences giving talks, or does it also influence other areas of your life?

Combined response	1-3	4	5-7
Percent responding	23.6	27.3	45.5

The ascription as to the causality of the situation described by this situation illustrates an external locus of control which may not be controlled by the subject. The negative reaction may be fixed, long lasting or variable over time and the responses reflect the instability of the circumstances. The reaction of the audience could have been due to the subject matter, presentation skills, size of the room, poor audio equipment, etc. The subject's response appears to be mixed possibly due to the nature of the question. However, it is interesting to the researcher that without an explanation for why the audience reacted negatively, 43.6 % (almost 50%) of the subjects internalized the response as having been caused by the subject.

The high “undecided” response (47.3%) in the second part of the question tends to explain the subjects’ confusion as to the stability of the situation and its influences. The 45.5 % response to the third part of the question (Is the cause something that just influences interacting with team mates, or does it also influence other areas of your life?) also reflects the cause as being subject to volitional control and possibly independent of personal will.

YOU WIN A BIG DIVING MEET AND YOU ARE HIGHLY PRAISED.

Is the cause of your being praised due to something about you or something about other people or circumstances?

Combined response	1-3	4	5-7
Percent responding	7.3	18.2	70.9

In the future, when you win a big meet, will this cause again be present?

Combined response	1-3	4	5-7
Percent responding	3.6	16.4	76.4

Is the cause something that just affects winning a big meet, or does it also influence other areas of your life?

Combined response	1-3	4	5-7
Percent responding	18.2	12.7	65.5

Similar to the positive attribution responses given in Question 3, the divers responded with an internal, stable and controllable, locus of control. The very high responses of internal attribution to “self” for all parts of this question (70.9 %) illustrate that the athletes feel in control of their effort, performance and task efficiency even within the parameters of a subjective sport. Subsequent internal ascriptions for success fall in line with results from other studies. Praise for success is expected within the sport and outcome feelings of confidence and competence are expected.

In the second part of this question, 76.4% responded that the cause will again be present in the future. This can be interpreted as the divers’ sense of controllability and competence. In the third part of the question, 65.5% responded that the cause is not just

situational, but will again be present in other competitions. This speaks to the global nature of success and the competence the athletes derive from it.

YOU MEET A TEAM MATE WHO ACTS HOSTILELY TOWARDS YOU.

Is the cause of your team mate acting hostile due to something about you or something about other people or circumstances?

Combined response	1-3	4	5-7
Percent responding	30.9	36.4	30.9

In the future, when interacting with team mates, will this cause again be present?

Combined response	1-3	4	5-7
Percent responding	21.8	34.5	41.8

Is the cause something that just influences interacting with team mates, or does it also influence other areas of your life?

Combined response	1-3	4	5-7
Percent responding	25.5	30.9	41.8

The responses as to the causality of the situation described by this hypothetical scenario illustrate an external locus of control which may not be controlled by the subject. The stability of the hostility may be fixed, long lasting or variable over time, and the responses reflect the instability of the situation now and in the future. The mixed responses (25.5 %, 30.9 % and 41.8 %) to the third part of the question (Is the cause something that just influences interacting with team mates, or does it also influence other areas of your life?) also reflect the cause being subject to volitional control and possibly independent of the subject's personal will.

YOU DON'T FINISH WORKOUTS THAT OTHERS EXPECT YOU TO COMPLETE.

Is the cause of not finishing workouts due to something about you or something about other people or circumstances?

Combined response	1-3	4	5-7
Percent responding	16.4	10.9	70.9

In the future, when not finishing workouts that others expect you to, will this cause again be present?

Combined response	1-3	4	5-7
Percent responding	16.4	27.3	54.5

Is the cause something that just affects finishing workouts that others expect you to, or does it also influence other areas of your life?

Combined response	1-3	4	5-7
Percent responding	21.8	14.5	61.8

Responses to the first part of this question (70.9 % due to self) locate the cause as internal and due to the athlete's *lack* of effort (*I did not finish the workout because I...*). The high response rate (54.5 %, will be present in the future) exhibited in the second part of the question (In the future, when not finishing workouts that others expect you to, will this cause again be present?) again places the locus of causality as internal and unstable, with the responsibility of completing a practice session sitting on the shoulders of the athlete. The responses to the third part of the question (61.8 %, influences other situations) places responsibility of the cause influencing other parts of their lives as controllable and having to do with the amount of effort the athlete puts forth.

YOUR COACH HAS BEEN GIVING YOU MORE ATTENTION.

Is the cause of your coach giving you more attention due to something about you or something about other people or circumstances?

Combined response	1-3	4	5-7
Percent responding	14.5	23.6	58.2

In future interactions with your coach, will this cause again be present?

Combined response	1-3	4	5-7
Percent responding	1.8	38.2	56.4

Is the cause something that just affects how your coach attends to you, or does it also influence other areas of your life?

Combined response	1-3	4	5-7
Percent responding	34.5	16.4	45.5

The 58.2 % due to self response to the first part of this question locate the cause of the attention as internal and due to the athlete's effort (I am working hard, I am deserving of extra attention, etc.). The more mixed response (38.2 % undecided; 56.4 % will be present in the future) to the second part of the question (In the future, will this cause again be present) may speak to the nature of change of the athlete's effort in garnering that attention from the coach. The fairly equal responses of 34.5 % attribution to "circumstances of this situation" and 45.5 % attribution "due to circumstances in other situations" to the third aspect of the question may address the subject's uncertainty of the dimensions of controllability within the situation. "More attention" from a coach may be the result of many positive or negative variables within a specific practice or competition

setting. Though the situation did not define the nature of the coaches' attention (positive or negative) the responses indicate that the subjects nevertheless place the locus of control within themselves.

YOU COMPETE IN A BIG DIVING MEET IN WHICH YOU WANT TO FINAL,
AND YOU MAKE THE FINALS.

Is the cause of your making the finals due to something about you or something about other people or circumstances?

Combined Response	1-3	4	5-7
Percent Responding	1.8	14.5	80.0

In the future, when you make the finals, will this cause again be present?

Combined Response	1-3	4	5-7
Percent Responding	1.8	5.5	96.4

Is the cause something that just influences making the finals, or does it also influence other areas of your life?

Combined Response	1-3	4	5-7
Percent Responding	18.2	3.6	74.5

Responses to this question show the divers' locus of control as internal. The responses ascribe the causal dimensions as high in ability (*I dived well. My ability was stable. I made the finals*) as well as effort (*My efforts were controlled enough to place me in the top 8 finishers*). Similar to the subject's responses given for situations 2,3 and 6, the athletes clearly (80.0 %, 96.4 % and 74.5 %) take responsibility for their own success when achieving a predetermined goal such as making the finals in the competition.

YOU COMPETE IN A BIG DIVING MEET AND YOU DO POORLY.

Is the cause of your poor performance due to something about you or something about other people or circumstances?

Combined response	1-3	4	5-7
Percent responding	3.6	9.1	83.6

In the future, when you compete poorly, will this cause again be present?

Combined response	1-3	4	5-7
Percent responding	16.4	29.1	49.1

Is the cause something that just affects your poor performance, or does it also influence other areas of your life?

Combined response	1-3	4	5-7
Percent responding	20.0	14.5	58.2

As in situation 1, judges' scores are instantaneous feedback to the athlete which allows the athlete to make causal judgments immediately following the performance of a dive. The results of this hypothetical situation are not surprising to the researcher due to the nature of the sport. A significant percentage of responses (83.6 %) located the locus of control as internal (ability and effort) based on the subject's performance of the dive.

An athlete has a general sense of how he/she performed the dive and actually comes up from under the water, having completed the dive, already knowing the range of scores he/she will receive. Divers appear to place the locus of control for failure as internal and controllable based on effort exerted for this task. . Had the respondents placed the locus of control as "due to others," these results would have been more

consistent with the general finding of Frieze, Whitley, Hamusa & McHugh (in press) that there is a difference in attributions between males and females.

As in situation 1, the rather mixed response to the second part of the question, “In the future, will this cause again be present,” is again, possibly due to the nature of the sport. The athletes understand their performance will determine the “range” of scores they will receive, and those scores, in turn, will affect the final placement in the competition.

The higher “undecided” response to this question may be interpreted as the athletes understanding that in the future, they may or may not perform a dive at the same standard (instability of effort and ability) and are therefore “undecided” as to future competitions, performances and placement results.

The high attribution to third part of the question, “Is the cause something that just affects your scoring on competitive dive, or does it also influence other parts of your life,” (58.2% attribution) speaks to the causal dimension of controllability. This may mean the athletes understand the final results are only relevant to their performance and not other aspects of their lives although the 20.0 % response of its effect on other aspects of their lives may speak to attributions of failure emotions such as anger, shame (effort), and incompetence (ability) that would result from the “poor” performance.

YOU WIN A MAJOR DIVING MEET LIKE THE NCAA CHAMPIONSHIPS.

Is the cause of your winning a major meet due to something about you or something about other people or circumstances?

Combined response	1-3	4	5-7
Percent responding	1.8	23.6	70.9

In the future, when you win a major meet, will this cause again be present?

Combined response	1-3	4	5-7
Percent responding	1.8	10.9	83.6

Is the cause something that just affects you winning a major meet, or does it also influence other areas of your life?

Combined response	1-3	4	5-7
Percent responding	5.5	9.1	81.8

The responses to this question are very similar to situations 2, 3, 6 and 10. The causal responses to this question illustrate the divers' locus of control as internal. The responses ascribe the causal dimensions as high in ability (I dived well. My ability was stable. *I* won) as well as effort (*My* efforts were controlled enough to win today).

Research Question 2: Is the response to twelve different hypothetical situations of elite college divers different for males and females?

To address this research question frequency distributions were determined for the responses by the female and male subjects to the questions directed toward each cause of the hypothetical situations (Appendix R). As with the response to Research Question 1, subjects' responses to each of the 36 questions were combined, 1 through 3, 4, and 5

through 7. One through 3 indicated the cause was due to other people or circumstances, will not be present, and influences this situation, a response of 4 indicated the subject was undecided, and a response of 5 through 7 indicated the cause was due to the subject, will be present, and influences situations in the subjects' life. Contingency tables were determined (Appendix S), and chi-square statistics were used to compare the resulting female and male frequencies.

After analysis of the responses to Research Question 2, no significant differences were found between male and female divers, at a significance level of 0.05, on the 36 comparisons.

Research Question 3: What is the attributional style of elite college divers?

To address this research question means were calculated for the 11 composite scores measuring the Attributional Style of Elite College Divers (Appendix T).

To arrive at the Composite Negative Attributional Style (CoNeg) the sum of the total of all "bad" event scores was divided by 6 (total number of "bad" events). The best score that can be obtained is 3; the worst score is 21. For example, a score of 3 would indicate that the respondent has a realistic and optimistic attributional style for negative situations (e.g., in the case of failure, the blame would be set on the lack of effort, the respondent views it as a specific and temporary situation that can be resolved through more effort, a better plan, or help from others). A score of 21 would indicate the respondent has a depressive attributional style for negative situations (e.g. blaming own self for failure and the failure would be considered a stable over time and global across all situations of life).

Appendix T shows the subjects' mean score for the Composite Negative Attributional Style (CoNeg) is 13.3 with a minimum score of 9.0 and a maximum score of 16.7. The best score for the CoNeg is defined to be 3 and the worst score is defined to be 21. The mean of 13.3 is slightly above the mid-point of 12.0 indicating the subjects are slightly pessimistic in failure situations and tend to blame themselves for what they consider failure (low scores and/or poor performance) and that they would tend to continue to blame themselves over time for other poor performances.

This slightly negative attributional style for failure seems appropriate for the type of athletes participating in a subjective sport. Divers understand the subjectivity of the scoring is based on the performance/nonperformance of each dive in a competition. Further, it indicates that the divers understand that poor dive scores add up to low placement at the end of a competition and seem to take ownership (internal, stable and controllable) of that responsibility for failure.

To arrive at the Composite Positive Attributional Style (CoPos) the sum of the total of all "good" event scores was divided by 6 (total number of "good" events). The best score that can be obtained is 21; the worst score is 3. For example, a score of 21 would indicate that the respondent has a very confident and optimistic attributional style for positive situations (e.g. in the case of success, the person is confident in his/her abilities, thinks that he/she can be successful in diverse situations and not only in the present situation, but in future situations as well). A score of 3 would indicate for positive situations the respondent has a pessimistic and self-doubting attributional style (e.g., in the case of success the respondent would attribute the success only to temporary

luck, specific for that particular situation. The respondent would think that in other situations of life, he/she might not be as lucky, and perhaps would not have success at all.).

Appendix T shows the subjects' mean score for the Composite Positive Attributional Style (CoPos) is 15.9 with a minimum score of 10.2 and a maximum score of 21.0. The best score for the CoPos is defined to be 21 and the worst score is defined to be 3. The mean of 15.9 is somewhat above the mid-point of 12.0 indicating the subjects are generally confident and in control of their diving ability and believe they can again be as successful in future competitions as today. The mean of 15.9 would also indicate that the respondents are generally optimistic about other parts of their lives and are not attributing their successes to "luck" as much as to internal, stable factors such as ability and effort.

It can be seen (Appendix T) that the subjects' mean score for the Composite Positive minus Composite Negative (CPCN) is 2.5 with a minimum score of -2.8 and a maximum score of 7.5. The best score for the CPCN is defined to be +18 and the worst score is defined to be -18. The mean of 2.5 is somewhat above the mid-point of 0 indicating the subjects are seemingly realistic in their attributions of success and failure. It can be seen (Appendix T) that the subjects' mean score for the Internal Negative is 4.9 with a minimum score of 3.7 and a maximum score of 6.8. The range of scores for the Internal Negative is between 1 and 7. The mean of 4.9 is somewhat above the mid-point of 4.

It can be seen (Appendix T) that the subjects' mean score for the Internal Positive score is 5.4 with a minimum score of 3.7 and a maximum score of 7.0. The range of scores for the Internal Positive is between 1 and 7. The mean of 5.4 is above the mid-point of 4.

It can be seen (Appendix T) that the subjects' mean score for the Stable Negative score is 4.4 with a minimum score of 2.2 and a maximum score of 6.2. The range of scores for the Stable Negative is between 1 and 7. The mean of 4.4 is somewhat above the mid-point of 4.

It can be seen (Appendix T) that the subjects' mean score for the Stable Positive score is 5.6 with a minimum score of 4.2 and a maximum score of 7.0. The range of scores for the Stable Positive is between 1 and 7. The mean of 5.6 is above the mid-point of 4.

It can be seen (Appendix T) that the subjects' mean score for the Global Negative score is 4.0 with a minimum score of 1.5 and a maximum score of 5.8. The range of scores for the Global Negative is between 1 and 7. The mean of 4.0 is somewhat above the mid-point of 4.

It can be seen (Appendix T) that the subjects' mean score for the Global Positive score is 4.9 with a minimum score of 2.0 and a maximum score of 7.0. The range of scores for the Global Positive is between 1 and 7. The mean of 4.9 is somewhat above the mid-point of 4.

It can be seen (Appendix T) that the subjects' mean score for the Hopelessness score is 4.2 with a minimum score of 2.2 and a maximum score of 6.0. The range of

scores for the Hopelessness is between 1 and 7. The mean of 4.2 is somewhat above the mid-point of 4.

It can be seen (Appendix T) that the subjects' mean score for the Hopefulness score is 5.3 with a minimum score of 3.1 and a maximum score of 7.0. The range of scores for the Hopefulness is between 1 and 7. The mean of 5.3 is somewhat above the mid-point of 4.

Research Question 4: Is the attributional style of elite college divers different males and females?

To address this research question means were calculated for the 11 composite scores measuring the Attributional Style of Elite College Divers, as outlined in the answer to Research Question 3, for female and male subjects (Appendix U). The means were then statistically compared using a MANOVA (Appendix V). The Wilks' Lambda value found was 0.860. This value would be significant at the 0.435 level, far above the significant level set at 0.05.

After analysis of the responses to Research Question 4, **no** significant difference was found between male and female divers, at a significance level of 0.05, on the 36 comparisons.

Research Question 5: Is the attributional style of elite college divers related to their performance?

To address this research question Pearson correlation coefficients were calculated between the diver's Attributional Style composite scores and their one-meter and three-meter rankings in the 2005 NCAA Diving Championships (Appendix W). The Pearson

correlation coefficients were then statistically tested, using a Student's t test at a 0.05 level of significance with $n-2$ degrees of freedom (Appendix W). The degrees of freedom for the eleven statistical tests ranged between 42 and 50. The correlation coefficient that would be significant, that is indicating a relationship, with 50 degrees of freedom, is equal to or greater than 0.273. With 40 degrees of freedom the correlation coefficient value would have to be equal to 0.304 or larger to be significant.

The highest absolute value correlation coefficient found was between Place Finish in the One-Meter Competition and Stable Negative, 0.201, well below the significant value of 0.273.

The highest absolute value correlation coefficient found between Place Finish in the One-Meter Competition and Composite Attributional Style Scores was for Composite Negative, 0.086.

The highest absolute value correlation coefficient found between Place Finish in the One-Meter Competition and Internal Scores was for Internal Positive, 0.113.

The highest absolute value correlation coefficient found between Place Finish in the One-Meter Competition and Stable Scores was for Stable Positive, 0.098.

The highest absolute value correlation coefficient found between Place Finish in the One-Meter Competition and Global Scores was for Global Negative, 0.128.

The highest absolute value correlation coefficient found between Place Finish in the One-Meter Competition and Hope Scores was for Hopelessness, 0.118.

The highest absolute value correlation coefficient found between Place Finish in the One-Meter Competition and Composite Attributional Style Scores was for Composite Difference, 0.196.

The highest absolute value correlation coefficient found between Place Finish in the One-Meter Competition and Internal Scores was for Internal Positive, 0.192.

The highest absolute value correlation coefficient found between Place Finish in the One-Meter Competition and Stable Scores was for Stable Negative, 0.201.

The highest absolute value correlation found between Place Finish in the One-Meter Competition and Global Scores was for Global Negative, 0.113.

The highest absolute value correlation found between Place Finish in the One-Meter Competition and Hope Scores was for Hopelessness, 0.178.

All of the above correlation coefficient values found are below the significant values. Therefore, the answer to Research Question 5 is that there is no significant correlation between attributional style of elite college divers and their performance.

Research Question 6: Is the attributional style of elite female college divers related to their performance?

Research Question 7: Is the attributional style of elite male college divers related to their performance?

To answer Research Questions 6 and 7, it was anticipated that Pearson correlation coefficients would be calculated between the diver's Attributional Style

composite scores and their ranking in the 2005 NCAA Diving Championships for female and male divers. As noted in Chapter 3, these statistics were contingent on the results found for Research Question 4. The analysis for Research Question 4 indicated that there was no significant difference between female and male subjects on any of the eleven Attributional Style scores. Therefore, the findings for Research Question 5 can be generated to Research Questions 6 and 7; there is no correlation between attributional style and diving performance for female and male elite college divers.

CONCLUSIONS

As evidenced in previous chapters and numerous studies (Matlin, 1987; Frieze et al., in press) socialization processes contribute to sex differences in expectancies for success. Males are less likely to attribute an unsuccessful outcome to lack of effort or ability than females and females are more likely than successful males to attribute the outcome to luck rather than ability. The three major circumstances in which men are more likely than women to attribute their success to ability, and men are less likely than women to attribute their failure to ability are: (a) sex differences in attributional style seem most likely to emerge on tasks that are considered to be masculine; (b) attributional patterns seem to be influenced by whether the responses are made publicly or privately, when people are aware that they are being evaluated by others; and (c) women and men show different attributional patterns when they have certain kinds of personal characteristics. Women who hold more traditional gender roles show attributional styles more typical to feminine sex-role (avoid ability explanation for their failures), as opposed to women who are nontraditional, and show attributional patterns more typical to men (use of ability explanation for success, and avoid ability explanation for failure).

Results of this study

Results from this study did not parallel those found in other studies of causal attributions made by athletes. The responses to failure situations pertaining to diving yielded a mean score of 13.3 is just above the mid-point of 12.0 for both females and males. This indicates both sexes are slightly pessimistic and tend to blame themselves for what they consider failure (low scores on a dive and/or poor performance). They also tend to continue to blame themselves for failure over time.

The responses to successful situations pertaining to diving yielded a mean score of 15.9, somewhat above the mid-point of 12.0. This indicates the subjects are generally confident and feel in control of their ability and believe they can again be successful in future competitions. The mean also indicates the respondents are generally optimistic about other parts of their lives and are not attributing their successes to “luck” as much as to internal, stable factors such as ability and effort.

Unlike other study’s results, the results of this survey indicate that there are no significant differences between male and female attributional styles with regard to their performances. What makes the results within the sport of springboard and platform diving different from other sports? Why are there no significant differences of attributional style between male and female NCAA divers? There are many possible reasons for the current findings.

LIMITATIONS

Due to the nature of the sport itself, the current survey queried only elite NCAA divers (41 total women and 35 total men) at the national championships, the most elite championship within the NCAA program. The total number of participants taking the survey was small. The small sample size may have minimized the power to detect a difference between the sexes and limited the generalizability to other groups, even within the sport. Further, the research was constrained by the limited number of participants that had succeeded to the level within the sport, to be available to participate in the study.

Unlike other sports such as swimming and track and field which are objectified by a clock and a resultant time, diving is a purely subjective sport with coaches also acting as judges, even at the national championships. Thus the sport is a tightly knit group of participants and coaches. Humility upon winning and losing is stressed within the fabric of the sport. An athlete does not want to be seen by the coaches/judges as “cocky” for fear he/she might endanger his/her reputation and be judged poorly at a future competition.

The survey used in this research was technically a self-report form. All of the participating athletes knew the researcher was also a coach and potential judge, so possibly their answers were according to the milieu of the sport. Therefore, a limitation may be that the responses were tempered by a self-serving bias to bolster public presentation (Wong & Weiner, 1981) because the athletes were made aware that the researcher was also a coach and potential future judge.

Furthermore, there is very little difference in ability at the top end of the sport. In other sports, athletes are known to “get hot” and score a lot of points in a short time (i.e. basketball, football, etc.). An aesthetic sport such as springboard and platform diving has innate characteristics that focus on attaining perfectly executed performances. In diving the format and slow pace of the competition create a time span that may or may not help a specific competitor. The top finishers are often very close in total points and in placement at a championship. Thus, by a twist of fate (a momentary distraction, a stumble, a slip of a hand, etc.), or a ½ point difference in just one judge’s score, a former champion can find him/herself lower than expected in the results. Consequently another limitation is couched in the subconscious humility with regard to success and failure embedded within the participating athletes.

The unique culture of the sport of diving may have also played a role in the findings. Diving is an individual sport with no group dynamic. In many sports such as football, basketball, track and field, baseball, etc., showing pride in success is stressed. Spiking the ball in the end zone, raising a fist of domination while crossing the finish line, or jubilant “hot dogging” in some other way, is encouraged and rewarded by the team, coach and fans. The results may reflect the sport’s culture of humility.

A final limitation may be the currency of the survey respondents as compared to other studies. Within the last five years, and certainly since the passage of Title IX, female collegiate athletes have become more empowered (i.e., increased scholarship money, television time, better coaching, and public popularity) and may have actually adopted more formally male gendered attributions. Male divers find themselves in a non-

traditional and non-conventional male sport because the sport is based on aesthetic performance as opposed to head-to-head competition. Thus the male divers could actually be tending toward the adoption of more formerly “female” gendered attributions.

This might explain why there was no significant difference between male and female NCAA divers with regard to their attributional style. Both sexes seemed to locate the locus of control as internal (ability and effort) based on the subject’s performance of the dive. The athletes seem to understand their performance will determine the “range” of scores they will receive and thus the place finish. Both sexes also consistently attribute the causal dimension of controllability with regard to their performance (good or poor), the subsequent scores (high or low), and final placement.

Generalizability

While information was gleaned from the study with regard to the attributional style of elite NCAA divers, the results are only generalizable to other divers at a similar elite diving level (e.g., United States Diving Senior National Championships, World Championships and Olympic Games) and age (18-22 or college age). Younger divers or less experienced divers may have a different attributional style than the older more elite strata of sport.

Furthermore, the results can not be generalized to other collegiate sports even though the age range is similar. Other sports, even subjective ones such as gymnastics or ice skating, have different judging requirements that are much more objectified, even within subjectivity. Because those sports are performances based on routines, as opposed to a 1 second skill, participants in these sports have many more aspects by which they are judged.

IMPLICATIONS

The findings imply that divers, at least in the elite group that was studied, are self-reliant athletes. Their internal attributions of control reflect the nature of the sport in which they participate. In other team sports (e.g. softball, football, etc.) and individual sports whose competition is one-on-one (e.g., tennis, wrestling, etc.) participants can weigh their opponent's contribution to the matches' final outcome more heavily than in the sport of diving. A diver's success or failure on individual dives or in place finish is based solely on his/her performance and resulting scores. This may partially explain why no significant differences in attributional style were found between the genders.

Recommendations for future research

While research on the most elite athletes in any sport is interesting and rewarding, more research needs to be conducted on the younger, less experienced segment of the sport of diving. Another interesting twist on this research would be to query elite younger divers that have met with success at an early age. These athletes, though younger (high school age) may have similar or different attributions for success and failure.

Future research could also include surveys of divers from other countries, many of whom compete within the collegiate ranks. Would foreign athletes that have grown up in other cultures with different gender expectations have the same causal attributions as American athletes? How would Chinese (Socialists) athletes' attributions compare to Canadian (Democratic) divers?

Furthermore, this study did not include any aspect of a coaches' influence on a diver's attributions. Coaches serve their athletes well when they encourage a well timed search for personal accountability and potential control, especially after set-backs are experienced. Since research has been done on perceived motivational climate and mastery versus ego-orientation environments and the coaches' role with regard to creating those environments, a study of diving coaches could prove valuable in further understanding divers' attributions. What do experienced coaches do to enhance

attributional style? How do they structure activities and are those activities varied? And finally how does the diver's coach affect the perceptions of the athlete? There are many aspects of coaching and motivation that could be studied for a better understanding of divers' attributions.

An additional recommendation is to include a qualitative aspect in any future research. Interviewing the divers and extracting common threads may help explain the similarities in their causal attributions with regard to performance. At a minimum, including a qualitative component may answer the "why?" of the findings.

Summary of results and findings

NCAA elite male and female divers are generally internal, stable and personally controllable. They locate the locus of control, in both good and bad situations, internally. They explain their performance in terms of to whom and where responsibility is directed – themselves. They do not direct their explanations to other people or environmental circumstances which would be regarded as externally regulated or entirely uncontrollable.

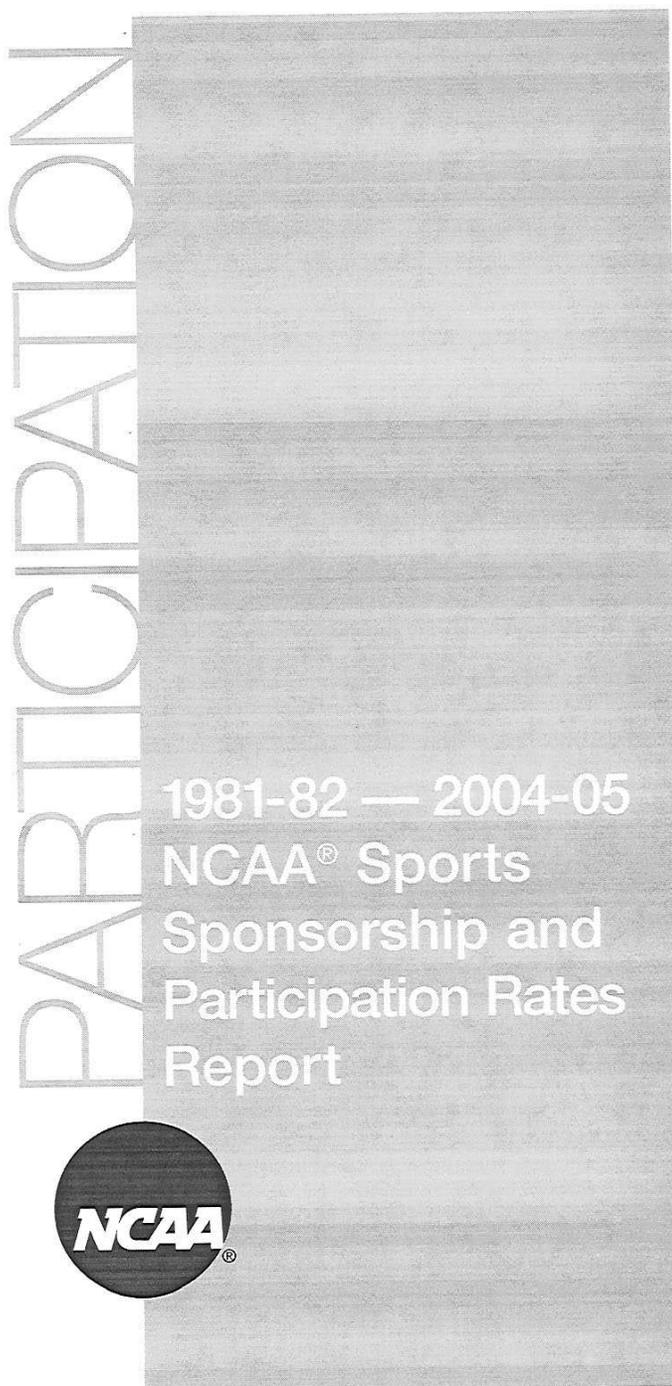
Based on the responses, divers are also very stable in their causal attributions. While some athletes believe that their setbacks in performance will continue well into the future, divers tend to view similar incidents as fleeting. Divers tend to see success and failure as temporary.

They exhibit an understanding that their performance will determine their scores and the ultimate outcome of the competition. Based on the findings, they are also stable in their causal attribution that their effort is responsible for future outcomes in competitions.

Once an individual understands the relationship between actions and outcomes, there are tools to be acquired which can be used in self-intervention to strengthen feedback, indeed to improve the situation (outcomes). The key is to improve cognitive control over emotional sensations is recognizing problems and solving them. In other words, exercising self-control. Further understanding of cognitive and emotional aspects

of sport are imperative if we are to succeed in building programs which emphasize human qualities (MacLaren, Reilly, and Lees, 1985). Only one person or team can win, but all the participants can try to do their best and thus reap the benefits of effort evaluations (Weiner, 1975).

APPENDIX A: MEN'S NCAA SPONSORSHIP AND PARTICIPATION REPORT



Men's Swimming/Diving

YEAR	Number of Members	DIVISION I					DIVISION II					DIVISION III					OVERALL				
		Number of Teams	% of Total Members	Total Athletes	Wt. Squad Size	Number of Members	Number of Teams	% of Total Members	Total Athletes	Wt. Squad Size	Number of Members	Number of Teams	% of Total Members	Total Athletes	Wt. Squad Size	Number of Members	Number of Teams	% of Total Members	Total Athletes	Wt. Squad Size	
1961-62	226	181	80.1	4,109	22.7	162	57	24.7	1,311	19.5	284	129	46.9	2,556	18.2	752	297	30.1	2,542	23.2	
1962-63	217	161	74.2	3,991	22.2	205	94	27.8	1,125	19.7	355	143	46.7	2,311	16.2	748	299	48.3	2,427	19.8	
1963-64	228	159	69.7	4,394	24.0	188	82	28.8	1,662	19.2	310	122	42.8	2,711	19.1	766	278	48.1	2,697	21.4	
1964-65	244	156	63.9	4,372	24.3	181	74	28.1	1,216	21.1	319	147	46.1	2,809	19.9	791	311	48.3	2,835	22.3	
1965-66	254	172	67.7	4,532	24.3	181	71	28.0	1,461	21.1	319	147	46.1	2,809	19.9	791	311	48.3	2,835	22.3	
1966-67	291	195	67.0	4,620	25.0	135	46	30.3	1,606	19.6	310	151	47.8	2,945	19.6	814	315	47.3	2,971	21.5	
1967-68	292	184	63.0	4,592	25.4	107	37	28.8	1,671	19.9	165	64	38.2	2,747	17.4	792	288	48.3	2,814	20.5	
1968-69	294	169	57.5	4,654	25.4	125	42	28.1	1,377	21.8	314	154	49.1	2,747	17.4	803	304	48.0	2,828	21.8	
1969-70	296	159	53.7	4,529	24.7	141	47	28.4	1,000	20.4	321	127	42.7	2,044	14.5	828	304	48.1	2,784	21.3	
1970-71	298	161	54.0	4,522	24.8	218	72	28.0	1,111	19.6	311	127	42.7	2,044	14.5	828	304	48.1	2,784	21.3	
1971-72	298	160	53.7	4,664	25.4	225	75	28.6	1,211	19.6	311	127	42.7	2,044	14.5	828	304	48.1	2,784	21.3	
1972-73	301	159	52.8	4,599	24.9	245	81	28.2	1,242	19.8	311	127	42.7	2,044	14.5	828	304	48.1	2,784	21.3	
1973-74	302	157	52.0	4,788	24.0	253	83	27.1	1,171	19.0	321	127	42.7	2,044	14.5	828	304	48.1	2,784	21.3	

Please note: For the 1965-66 through 1968-69 academic years, the average squad size data came from the Equity in Athletics Disclosure Act (EADA) form. As a result of using that data, the information for the years of 1965-66 and 1966-67 will not match the data printed in previous publications.

1964-65	306	162	52.9	4,477	23.6	290	99	28.1	1,596	20.4	421	174	41.2	3,205	20.7	898	400	40.1	3,620	22.6
1965-66*	307	151	49.2	4,279	21.7	289	94	27.6	1,477	19.2	398	166	41.5	2,570	16.4	964	471	37.3	2,291	18.7
1966-67*	308	150	48.7	4,385	21.9	290	94	27.6	1,477	19.2	398	166	41.5	2,570	16.4	964	471	37.3	2,291	18.7
1968-69*	312	151	48.4	4,684	24.3	297	95	27.5	1,873	18.7	421	174	41.2	2,603	16.4	1,031	381	37.0	2,509	18.9
1969-70*	321	149	46.4	4,326	24.4	297	92	28.2	1,624	19.3	421	174	41.2	2,603	16.4	1,031	381	37.0	2,509	18.9
1970-71*	321	149	46.4	4,326	24.4	297	92	28.2	1,624	19.3	421	174	41.2	2,603	16.4	1,031	381	37.0	2,509	18.9
1971-72*	324	145	44.7	4,401	24.3	296	91	28.1	1,606	19.2	421	174	41.2	2,603	16.4	1,031	381	37.0	2,509	18.9
1972-73*	327	140	42.8	4,451	24.4	292	89	27.2	1,641	19.3	421	174	41.2	2,603	16.4	1,031	381	37.0	2,509	18.9
1973-74*	327	140	42.8	4,451	24.4	292	89	27.2	1,641	19.3	421	174	41.2	2,603	16.4	1,031	381	37.0	2,509	18.9
1974-75*	327	141	43.1	4,468	24.3	284	86	26.3	1,641	19.3	421	174	41.2	2,603	16.4	1,031	381	37.0	2,509	18.9

*Provisional numbers are included in these numbers.

APPENDIX B: WOMEN'S NCAA SPONSORSHIP AND PARTICIPATION REPORT

PARTICIPATION

1981-82 — 2004-05
NCAA® Sports
Sponsorship and
Participation Rates
Report



Women's Swimming/Diving

YEAR	DIVISION I					DIVISION II					DIVISION III					OVERALL				
	Number of Members	Number of Teams	% of Total Members	Total Athletes	Avg Squad Size	Number of Members	Number of Teams	% of Total Members	Total Athletes	Avg Squad Size	Number of Members	Number of Teams	% of Total Members	Total Athletes	Avg Squad Size	Number of Members	Number of Teams	% of Total Members	Total Athletes	Avg Squad Size
1981-82	276	161	58.3	3,038	18.9	192	57	29.7	1,655	18.5	284	130	63.8	2,134	16.3	752	348	60.3	5,218	17.9
1982-83	277	166	57.7	3,228	21.1	205	64	31.2	1,918	14.3	306	151	60.3	2,440	16.4	788	361	68.8	5,687	18.4
1983-84	278	171	57.9	3,418	23.0	189	64	32.3	1,942	19.4	310	154	60.2	2,605	17.5	766	370	67.1	7,000	19.0
1984-85	284	174	57.8	3,500	23.0	189	65	34.4	1,984	19.8	318	155	62.7	2,803	19.2	791	374	67.3	7,647	20.4
1985-86	284	169	57.4	3,624	21.2	191	65	34.0	1,911	20.2	319	162	50.8	3,089	19.1	784	390	61.1	7,874	20.2
1986-87	291	169	58.1	3,625	21.4	185	66	30.3	1,935	18.5	316	167	53.8	3,100	18.6	792	392	61.5	7,960	19.8
1987-88	292	164	56.2	3,599	21.7	181	58	32.0	1,887	18.7	320	175	54.7	3,200	18.4	792	397	60.6	7,987	20.0
1988-89	294	162	55.1	3,580	22.1	192	61	31.8	1,888	19.8	314	174	55.4	3,149	18.1	800	397	60.6	7,982	19.4
1989-90	293	159	54.3	3,515	22.1	194	61	31.4	1,860	18.8	315	176	55.0	3,141	17.7	802	396	60.6	7,982	19.8
1990-91	296	163	55.1	3,627	22.5	209	64	32.8	1,961	19.6	323	179	55.4	3,159	17.6	828	396	62.8	7,840	19.8
1991-92	298	165	55.4	3,716	22.5	218	65	32.9	1,908	19.6	331	177	53.5	3,056	17.5	847	394	65.3	7,810	19.9
1992-93	298	164	55.0	3,772	23.0	221	68	32.5	2,021	18.8	340	179	52.2	3,284	18.4	861	391	65.3	7,668	20.4
1993-94	301	162	53.8	3,848	23.8	245	71	30.8	2,044	18.7	346	180	52.0	3,240	18.9	882	393	64.1	8,060	20.5
1994-95	302	164	54.3	3,844	23.5	261	71	29.2	2,071	18.5	352	183	47.9	3,221	17.6	947	400	61.2	7,990	19.9

Please note: For the 1995-96 through 1998-99 academic years, the average squad size data came from the Equity in Athletics & Disclosure Act (EADA) form. As a result of using this data, the information for the years of 1995-96 and 1996-97 will not match the data printed in previous publications.

* Provisional members are included in these numbers.

APPENDIX C: DIVE GROUPS

There are six "groups" into which dives are classified: *Forward*, *Back*, *Inward*, *Reverse*, *Twist*, and *Armstand*. The latter applies only to Platform competitions, whereas the other five apply to both Springboard and Platform.

- In the Forward Group (Group 1), the diver takes off facing forwards and rotates forwards
- In the Back Group (2), the diver takes off with their back to the water and rotates backwards
- In the Reverse Group (3), the diver takes off facing forwards and rotates Backwards
- In the Inward Group (4), the diver takes off with their back to the water and rotates forwards
- Any dive incorporating an axial twisting movement is in the Twist group (5).
- Any dive commencing from a handstand is in the Armstand group (6).

APPENDIX D: DIVING BODY POSITIONS

Positions

Divers use one or more of the four body positions during each dive:

**Pike**

The legs are straight with the body bent at the waist. Like the straight position, arm placement is dictated by the particular dive or by the choice of the diver.

**Straight**

No bend at the waist or knees. Depending on the dive, there may be an arch in the back. Arm placement is the diver's choice or is defined by the dive performed.

**Tuck**

Body is bent at the waist and knees, with thighs drawn to the chest and heels kept close to the buttocks. Feet and knees should be kept together and toes should be pointed.

Free

Indicates the diver's option to use any of the above three positions, or combinations thereof, when performing a twisting dive.

APPENDIX E: DIVING DEGREE OF DIFFICULTY TABLE

Degrees of difficulty for dives are calculated using the component values of the formula shown on the following two pages. The formula is:

$$A + B + C + D + E = \text{Degree of Difficulty}$$

Please note that the "D" component appears twice. Choose the version of component "D" that applies to dive being performed.

As a guide, a list of previously calculated degrees of difficulty follows the formula. In this table, empty spaces indicate the degree of difficulty has not been calculated. A "--" indicates the dive is not possible.

Every effort has been made to ensure the accuracy of the entries in the table, but if any entry varies from that arrived at through use of the formula, the formula-derived degree of difficulty is to be applied to the dive in question, according to the USD FINA Technical Representative.

The source for this information is the FINA DD Formula and Table of DD in the FINA Handbook 2005-2009 (as amended by FINA March 14, 2006).

Degree of Difficulty (DD) is calculated by adding: A + B + C + D + E

A. Somersaults

Level	0	½	1	1½	2	2½	3	3½	4½
1m & 5m	0.9	1.1	1.2	1.6	2.0	2.4	2.7	3.0	--
3m & 7½	1.0	1.3	1.3	1.5	1.8	2.2	2.3	2.8	3.5
10m	1.0	1.3	1.4	1.5	1.9	2.1	2.5	2.7	3.5

B. Flight Position For flying dives add fly position (E) to either (B) or (C) Position

	0 - 1 Somersault					1-1/2 -2 Somersault					2-1/2 Somersault					3 - 3-1/2 Somersault					4-1/2 Som	
	Fw	Ba	Re	In	Ar	Fw	Bac	Re	In	Ar	Fw	Bac	Re	In	Ar	Fw	Bac	Re	In	Ar	Fw	In
C = Tuc	0.1	0.1	0.1	-0.3	0.1	0	0	0	0.1	0	0	0.1	0	0.2	0.1	0	0	0	0.3	0.1	0	0.4
B = Pike	0.2	0.2	0.2	-0.2	0.3	0.1	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.5	0	0.3	0.3	0.3	0.6	0.4	0.4	0.7
A = Strt	0.3	0.3	0.3	0.1	0.4	0.4	0.5	0.6	0.8	0.5	0.6	0.7	0.6	-	-	-	-	-	-	-	-	-
D = Free	0.1	0.1	0.1	-0.1	0	0	-0.1	-0.1	0.2	0	0	-0.1	-0.2	0.4	0	0	0	0	-	-	-	-
E = Fly	0.2	0.1	0.1	0.4	-	0.2	0.2	0.2	0.5	-	0.3	0.3	0.3	0.7	-	0.4	-	-	-	-	-	-

Seven of the above components have negative values. Dashes indicate dives that currently are not possible.

C. Twists

Group	½ Twist ½ - 1 Som.	½ Twist 1 ½ -2 Som.	½ Twist 2 ½ Som.	½ Twist 3- 3 ½ Som.	1 Twist	1 ½ Twists	2 Twists	2 ½ Twists	3 Twists	3 ½ Twists	4 Twists	4 ½ Twists
Forward	0.4	0.4	0.4	0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0
Back	0.2	0.4	0	0	0.4	0.8	0.8	1.2	1.4	1.6	1.8	2.0
Reverse	0.2	0.4	0	0	0.4	0.8	0.8	1.2	1.4	1.6	1.8	2.0
Inward	0.2	0.4	0.2	0.4	0.4	0.8	0.8	1.2	1.4	1.6	1.8	2.0
Arm. Forward	0.4	0.5	0.5	0.4	1.2	1.3	1.5	1.7	--	--	--	--
Arm. Back/Rev	0.4	0.5	0.5	0.5	1.2	1.3	1.3	1.7	--	--	--	--

In calculating the degree of difficulty for twist dive with 1 or 1½ somersaults, the free position (D) shall be used in the calculation.

D. Approach/Group 1. Forward, Back, Reverse, Inward Groups

Level	Forward	Back	Reverse	Inward ½ - 1 Som.	Inward 1½ - 4½ Som.
1m and 5m	0	0.2	0.3	0.6	0.5
3m and 7½m	0	0.2	0.3	0.3	0.3
10m	0	0.2	0.3	0.3	0.2

D. Approach/Group 2. Armstand (does not apply to twisting dives)

Level	Forward with 0-2 Som.	Forward with more than 2 Som.	Back with 0-½ Som.	Back with 1-4 Som.	Reverse with 0-½ Som.	Reverse with 1-4 Som.
5m, 7½m, 10m	0.2	0.4	0.2	0.4	0.3	0.5

E. Unnatural Entry (does not apply to twisting dives)

Group	½ Som.	1 Som	1½ Som	2 Som	2 ½ Som	3 Som	3 ½ Som
Forward/Inward	--	0.1	--	0.2	--	0.2	--
Back/Reverse	0.1	--	0.2	--	0.3	--	0.4
Armstand Back & Reverse	--	0.1	--	0.2	--	0.2	--
Armstand Forward	0.1	--	0.2	--	0.3	--	0.4

The diver does not see the water until dive action is substantially completed. The component is the same at all levels.

Examples

Dive	Pos	Hght	A	B	C	D	E	DD		Dive	Pos	Hght	A	B	C	D	E	DD
632	B	10	1.4	0.3	0	0.5	0.1	2.3		313	C	3	1.5	0.2	0	0.3	0.2	2.2
6243	D	10	1.9	0	1.3	0	0	3.2		5132	D	3	1.5	0	0.6	0	0	2.1
6241	B	10	1.9	0.3	0.5	0	0	2.7		5351	C	3	2.2	0	0	0.3	0	2.5
6162	C	10	2.5	0.1	1.2	0	0	3.8		5371	C	3	2.8	0	0	0.3	0	3.1

APPENDIX G: JUDGING SCORE RATING

Although several divers may do the same dive, each performance never looks quite the same. This is because each individual has unique mannerisms, characteristics of movement, strengths and timing -- all adding up to an abstract but observable phenomenon called "style."

Style is difficult to assess by any standard, except whether or not you like it. This is why judging is difficult. Even though there are criteria of execution all divers must meet, evaluation remains a subjective process. No matter how well a dive is performed, artistic likes and dislikes of the judges play a large part in the outcome of any contest, and for this reason there are usually differences of opinion among coaches, competitors, judges and spectators about the accuracy of results.

A dive is scored between zero and 10 points (full or half point increments) by each judge. A table of the scores and how they should be awarded appears to the left. Note that the guidelines do not indicate an award of 10 as "perfect," but instead as "very good."

Categories of Judging

Certain parts of each dive must be analyzed and evaluated, and an overall award obtained. The parts of a dive are:

Approach

Three or more steps forward to the end of the board before the hurdle and takeoff. Form: Should be smooth but forceful, showing good form.

Takeoff

A diver's lift from the board prior to execution of the dive. Form: Must show control and balance, plus the proper angle of landing and leaving for the particular dive being attempted.

Elevation

The amount of spring or lift a diver receives from the takeoff greatly affects the appearance of the dive. Form: Since more height means more time, a higher dive generally affords greater accuracy and smoothness of movement.

Execution

The dive itself. Form: A judge watches for proper mechanical performance, technique, form and grace.

Entry

The entry into the water is very significant because it is the last thing the judge sees and the part probably remembered best. Form: The two criteria to be evaluated are the angle of entry, which should be near vertical, and the amount of splash, which should be as little as possible.

Scoring

Seven judges are used in individual competition. When the judges awards are given, the high and low scores will be eliminated and the remaining five scores totaled. The number will be multiplied by the degree of difficulty rating assigned to the dive. The DD is predetermined with a table range from 1.2 to 3.7 in one-tenth increments. This is then multiplied by 0.6.

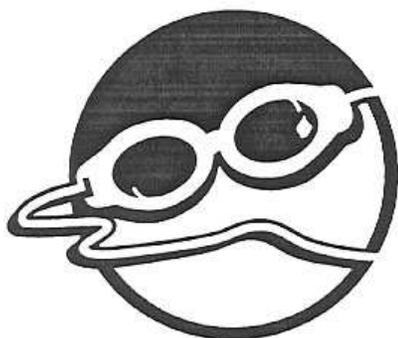
There are nine judges in the synchronized diving events, two judges will rate one individual diver, two other judges will rate the second individual diver, and five judges will rate the synchronization of the pair. The high and low individual scores and the high and low synchronization scores will be thrown out. The final score is then determined following the formula above.

GUIDELINES

0	completely failed
1/2-2	unsatisfactory
2 1/2-4 1/2	deficient
5-6	satisfactory
6 1/2-8	good
8 1/2-10	very good

SCORING

1. Awards 6-5-5-5-5-5-4
2. "6" and "4" are dropped
3. Total of remaining scores = 25
4. Multiplied by DD (2.0)=50
5. Multiplied by 0.6=30 points



**2005
DIVISION I
MEN'S & WOMEN'S
SWIMMING & DIVING
CHAMPIONSHIPS
HANDBOOK**

Updated 2/28/2005



Appendix A

NCAA Geographical Regions

Men

Northeast Region (Zone A)

- American University
- Boston College
- Boston University
- Brown University
- Bucknell University
- State University of New York at Binghamton
- University at Buffalo, State University of New York
- Cornell College
- Cornell University
- Columbia University
- University of Connecticut
- Dartmouth College
- University of Delaware
- Drexel University
- Fairfield University
- Fordham University
- George Mason University
- George Washington University
- Georgetown University
- Harvard University
- College of the Holy Cross
- Howard University
- Iona College
- James Madison University
- Le Salle University
- Lafayette College
- Lehigh University
- Loyola College (Maryland)
- University of Alabama, Tuscaloosa
- Auburn University
- College of Charleston (South Carolina)
- Clemson University
- Davidson College
- Duke University
- East Carolina University
- University of Florida
- Florida A&M University
- University of Maine, Orono
- Marist College
- University of Maryland, Baltimore County
- University of Massachusetts, Amherst
- University of New Hampshire
- Niagara University
- University of Pennsylvania
- University of Pittsburgh
- Princeton University
- Purdue University
- University of Rhode Island
- Rider University
- Rutgers, The State University of New Jersey, New Brunswick
- St. Bonaventure University
- St. Peter's College
- Salton Hall University
- University at Stony Brook, State University of New York
- Syracuse University
- Towson University
- U.S. Military Academy
- U.S. Naval Academy
- Villanova University
- West Virginia University
- College of William and Mary
- Yale University

South Region (Zone B)

- Florida Atlantic University
- Florida State University
- University of Georgia
- Georgia Institute of Technology
- University of Kentucky
- Louisiana State University
- University of Louisville
- University of Maryland, College Park
- University of Miami (Florida)

36

- University of North Carolina, Chapel Hill
- University of North Carolina, Wilmington
- North Carolina State University
- Old Dominion University
- University of South Carolina, Columbia
- University of Tennessee, Knoxville

Central Region (Zone C)

- University of Minnesota, Twin Cities
- Northwestern University
- University of Notre Dame
- Oakland University
- Ohio State University
- Ohio State University
- Purdue University
- Vanderbilt University
- Western Illinois University
- University of Wisconsin, Green Bay
- University of Wisconsin, Madison
- University of Wisconsin, Milwaukee
- Wright State University
- Xavier University (Ohio)
- Ball State University
- Butler University
- University of Cincinnati
- Cleveland State University
- Eastern Illinois University
- Eastern Michigan University
- University of Evansville
- Indiana University, Bloomington
- Indiana University-Purdue University at Indianapolis
- University of Iowa
- Miami University (Ohio)
- University of Michigan
- Michigan State University

Midwest Region (Zone D)

- Southern Methodist University
- Southwest Missouri State University
- University of Texas at Austin
- Texas A&M University, College Station
- Texas Christian University
- Centenary College (Louisiana)
- University of Louisiana at Monroe
- University of Missouri, Columbia
- South Dakota State University
- Southern Illinois University at Carbondale

West Region (Zone E)

- University of Arizona
- Arizona State University
- Brigham Young University
- University of California, Berkeley
- University of California, Santa Barbara
- University of California, Santa Barbara
- California Polytechnic State University
- University of Utah
- University of Washington
- University of Wyoming
- University of Hawaii, Manoa
- University of Nevada, Las Vegas
- University of the Pacific
- University of Southern California
- Stanford University
- U.S. Air Force Academy
- University of Utah
- University of Washington
- University of Wyoming

37

Women

Northeast Region (Zone A)

- American University
- Boston College
- Boston University
- Brown University
- Bucknell University
- State University of New York at Binghamton
- State University of New York at Buffalo
- Central Connecticut State University
- Columbia University
- Columbia University-Barnard College
- University of Connecticut
- Cornell University
- Dartmouth College
- University of Delaware
- Drexel University
- Duquesne University
- Fairfield University
- Fordham University
- George Mason University
- George Washington University
- Georgetown University
- Harvard University
- College of the Holy Cross
- Howard University
- Iona College
- James Madison University
- La Salle University
- Lafayette College
- Lehigh University
- Lehigh College (Maryland)
- University of Maine, Orono
- Manhattan College
- University of Maryland, Baltimore County
- University of Massachusetts, Amherst
- University of New Hampshire
- Niagara University
- North Carolina State University
- University of Pennsylvania
- Pennsylvania State University
- University of Pittsburgh
- Princeton University
- Marist College
- Providence College
- University of Rhode Island
- Rider University
- Rutgers, The State University of New Jersey, New Brunswick
- Sacred Heart University
- St. Bonaventure University
- St. Francis College (New York)
- St. Francis University (Pennsylvania)
- St. Peter's College
- Seton Hall University
- Siena College
- University at Stony Brook, State University of New York
- Syracuse University
- Towson University
- U.S. Military Academy
- U.S. Naval Academy
- University of Vermont
- Wagner University
- West Virginia University
- College of William and Mary
- Yale University

South Region (Zone B)

- University of Alabama, Tuscaloosa
- Auburn University
- Campbell University
- College of Charleston (South Carolina)
- Clendenen University
- Davidson College
- Duke University
- East Carolina University
- University of Florida
- Florida A&M University
- Florida Atlantic University
- Florida International University
- Florida State University
- University of Georgia
- Gardner-Webb University
- Georgia Institute of Technology
- Georgia Southern University
- University of Kentucky
- Louisiana State University
- University of Louisville
- University of Maryland, College Park
- University of Miami (Florida)

- University of New Orleans
- University of North Carolina, Chapel Hill
- University of North Carolina, Wilmington
- North Carolina A&T State University
- North Carolina State University
- University of North Florida
- Old Dominion University
- Rackham University
- University of Richmond
- University of South Carolina, Columbia
- University of Tennessee, Knoxville
- Tulane University
- University of Virginia
- Virginia Military Institute
- Virginia Polytechnic Institute and State University
- Western Kentucky University

Central Region (Zone C)

- University of Michigan
- Michigan State University
- University of Minnesota, Twin Cities
- Northwestern University
- University of Notre Dame
- Oakland University
- Ohio State University
- Purdue University
- University of Toledo
- Valparaiso University
- Western Illinois University
- University of Wisconsin, Green Bay
- University of Wisconsin, Madison
- University of Wisconsin, Milwaukee
- Wright State University
- Xavier University (Ohio)
- Youngstown State University
- University of Akron
- Ball State University
- Bowling Green State University
- Baylor University
- University of Cincinnati
- Cleveland State University
- Eastern Illinois University
- Eastern Michigan University
- University of Evansville
- University of Illinois, Champaign
- University of Illinois, Chicago
- Indiana State University
- Indiana University-Bloomington
- Indiana University-Purdue University at Indianapolis
- University of Iowa
- Marshall University
- Miami University (Ohio)

Midwest Region (Zone D)

- University of Arkansas, Fayetteville
- University of Arkansas, Little Rock
- Centenary College (Louisiana)
- University of Houston
- Iowa State University
- University of Kansas
- University of Louisiana at Monroe
- University of Missouri, Columbia
- University of Nebraska, Lincoln
- University of North Texas
- University of Northern Iowa
- Rice University
- Saint Louis University
- Southern Illinois University at Carbondale
- Southern Methodist University
- Southern Missouri State University
- University of Texas at Austin
- Texas A&M University, College Station
- Texas Christian University

West Region (Zone E)

- University of Arizona
- Arizona State University
- Brighton College
- University of California, Berkeley
- University of California, Irvine
- University of California, Los Angeles
- University of California, Santa Barbara
- California Polytechnic State University, Pomona
- California State University, Fresno

Appendix B

2005 Men's Time Standards

Event	25-Yard Course		25-Meter Course		50-Meter Course	
	A	B	A	B	A	B
50 Freestyle	1:19.74	20.33	22.04	22.70	22.69	23.37
100 Freestyle	1:43.53	44.83	48.59	50.04	50.04	51.54
150 Freestyle	2:10.00	67.77	71.53	73.98	73.98	75.48
500 Freestyle	4:19.63	4:27.41	3:47.15	3:53.95	3:54.96	4:02.00
1,650 Freestyle	15:05.67	15:33.04	15:03.17	15:30.25	15:29.10	15:56.97
100 Butterfly	1:47.25	48.66	52.74	54.31	53.39	54.99
200 Butterfly	1:44.93	1:48.07	1:57.11	2:00.62	1:59.24	2:02.91
100 Backstroke	1:41.33	43.33	46.64	48.11	47.16	48.66
200 Backstroke	1:44.00	1:47.14	1:56.10	1:59.58	1:59.57	2:03.15
100 Breaststroke	54.00	55.62	1:00.27	1:02.08	1:02.43	1:04.31
200 Breaststroke	1:57.35	2:00.87	2:10.88	2:14.61	2:15.67	2:19.74
200 Individual Medley	1:46.69	1:46.89	1:59.08	2:02.65	2:03.35	2:07.05
400 Individual Medley	3:47.29	3:47.29	4:01.28	4:05.26	4:05.26	4:09.25
200 Freestyle Relay	1:50.83	1:50.83	1:50.20	1:50.20	1:50.20	1:50.20
400 Freestyle Relay	2:54.21	2:59.43	3:14.44	3:20.26	3:20.25	3:26.25
800 Freestyle Relay	6:26.08	6:37.66	7:10.90	7:23.82	7:21.24	7:34.47
200 Medley Relay	1:26.72	1:29.32	1:36.79	1:39.69	1:39.34	1:44.32
400 Medley Relay	3:12.36	3:18.13	3:24.69	3:31.13	3:30.35	3:36.96

1-Meter Diving Points—Dual 200/200***Championship 465
 3-Meter Diving Points—Dual 310/320***Championship 460
 Platform Diving Points—Dual 250/160 ones 430/174 ones 620

***qualifying point total when using six optional dives with standard D.D.

compete in only those diving events for which he or she competed in the zone-qualifying meet. The student-athlete must compete in one event for which he or she qualified. All divers must be properly entered on the official zone meet entry form.

Seeding of Metric Times

The following procedures will be used when seeding metric times:

1. A qualifying mark based on a performance in a long-course or short-course metric pool will be seeded at its converted time.
2. The swimmer's fastest time in a 25-yard course must be submitted unless the swimmer has a long-course or short-course time that converts to a faster 25-yard time.

Diving Zone Allocations from NCAA Championships

Each zone will receive a minimum of four spots for men and women. The guaranteed spots will fill 20 of the 35 diving spots for men and 20 of 41 spots for women.

To complete the diving field (15 spots for men and 21 spots for women), the results from the previous year's national championships will be used. A place system will be used to determine the allocations going to each zone for next year's meet.

The allocations for the 2005 men's championships are: Zone A—4; Zone B—13; Zone C—7; Zone D—5; and Zone E—6. The allocations for the 2005 women's championships are: Zone A—4; Zone B—11; Zone C—7; Zone D—10; and Zone E—9.

Certification of Eligibility/Availability

Reference: Certification of Eligibility/Availability in the Division I General Section, and Bylaws 3.2.4, 12, 13, 14, 15 and 16 in the NCAA Division I Manual.

Only student-athletes eligible under Bylaws 12, 13, 14, 15 and 16 may compete in NCAA championships. In accordance with Bylaw 3.2.4, member institutions are required to certify the eligibility of their student-athletes before the beginning of each academic year and to withhold ineligible student-athletes from all intercollegiate competition. Member institutions are reminded to notify the NCAA national office before the selection date for each championship of any student-athletes who may have participated in regular-season competition but subsequently is determined to be ineligible or unavailable for NCAA championships competition.

For the swimming and diving championships, it is critical for coaches to immediately inform Bob Clauson regarding student-athletes who have become unavailable to compete, since another student-athlete could lose the opportunity to participate in the championships if this information is not received.

If a student-athlete becomes unavailable after entries have been submitted, notification must be given before noon local time of the competing institution

20

on the Thursday after the entry deadline.

After the official psyche sheet is published, coaches must notify John Lyons (215/951-1673) or Bob Clauson (970/686-9933) immediately if a student-athlete who has been invited to the championships becomes unavailable. At the championships site, coaches will receive an entry list at registration and will be asked to confirm by their signature that all of the student-athletes listed are present and will be competing in the championships.

Failure to comply with these notification procedures could result in a substantial penalty to an institution and may include the disqualification of a competitor.

APPENDIX I: 2005 NCAA MEN'S AND WOMEN'S DIVING CHAMPIONSHIP RESULTS

2005 Division I Swimming & Diving Championships Results

Host: University of Minnesota

FINALS RESULTS

EVENT: 5 MEN'S 1 Meter SPRINGBOARD DIVING

RANK	NAME	YEAR	TEAM	OPTIONAL		LIMITED	
				DD	PRELIM	DD	FINALS
1	PUHAKKA, JOONA		ARIZONA STATE		386.00		421.05
2	COLWILL, CHRIS		GEORGIA		344.30		387.45
3	SMITH, STEWART		ALABAMA		325.30		377.75
4	SEGERLIN, STEVE		AUBURN		345.30		370.25
5	WILCOX, ZACHARY		FLORIDA		326.45		352.55
6	TARANTINO, JEVO		TENNESSEE		313.55		332.20
7	RICHESON, MITCH		OHIO STATE		313.75		330.90
8	BRICKER, MATTHEW		AUBURN		321.60		328.40
9	SEHN, ERIC		TEXAS A&M		309.05		
10	COLLIER, JOHN		ARIZONA		307.20		
11	ASHWORTH, AARON		ALABAMA		306.40		
12	DALMAN, NIKO		LOUISIANA STATE		301.50		
13	PIERCE, ADAM		PENN. STATE		300.85		
14	VELAZOVEZ, MIGUEL		MIAMI (FLORIDA)		299.65		
15	FAGAN, RYAN		INDIANA		296.35		
16	STARKS, DEREK		MIAMI (FLORIDA)		294.75		
17	GAGNET, LOUIE		CAL. BERKELEY		286.85		
18	GASTALDO, MARC		PENN. STATE		286.20		
19	VINCENT, RAY		SOUTHERN CAL.		284.85		
20	BRADLEY, ANDY		SOUTH CAROLINA		284.30		
21	McCAIN, KELLY		TEXAS CHRISTIAN		283.50		
22	HARKNESS, KELLEN		OHIO STATE		281.00		
23	HILDE, MIKE		SOUTHERN CAL.		273.45		
24	WATTERS, EVAN		MISSOURI		271.15		
25	CARLTON, MARC		INDIANA		269.10		
26	LOBUE, STEVE		PURDUE		266.30		
27	BERMAN, DEAN		UNC-WILMINGTON		266.10		
28	HANNEMAN, NICK		OHIO STATE		263.05		
29	NEMTSANOV, DENIS		PITTSBURGH		262.60		
30	AVERY, TODD		GEORGIA		258.50		
31	DeMOND, KENT		PRINCETON		258.45		
32	KALEC, DAVID		TEXAS A&M		258.25		
33	MARIANO, BRIAN		INDIANA		257.85		
34	SYDES, BEAU		S.M.U.		243.30		
35	RANDALL, SCOTT		BRIGHAM YOUNG		240.70		

FINALS RESULTS							
EVENT: 13 MEN'S 3 Meter SPRINGBOARD DIVING							
RANK	NAME	YEAR	TEAM	OPTIONAL	PRELIM	LIMITED	FINALS
				DD		DD	
1	PUHAKKA, JOONA		ARIZONA STATE	383.50	589.35	205.85	645.20
2	COLWILL, CHRIS		GEORGIA	370.50	567.00	196.50	631.15
3	SEGERLIN, STEVE		AUBURN	374.05	574.60	200.55	618.30
4	TARANTINO, JEVO		TENNESSEE	377.45	559.55	182.10	609.60
5	VELAZOVEZ, MIGUEL		MIAMI (FLORIDA)	346.80	557.95	211.15	590.75
6	BRADLEY, ANDY		SOUTH CAROLINA	367.35	564.75	197.40	582.75
7	SEHN, ERIC		TEXAS A&M	354.85	550.90	196.05	574.00
8	RICHESON, MITCH		OHIO STATE	375.60	573.60	198.00	550.45
9	GAGNET, LOUIE		CAL. BERKELEY	347.40	547.50		
10	BRICKER, MATTHEW		AUBURN	339.35	545.15		
11	COLLIER, JOHN		ARIZONA	364.70	536.75		
12	SMITH, STEWART		ALABAMA	359.60	534.65		
13	CARLTON, MARC		INDIANA	320.80	524.20		
14	PIERCE, ADAM		PENN. STATE	336.45	523.85		
15	WILCOX, ZACHARY		FLORIDA	330.35	512.55		
16	KALEC, DAVID		TEXAS A&M	301.45	508.35		
17	MARIANO, BRIAN		INDIANA	318.55	507.10		
18	HILDE, MIKE		SOUTHERN CAL.	305.40	501.15		
19	HANNEMAN, NICK		OHIO STATE	304.10	500.90		
20	STARKS, DEREK		MIAMI (FLORIDA)	314.70	498.15		
21	WATTERS, EVAN		MISSOURI	320.50	495.90		
22	HARKNESS, KELLEN		OHIO STATE	317.50	493.65		
23	NEMTSANOV, DENIS		PITTSBURGH	307.15	488.85		
24	GASTALDO, MARC		PENN. STATE	310.45	483.50		
25	DALMAN, NIKO		LOUISIANA STATE	300.80			
26	FAGAN, RYAN		INDIANA	298.40			
27	ASHWORTH, AARON		ALABAMA	298.30			
28	LOBUE, STEVE		PURDUE	294.35			
29	VINCENT, RAY		SOUTHERN CAL.	283.40			
30	BERMAN, DEAN		UNC-WILMINGTON	268.12			
31	SYDES, BEAU		S.M.U.	263.70			
32	McCAIN, KELLY		TEXAS CHRISTIAN	258.20			
33	AVERY, TODD		GEORGIA	257.50			
34	RANDALL, SCOTT		BRIGHAM YOUNG	212.50			

FINALS RESULTS

EVENT: 20 MEN'S PLATFORM DIVING

RANK	NAME	YEAR	TEAM	OPTIONAL		LIMITED	
				DD	PRELIM	DD	FINALS
1	BRICKER, MATTHEW		AUBURN	392.75	567.05	174.30	604.35
2	SEGERLIN, STEVE		AUBURN	390.25	556.30	166.05	555.65
3	VELAZOVEZ, MIGUEL		MIAMI (FLORIDA)	323.45	486.20	162.75	543.50
4	STARKS, DEREK		MIAMI (FLORIDA)	321.75	477.20	155.45	508.60
5	SEHN, ERIC		TEXAS A&M	352.55	480.65	128.10	498.55
6	VINCENT, RAY		SOUTHERN CAL.	349.40	514.05	164.65	493.20
7	COLWILL, CHRIS		GEORGIA	398.35	556.05	157.70	484.00
8	KALEC, DAVID		TEXAS A&M	389.55	558.25	168.70	470.85
9	HILDE, MIKE		SOUTHERN CAL.	307.25	474.40		
10	GAGNET, LOUIE		CAL. BERKELEY	326.35	473.20		
11	CARLTON, MARC		INDIANA	308.55	473.05		
12	LoBUE, STEVE		PURDUE	326.40	469.25		
13	MARIANO, BRIAN		INDIANA	308.15	466.90		
14	SMITH, STEWART		ALABAMA	308.20	460.30		
15	DeMOND, KENT		PRINCETON	317.25	457.25		
16	ASHWORTH, AARON		ALABAMA	299.85	445.05		
17	WILCOX, ZACHARY		FLORIDA	290.00	434.55		
18	AVERY, TODD		GEORGIA	277.65	425.95		
19	PUHAKKA, JOONA		ARIZONA STATE	275.15	410.85		
20	NEMTSANOV, DENIS		PITTSBURGH	256.00	404.70		
21	DALMAN, NIKO		LOUISIANA STATE	258.60	402.15		
22	WATTERS, EVAN		MISSOURI	236.80	369.85		
23	FAGAN, RYAN		INDIANA	221.80	369.55		

Women's 2005 NCAA Swimming and Diving Championships

Hosted by Purdue University

EVENT: 5 WOMEN'S 1 Meter SPRINGBOARD DIVING

RANK	NAME	YEAR	TEAM	OPTIONAL		LIMITED	
				DD	PRELIM	DD	FINALS
1	HUANG, QIONG JIE		HAWAII		309.50		327.00
2	HARTLEY, BLYTHE		SOUTHERN CAL.		310.35		324.90
3	UNDERWOOD, NANCILEA		IOWA		302.10		321.40
4	McCambridge, Carrie		PURDUE		292.35		314.40
5	PERRY-EATON, MEGHAN		NOTRE DAME		287.15		303.00
6	DREYER, JENNA		MIAMI		300.85		302.65
7	LOUKAS, CHRISTINA		INDIANA		288.65		296.80
8	SILVESTRI, LISA		INDIANA		286.70		291.05
9	CARDINELL, CASSANDRA		INDIANA		279.95		
10	McCLOW, COURTNEY		FLORIDA STATE		279.60		
11	KING, LAUREN		SOUTH CAROLINA		277.95		
12	TUMLINSON, TRISHA		ARIZONA STATE		273.70		
13	RASMUSSEN, CRYSTAL		ALABAMA		271.65		
14	KRUG, CASSIDY		STANFORD		267.50		
15	BARRAS, BECCA		NEW MEXICO		265.15		
16	BROMS, JULIE		OHIO STATE		263.60		
17	IGNACIO, TARYN		KENTUCKY		263.40		
18	ROSENTHAL, ASHLEE		STANFORD		262.45		
19	KIESS, ANNA		HOUSTON		260.75		
20	WHITING, ROSIE		TEXAS A&M		259.75		
21	WANTZ, JESSICA		LOUISIANA STATE		257.10		
22	WANG, RUI		HAWAII		256.25		
23	BEMME, DANIELA		ARIZONA		246.95		
24	SEGRAVES, LYNNSEY		AUBURN		244.90		
25	MAXWELL, MONICA		TEXAS		240.75		
26	PIKE, LIZ		S.M.U.		240.45		
27	BUOY, AMIE		NEBRASKA		240.05		
28	RICHARDSON, TRACEY		SOUTH CAROLINA		238.50		
29	THOMPSON, JESSICA		KENTUCKY		235.30		
30	FEBVAY, CLAIRE		ARIZONA		234.00		
31	CULBERSON, MOLLY		N.CAROLINA STATE		229.75		
32	HORTON-PERINCHIEF, K.		GEO. WASHINGTON		228.60		
33	NICHOLS, HILLARY		IOWA STATE		217.45		
34	RICCOBONO, ALISON		PENN. STATE		213.20		
35	LOFTUS, MELANIE		YALE		210.60		
36	MUSSELMAN, MARI-MICHE		TEXAS A&M		209.35		
37	FRAZIER, NICOLE		MISSOURI		201.65		
38	GITELSON, RACHEL		HOUSTON		199.20		

EVENT: 13 WOMEN'S 3 Meter SPRINGBOARD DIVING							
RANK	NAME	YEAR	TEAM	OPTIONAL		LIMITED	
				DD	PRELIM	DD	FINALS
1	HARTLEY, BLYTHE		SOUTHERN CAL.	316.75	519.85	203.10	586.15
2	UNDERWOOD, NANCILEA		IOWA	302.75	490.70	187.95	561.84
3	McCambridge, Carrie		PURDUE	323.60	529.85	206.25	558.90
4	HUANG, QIONG JIE		HAWAII	297.45	501.90	204.45	551.84
5	LOUKAS, CHRISTINA		INDIANA	296.55	494.15	197.60	542.70
6	WANG, RUI		HAWAII	298.00	495.60	197.60	531.15
7	ALMAZAN, AZUL		HOUSTON	294.10	497.35	203.25	500.35
8	ROSENTHAL, ASHLEE		STANFORD	299.55	490.10	190.55	476.30
9	BROMS, JULIE		OHIO STATE	289.10	477.25		
10	SEGRAVES, LYNNSEY		AUBURN	289.95	476.20		
11	THOMPSON, JESSICA		KENTUCKY	284.55	472.85		
12	SILVESTRI, LISA		INDIANA	285.25	471.60		
13	KRUG, CASSIDY		STANFORD	286.15	470.55		
14	DREYER, JENNA		MIAMI - FLORIDA	292.45	469.45		
15	PERRY-EATON, MEGHAN		NOTRE DAME	281.40	463.50		
16	RICCOBONO, ALISON		PENN. STATE	277.90	460.15		
17	WHITING, ROSIE		TEXAS A&M	279.65	459.80		
18	BUOY, AMIE		NEBRASKA	275.75	458.65		
19	BARRAS, BECCA		NEW MEXICO	279.70	457.20		
20	BOUNDS, HEATHER		MIAMI - FLORIDA	276.30	453.40		
21	RASMUSSEN, CRYSTAL		ALABAMA	261.00	450.75		
22	BEMME, DANIELA		ARIZONA	261.55	449.75		
23	TUMLINSON, TRISHA		ARIZONA STATE	269.15	448.55		
24	MAXWELL, MONICA		TEXAS	260.50	432.90		
25	NICHOLS, HILLARY		IOWA STATE	255.00			
26	PIKE, LIZ		S.M.U.	254.90			
27	RICHARDSON, TRACEY		SOUTH CAROLINA	253.00			
28	CULBERSON, MOLLY		N.CAROLINA STATE	252.90			
29	McCLOW, COURTNEY		FLORIDA STATE	251.95			
30	CARDINELL, CASSANDRA		INDIANA	243.25			
31	HORTON-PERINCHIEF, K.		GEO. WASHINGTON	243.20			
32	LOFTUS, MELANIE		YALE	242.80			
33	IGNACIO, TARYN		KENTUCKY	236.80			
34	WANTZ, JESSICA		LOUISIANA STATE	236.00			
35	KIESS, ANNA		HOUSTON	235.65			
36	FEBVAY, CLAIRE		ARIZONA	227.65			
37	KING, LAUREN		SOUTH CAROLINA	222.25			
38	GITELSON, RACHEL		HOUSTON	217.80			
39	FRAZIER, NICOLE		MISSOURI	212.60			
40	MUSSELMAN, MARI-MICHE		TEXAS A&M	209.10			
41	GAVOZDEA, ADELA		NORTHEASTERN	208.75			

EVENT: 20 WOMEN'S PLATFORM DIVING							
RANK	NAME	YEAR	TEAM	OPTIONAL		LIMITED	
				DD	PRELIM	DD	FINALS
1	CARDINELL, CASSANDRA		INDIANA	327.05	501.05	174.00	501.45
2	KIESS, ANNA		HOUSTON	287.30	462.20	174.90	478.95
3	WANG, RUI		HAWAII	322.35	494.65	172.30	466.15
4	TUMLINSON, TRISHA		ARIZONA STATE	276.40	440.30	163.90	455.10
5	HARTLEY, BLYTHE		SOUTHERN CAL.	287.80	449.90	162.10	448.35
6	ALMAZAN, AZUL		HOUSTON	270.25	441.40	171.15	437.40
7	McCambridge, Carrie		PURDUE	286.60	445.30	158.70	417.65
8	FEBVAY, CLAIRE		ARIZONA	296.10	459.90	163.80	416.85
9	IGNACIO, TARYN		KENTUCKY	273.35	420.95		
10	LOUKAS, CHRISTINA		INDIANA	258.30	410.60		
11	BEMME, DANIELA		ARIZONA	245.20	393.60		
12	GITELSON, RACHEL		HOUSTON	249.55	391.55		
13	McCLOW, COURTNEY		FLORIDA STATE	249.70	391.40		
14	DREYER, JENNA		MIAMI - FLORIDA	240.65	385.20		
15	THOMPSON, JESSICA		KENTUCKY	232.60	380.80		
16	SEGRAVES, LYNNSEY		AUBURN	234.95	371.15		
17	GAVOZDEA, ADELA		NORTHEASTERN	211.95	366.40		
18	HUANG, QIONG JIE		HAWAII	211.80	365.00		
19	MAXWELL, MONICA		TEXAS	224.40	364.95		
20	BOUNDS, HEATHER		MIAMI - FLORIDA	233.10	358.15		
21	LOFTUS, MELANIE		YALE	219.30	354.30		
22	SILVESTRI, LISA		INDIANA	205.15	348.40		
23	BARRAS, BECCA		NEW MEXICO	206.80	346.40		
24	FRAZIER, NICOLE		MISSOURI	193.65	307.65		
25	NICHOLS, HILLARY		IOWA STATE	187.95			
26	HORTON-PERINCHIEF, K.		GEO. WASHINGTON	182.30			
27	WANTZ, JESSICA		LOUISIANA STATE	178.70			

APPENDIX J: ATTRIBUTIONAL STYLE QUESTIONNAIRE

ATTRIBUTIONAL STYLE QUESTIONNAIRE

Directions:

- 1) Read each situation and vividly imagine it happening to you.
- 2) Decide what you believe to be the one major cause of the situation if it happened to you.
- 3) Write this cause in the blank provided.
- 4) Answer the six questions about the cause by circling one number per question. Do not circle the words.
- 5) Go on to the next situation.

SITUATIONS

YOU RECEIVE A LOWER SCORE ON A DIVE THAN YOU EXPECT.

1. Write down one major cause: _____
2. Is the cause of the lower score due to something about you or something about other people or circumstances?

Totally due to other people or circumstances	1 2 3 4 5 6 7	Totally due to me
---	---------------	-------------------
3. In the future, will this cause again be present?

Will never again be present	1 2 3 4 5 6 7	Will always be present
-----------------------------	---------------	------------------------
4. Is the cause something that just affects your scoring on competitive dives, or does it also influence other areas of your life?

Influences just this particular situation	1 2 3 4 5 6 7	Influences all situations in my life
--	---------------	---

YOU PERFORM A DIFFICULT DIVE BETTER THAN YOU EVER HAVE BEFORE.

5. Write down one major cause: _____
6. Is the cause of the performance due to something about you or something about other people or circumstances?

Totally due to other people or circumstances	1 2 3 4 5 6 7	Totally due to me
---	---------------	-------------------
7. In the future, when performing this dive again, will this cause be present?

YOU MEET A TEAM MATE WHO ACTS HOSTILELY TOWARDS YOU.

25. Write down one major cause: _____
26. Is the cause of your team mate acting hostile due to something about you or something about other people or circumstances?
- | | | |
|---|---------------|-------------------|
| Totally due to other
people or circumstances | 1 2 3 4 5 6 7 | Totally due to me |
|---|---------------|-------------------|
27. In the future, when interacting with team mates, will this cause again be present?
- | | | |
|-----------------------------|---------------|------------------------|
| Will never again be present | 1 2 3 4 5 6 7 | Will always be present |
|-----------------------------|---------------|------------------------|
28. Is the cause something that just influences interacting with team mates, or does it also influence other areas of your life?
- | | | |
|--|---------------|---|
| Influences just this particular
situation | 1 2 3 4 5 6 7 | Influences all
situations in my life |
|--|---------------|---|

YOU DON'T FINISH WORKOUTS THAT OTHERS EXPECT YOU TO COMPLETE

29. Write down one major cause: _____
30. Is the cause of not finishing workouts due to something about you or something about other people or circumstances?
- | | | |
|---|---------------|-------------------|
| Totally due to other
people or circumstances | 1 2 3 4 5 6 7 | Totally due to me |
|---|---------------|-------------------|
31. In the future, when not finishing workouts that other expect you to, will this cause again be present?
- | | | |
|-----------------------------|---------------|------------------------|
| Will never again be present | 1 2 3 4 5 6 7 | Will always be present |
|-----------------------------|---------------|------------------------|
32. Is the cause something that just affects finishing workouts that others expect you to, or does it also influence other areas of your life?
- | | | |
|--|---------------|---|
| Influences just this particular
situation | 1 2 3 4 5 6 7 | Influences all
situations in my life |
|--|---------------|---|

YOUR COACH HAS BEEN GIVING YOU MORE ATTENTION.

33. Write down one major cause: _____

34. Is the cause of your coach giving you more attention due to something about you or something about other people or circumstances?

Totally due to other people or circumstances 1 2 3 4 5 6 7 Totally due to me

35. In future interactions with your coach, will this cause again be present?

Will never again be present 1 2 3 4 5 6 7 Will always be present

36. Is the cause something that just affects how your coach attends to you, or does it also influence other areas of your life?

Influences just this particular situation 1 2 3 4 5 6 7 Influences all situations in my life

YOU COMPETE IN A BIG DIVING MEET IN WHICH YOU WANT TO FINAL,
AND YOU MAKE THE FINALS.

37. Write down one major cause: _____

38. Is the cause of making the finals due to something about you or something about other people or circumstances?

Totally due to other people or circumstances 1 2 3 4 5 6 7 Totally due to me

39. In the future, when you compete in a big meet that you want to final in, will this cause again be present?

Will never again be present 1 2 3 4 5 6 7 Will always be present

40. Is the cause something that just affects your making the finals, or does it also influence other areas of your life?

Influences just this particular situation 1 2 3 4 5 6 7 Influences all situations in my life

YOU COMPETE IN A BIG DIVING MEET AND YOU DO POORLY

41. Write down one major cause: _____

42. Is the cause of your poor performance due to something about you or something about other people or circumstances?

Totally due to other people or circumstances 1 2 3 4 5 6 7 Totally due to me

people or circumstances

43. In the future, when you compete poorly, will this cause again be present?

Will never again be present 1 2 3 4 5 6 7 Will always be present

44. Is the cause something that just affects your poor performance, or does it also influence other areas of your life?

Influences just this particular 1 2 3 4 5 6 7 Influences all
situation situations in my life

YOU WIN A MAJOR DIVING MEET LIKE THE NCAA CHAMPIONSHIPS

45. Write down one major cause: _____

46. Is the cause of your winning a major meet due to something about you or something about other people or circumstances?

Totally due to other 1 2 3 4 5 6 7 Totally due to me
people or circumstances

47. In the future, when you win a major meet, will this cause again be present?

Will never again be present 1 2 3 4 5 6 7 Will always be present

48. Is the cause something that just affects your winning a major meet, or does it also influence other areas of your life?

Influences just this particular 1 2 3 4 5 6 7 Influences all
situation situations in my life

APPENDIX K: COACH'S EMAIL OF EXPLANATORY OF STUDY

Recruitment Materials

Text of email to be sent to all competitors and coaches

Dear _____,

Congratulations on qualifying to the 2005 NCAA Championships. While at the championships you will have the opportunity to participate in a research study. The study asks that you fill out a short questionnaire (approximately 40 questions -- 15 minutes), immediately following the conclusion of your final event at the NCAA championships.

The results of the study will help determine your attribution style, that is, what you attribute your success or failure to, for this competition.

If you finish in the top five places in any event, you will then be asked to spend a few minutes in a telephonic interview (within one month of the competition) with the author of the study to further determine your attributions.

Your participation in this study is completely voluntary. You may withdraw from the study at any time. However, the cumulative results of the study could help you understand your mental attributions in major competitions, help your coach become more sensitive to your training style, and help the sport at large. You may also voluntarily complete a waiver at the championships, if you would like your coach to receive your personal results.

In the participant meeting at the site of the championships, but prior to commencement of the competition, I will verbally explain the procedures of the study in a similar manner as proscribed in this email and collect consent forms and waivers at that time.

APPENDIX L: NCAA DIRECTOR OF CHAMPIONSHIPS APPROVAL LETTER



December 16, 2004

P.O. Box 6222
Indianapolis, Indiana 46206
Telephone: 317/917-6222

Shipping/Overnight Address:
1802 Alonzo Watford Sr. Drive
Indianapolis, Indiana 46202

www.ncaa.org

VIA FACSIMILE

Ms. Michelle Rocha
Head Diving Coach
University of Arizona
P.O. Box 210096
Tucson, Arizona 85721-0096

Dear Ms. Rocha:

The NCAA authorizes you, Michele Rocha, to administer a questionnaire to diving student-athletes at the 2005 NCAA Women's and Men's Swimming and Diving Championships. The questionnaire is part of a doctoral study focusing on the attributional styles of human subjects.

Please contact me if you need further assistance.

Sincerely,

A handwritten signature in cursive script that reads "Wayne Burrow / ksw".

R. Wayne Burrow
Director of Championships

National Collegiate Athletic Association

An association of more than 1,200 members serving the student-athlete
Equal Opportunity/Affirmative Action Employer

APPENDIX M: QUALIFIED DIVERS' EMAIL OF EXPLANATION OF STUDY

Recruitment Materials

Text of email to be sent to all competitors and coaches

Dear _____,

Congratulations on qualifying to the 2005 NCAA Championships. While at the championships you will have the opportunity to participate in a research study. The study asks that you fill out a short questionnaire (approximately 40 questions -- 15 minutes), immediately following the conclusion of your final event at the NCAA championships.

The results of the study will help determine your attribution style, that is, what you attribute your success or failure to, for this competition.

If you finish in the top five places in any event, you will then be asked to spend a few minutes in a telephonic interview (within one month of the competition) with the author of the study to further determine your attributions.

Your participation in this study is completely voluntary. You may withdraw from the study at any time. However, the cumulative results of the study could help you understand your mental attributions in major competitions, help your coach become more sensitive to your training style, and help the sport at large. You may also voluntarily complete a waiver at the championships, if you would like your coach to receive your personal results.

In the participant meeting at the site of the championships, but prior to commencement of the competition, I will verbally explain the procedures of the study in a similar manner as proscribed in this email and collect consent forms and waivers at that time.

APPENDIX N: SUBJECTS' CONSENT FORM AND APPROVAL

APPROVED BY UNIVERSITY OF AZ IF
THIS STAMP MUST APPEAR ON ALL
DOCUMENTS USED TO CONSENT SUBJECT
DATE: 1/21/05 EXPIRATION: 1/21/06

SUBJECT'S CONSENT FORM

Success and Failure Attributions of Male and Female NCAA Divers

I AM BEING ASKED TO READ THE FOLLOWING MATERIAL TO ENSURE THAT I AM INFORMED OF THE NATURE OF THIS RESEARCH STUDY AND OF HOW I WILL PARTICIPATE IN IT, IF I CONSENT TO DO SO. SIGNING THIS FORM WILL INDICATE THAT I HAVE BEEN SO INFORMED AND THAT I GIVE MY CONSENT. FEDERAL REGULATIONS REQUIRE WRITTEN INFORMED CONSENT PRIOR TO PARTICIPATION IN THIS RESEARCH STUDY SO THAT I CAN KNOW THE NATURE AND RISKS OF MY PARTICIPATION AND CAN DECIDE TO PARTICIPATE OR NOT PARTICIPATE IN A FREE AND INFORMED MANNER.

PURPOSE

I am being invited to participate voluntarily in the above-titled research project. The purpose of this project is to evaluate the effect of an individual's attribution on an individual's performance and to determine if this attribution is also effected by gender in college age male and female divers.

SELECTION CRITERIA

I am being invited to participate because I have qualified to the NCAA Championships through a geographic zone. The top 70 NCAA male and female divers (in each of three events) will be recruited for the study. The athletes range in age from 18 – 25. Approximately 80% of the athletes are American and the other 20% are foreign student-athletes attending NCAA Division I schools. Based on previous NCAA results, ethnic minority groups are represented at approximately 10% of the participants. Of the coaches at the championships, 99% are male and 1% are female. Most are white with approximately 10% representing ethnic minority groups. Coaches at the NCAA Championships are only there if their athlete has qualified for the meet.

STANDARD TREATMENT(S)

Inclusion in this study is completely voluntary and no compensation will be paid to me.

PROCEDURE(S)

If I agree to participate, I will be asked to consent to the following: Following my final event, I will be asked to fill out the Attribution Style Questionnaire which will take approximately 15 minutes to complete. The results from the questionnaires will be correlated with my performance. In addition statistics will examine the effects of gender on my attribution. If I finish in the top five on any event, I will be telephoned and interviewed to further explain my attributions. This interview will be audio-recorded. All participants will receive a summation of the study. Its results will also be published in a national diving magazine as well as distributed through various websites whose readership is both athletes and coaches.

RISKS

Since the questionnaire is given AFTER the competition it will not influence your mental state during the competition. There are no associated risks in completing the questionnaire since there is no "right" or "wrong" answer.

BENEFITS

Benefits for participation in this study are: acquisition of useful information for you and your coach as well as garnering a better understanding of competitor attributions as a whole, so that coaches may glean insight of their athletes and adjust their coaching styles to increase the success of American diving.

CONFIDENTIALITY

The only person who will have access to the data is the principle investigator, Michele Mitchell-Rocha. Actual surveys and interview notes, and any other documentation relating to this study will be maintained in a secured and locked filing cabinet in the Educational Psychology offices at the University of Arizona for a period of five years.

I give me consent for the principle, Michele Mitchell-Rocha, to release my personal questionnaire results, in writing, to my coach _____, after the study is completed.

(coach's name)

Yes _____ (initial box)

No _____ (initial box)

PARTICIPATION COSTS AND SUBJECT COMPENSATION

There are no costs to participate in this study and I will not receive any compensation for my participation.

CONTACTS

I can obtain further information from the principal investigator, Michele Mitchell-Rocha, (Ph.D. Candidate) at (520) 621-2750. If I have questions concerning my rights as a research subject, I may call the Human Subjects Committee office at (520) 626-6721.

AUTHORIZATION

BEFORE GIVING MY CONSENT BY SIGNING THIS FORM, THE METHODS, INCONVENIENCES, RISKS, AND BENEFITS HAVE BEEN EXPLAINED TO ME AND MY QUESTIONS HAVE BEEN ANSWERED. I MAY ASK QUESTIONS AT ANY TIME AND I AM FREE TO WITHDRAW FROM THE PROJECT AT ANY TIME WITHOUT CAUSING BAD FEELINGS. MY PARTICIPATION IN THIS PROJECT MAY BE ENDED BY THE INVESTIGATOR FOR REASONS THAT WOULD BE EXPLAINED. NEW INFORMATION DEVELOPED DURING THE COURSE OF THIS STUDY WHICH MAY AFFECT MY WILLINGNESS TO CONTINUE IN THIS RESEARCH PROJECT WILL BE GIVEN TO ME AS IT BECOMES AVAILABLE. THIS CONSENT FORM WILL BE FILED IN AN AREA

DESIGNATED BY THE HUMAN SUBJECTS COMMITTEE WITH ACCESS RESTRICTED TO THE PRINCIPAL INVESTIGATOR MICHELE MITCHELL-ROCHA OR AUTHORIZED REPRESENTATIVE OF THE EDUCATIONAL PSYCHOLOGY DEPARTMENT. I DO NOT GIVE UP ANY OF MY LEGAL RIGHTS BY SIGNING THIS FORM. A COPY OF THIS SIGNED CONSENT FORM WILL BE GIVEN TO ME.

Subject's Signature

Date

INVESTIGATOR'S AFFIDAVIT

I have carefully explained to the subject the nature of the above project. I hereby certify that to the best of my knowledge the person who is signing this consent form understands clearly the nature, demands, benefits, and risks involved in his/her participation and his/her signature is legally valid. A medical problem or language or educational barrier has not precluded this understanding.

Signature of Investigator
1/2000

Date

APPENDIX O: PERMISSION LETTER FROM DR. MARTIN E. P. SELIGMAN

UNIVERSITY of PENNSYLVANIA

School of Arts and Sciences

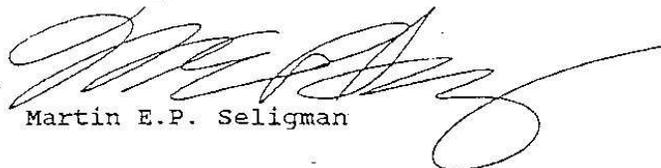
Department of Psychology
3815 Walnut Street
Philadelphia, PA 19104-6196
Martin E.P. Seligman
Professor of Psychology

Telephone: 215-898-7173
Office Fax: 215-573-2188
Home Fax: 610-896-6273
email: seligman@cattell.psych.upenn.edu

PERMISSION TO USE THE ATTRIBUTIONAL STYLE QUESTIONNAIRE

The Attributional Style Questionnaire (ASQ) is copyrighted material and may only be used with the written permission of the author, Dr. Martin E.P. Seligman. This letter grants you permission to use the ASQ, so please keep it on file. The questionnaire may be used only for academic research or by a clinical psychologist for the diagnosis or treatment of patients. It may not be used for profit or for any corporate-related activities.

Sincerely,



Martin E.P. Seligman

c:\wpwin\office\pernis.asq

APPENDIX P: SCORING KEY FOR ASQ
The Attributional Style Questionnaire Scoring Key

The Attributional Style Questionnaire is composed of 12 different hypothetical situations, consisting of 6 good events and 6 bad events. Each of these situations is followed by a series of 4 questions. The first question following each situation asks for the one major cause of the situation. This question is not used in scoring and simply serves as an aid to better answer the remaining questions. The remaining three questions are arranged in the same order for each situation and measure three different dimensions. The second question following each situation measures whether the subject's response is *internal* or *external*. The third question following each situation measures whether the subject's response is *stable* or *unstable*. The fourth question following each situation measures whether the subject's response is *global* or *specific*.

For each response, subjects marked an answer in the range of 1 to 7. For good events, a score of 1 is the lowest, or worst possible score, whereas a score of 7 is the highest, or best possible score. Conversely, for bad events, a score of 1 is the highest, or best possible score, and a score of 7 is the lowest, or worst possible score. Because of the reverse order of scoring for good and bad situations, scores for good events must be separated from scores for bad events.

Composite Negative Attributional Style (CoNeg): _____

(sum the total of all bad event scores and divide by the total number of bad events, 6. The best score is 3, the worst score is 21)

Composite Positive Attributional Style (CoPos): _____

(sum the total of all good event scores and divide by the total number of good events, 6. The best score is 21, the worst score is 3)

Composite Positive minus Composite Negative (CPCN): _____

(The best score is +18; the worst score is -18)

CPCN, Composite Negative (CoNeg), and to a lesser extent, Composite Positive (CoPos) scores are the most valid and reliable in the prediction of depression and various other outcomes. The individual dimension scores (internal, stable, and global), because they are based on only a few questions, have much lower reliability and validity. We therefore recommend that you concentrate all or most of your efforts on the composite scores (CPCN, CoNeg, and CoPos), unless you have a strong theoretical reason for investigating the individual dimension scores.

Following is a list of the individual dimension measures:

Internal Negative: _____

(sum the answers to the second question under each bad event and divide by the total number of bad events, 6)

APPENDIX Q: FREQUENCIES

Frequency Table

YOU RECEIVE A LOWER SCORE ON A DIVE THAN
YOU EXPECTED.

Cause of the performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Totally due to others	2	3.7	3.7	3.7
	2	2	3.7	3.7	7.4
	3	6	11.1	11.1	18.5
	4	4	7.4	7.4	25.9
	5	9	16.7	16.7	42.6
	6	21	38.9	38.9	81.5
	Totally due to me	10	18.5	18.5	100.0
	Total	54	100.0	100.0	

Cause will again be present

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	2	3.7	3.7	3.7
	3	3	5.6	5.6	9.3
	4	18	33.3	33.3	42.6
	5	11	20.4	20.4	63.0
	6	7	13.0	13.0	75.9
	Will always be present	13	24.1	24.1	100.0
	Total	54	100.0	100.0	

Cause affects competitive dives versus other areas of your life

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Influences just this situation	22	40.7	41.5	41.5
	2	9	16.7	17.0	58.5
	3	5	9.3	9.4	67.9
	4	6	11.1	11.3	79.2
	5	8	14.8	15.1	94.3
	6	2	3.7	3.8	98.1
	Influences all situation in my life	1	1.9	1.9	100.0
	Total	53	98.1	100.0	
Missing	System	1	1.9		
Total		54	100.0		

**YOU PERFORM A DIFFICULT DIVE BETTER THAN YOU
EVER HAVE BEFORE.**

Cause of the performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	1	1.9	1.9	1.9
	3	3	5.6	5.6	7.4
	4	5	9.3	9.3	16.7
	5	8	14.8	14.8	31.5
	6	19	35.2	35.2	66.7
	Totally due to me	18	33.3	33.3	100.0
	Total	54	100.0	100.0	

Cause will again be present

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	1	1.9	1.9	1.9
	4	15	27.8	28.3	30.2
	5	15	27.8	28.3	58.5
	6	13	24.1	24.5	83.0
	Will always be present	9	16.7	17.0	100.0
	Total	53	98.1	100.0	
Missing	System	1	1.9		
Total		54	100.0		

Cause affects competitive dives versus other areas of your life

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Influences just this situation	6	11.1	11.1	11.1
	2	5	9.3	9.3	20.4
	3	4	7.4	7.4	27.8
	4	14	25.9	25.9	53.7
	5	7	13.0	13.0	66.7
	6	15	27.8	27.8	94.4
	Influences all situation in my life	3	5.6	5.6	100.0
	Total	54	100.0	100.0	

YOU BECOME ONE OF THE BEST DIVERS IN THE COUNTRY.

Cause of becoming one of the best divers in the country

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Totally due to others	2	3.7	3.7	3.7
	2	1	1.9	1.9	5.6
	3	1	1.9	1.9	7.4
	4	16	29.6	29.6	37.0
	5	8	14.8	14.8	51.9
	6	19	35.2	35.2	87.0
	Totally due to me	7	13.0	13.0	100.0
	Total	54	100.0	100.0	

Cause will again be present

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	1	1.9	1.9	1.9
	4	9	16.7	16.7	18.5
	5	10	18.5	18.5	37.0
	6	17	31.5	31.5	68.5
	Will always be present	17	31.5	31.5	100.0
	Total	54	100.0	100.0	

Cause affects competitive dives versus other areas of your life

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Influences just this situation	3	5.6	5.6	5.6
	2	1	1.9	1.9	7.4
	3	1	1.9	1.9	9.3
	4	6	11.1	11.1	20.4
	5	10	18.5	18.5	38.9
	6	14	25.9	25.9	64.8
	Influences all situation in my life	19	35.2	35.2	100.0
	Total	54	100.0	100.0	

**A TEAM MATE COMES TO YOU WITH A PROBLEM
ABOUT DIVING AND YOU DON'T TRY TO HELP HIM/HER.**

Cause of the performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Totally due to others	5	9.3	9.8	9.8
	2	6	11.1	11.8	21.6
	3	5	9.3	9.8	31.4
	4	9	16.7	17.6	49.0
	5	7	13.0	13.7	62.7
	6	8	14.8	15.7	78.4
	Totally due to me	11	20.4	21.6	100.0
	Total	51	94.4	100.0	
Missing	System	3	5.6		
Total		54	100.0		

Cause will again be present

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Will never again be present	3	5.6	6.0	6.0
	2	7	13.0	14.0	20.0
	3	7	13.0	14.0	34.0
	4	22	40.7	44.0	78.0
	5	5	9.3	10.0	88.0
	6	4	7.4	8.0	96.0
	Will always be present	2	3.7	4.0	100.0
	Total	50	92.6	100.0	
Missing	System	4	7.4		
Total		54	100.0		

Cause affects competitive dives versus other areas of your life

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Influences just this situation	5	9.3	10.0	10.0
	2	6	11.1	12.0	22.0
	3	7	13.0	14.0	36.0
	4	19	35.2	38.0	74.0
	5	6	11.1	12.0	86.0
	6	6	11.1	12.0	98.0
	Influences all situation in my life	1	1.9	2.0	100.0
	Total	50	92.6	100.0	
Missing	System	4	7.4		
Total		54	100.0		

**YOU GIVE A TALK IN FRONT OF A GROUP OF DIVERS
AND THE AUDIENCE REACTS NEGATIVELY.**

Cause of the performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Totally due to others	1	1.9	1.9	1.9
	2	1	1.9	1.9	3.8
	3	4	7.4	7.5	11.3
	4	23	42.6	43.4	54.7
	5	10	18.5	18.9	73.6
	6	10	18.5	18.9	92.5
	Totally due to me	4	7.4	7.5	100.0
	Total	53	98.1	100.0	
Missing	System	1	1.9		
Total		54	100.0		

Cause will again be present

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Will never again be present	1	1.9	1.9	1.9
	2	3	5.6	5.7	7.5
	3	5	9.3	9.4	17.0
	4	26	48.1	49.1	66.0
	5	8	14.8	15.1	81.1
	6	5	9.3	9.4	90.6
	Will always be present	5	9.3	9.4	100.0
	Total	53	98.1	100.0	
Missing	System	1	1.9		
Total		54	100.0		

Cause affects competitive dives versus other areas of your life

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Influences just this situation	2	3.7	3.8	3.8
	2	7	13.0	13.2	17.0
	3	4	7.4	7.5	24.5
	4	15	27.8	28.3	52.8
	5	15	27.8	28.3	81.1
	6	7	13.0	13.2	94.3
	Influences all situation in my life	3	5.6	5.7	100.0
	Total	53	98.1	100.0	
Missing	System	1	1.9		
Total		54	100.0		

**YOU WIN A BIG DIVING MEET AND YOU ARE
HIGHLY PRAISED.**

Cause of the performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Totally due to others	1	1.9	1.9	1.9
	2	2	3.7	3.8	5.7
	3	1	1.9	1.9	7.5
	4	10	18.5	18.9	26.4
	5	17	31.5	32.1	58.5
	6	10	18.5	18.9	77.4
	Totally due to me	12	22.2	22.6	100.0
	Total	53	98.1	100.0	
Missing	System	1	1.9		
Total		54	100.0		

Cause will again be present

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	2	3.7	3.8	3.8
	4	9	16.7	17.0	20.8
	5	7	13.0	13.2	34.0
	6	15	27.8	28.3	62.3
	Will always be present	20	37.0	37.7	100.0
	Total	53	98.1	100.0	
Missing	System	1	1.9		
Total		54	100.0		

Cause affects competitive dives versus other areas of your life

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Influences just this situation	3	5.6	5.7	5.7
	2	2	3.7	3.8	9.4
	3	5	9.3	9.4	18.9
	4	7	13.0	13.2	32.1
	5	10	18.5	18.9	50.9
	6	15	27.8	28.3	79.2
	Influences all situation in my life	11	20.4	20.8	100.0
	Total	53	98.1	100.0	
Missing	System	1	1.9		
Total		54	100.0		

**YOU MEET A TEAM MATE WHO ACTS HOSTILELY
TOWARD YOU.**

Cause of the performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Totally due to others	6	11.1	11.1	11.1
	2	10	18.5	18.5	29.6
	3	1	1.9	1.9	31.5
	4	20	37.0	37.0	68.5
	5	11	20.4	20.4	88.9
	6	5	9.3	9.3	98.1
	Totally due to me	1	1.9	1.9	100.0
	Total	54	100.0	100.0	

Cause will again be present

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Will never again be present	2	3.7	3.7	3.7
	2	7	13.0	13.0	16.7
	3	3	5.6	5.6	22.2
	4	19	35.2	35.2	57.4
	5	8	14.8	14.8	72.2
	6	10	18.5	18.5	90.7
	Will always be present	5	9.3	9.3	100.0
	Total	54	100.0	100.0	

Cause affects competitive dives versus other areas of your life

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Influences just this situation	4	7.4	7.4	7.4
	2	5	9.3	9.3	16.7
	3	5	9.3	9.3	25.9
	4	17	31.5	31.5	57.4
	5	9	16.7	16.7	74.1
	6	7	13.0	13.0	87.0
	Influences all situation in my life	7	13.0	13.0	100.0
	Total	54	100.0	100.0	

**YOU DON'T FINISH WORKOUTS THAT OTHERS
EXPECT YOU TO COMPLETE.**

Cause of the performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Totally due to others	2	3.7	3.7	3.7
	2	4	7.4	7.4	11.1
	3	3	5.6	5.6	16.7
	4	6	11.1	11.1	27.8
	5	3	5.6	5.6	33.3
	6	13	24.1	24.1	57.4
	Totally due to me	23	42.6	42.6	100.0
	Total	54	100.0	100.0	

Cause will again be present

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Will never again be present	4	7.4	7.4	7.4
	2	2	3.7	3.7	11.1
	3	3	5.6	5.6	16.7
	4	15	27.8	27.8	44.4
	5	9	16.7	16.7	61.1
	6	11	20.4	20.4	81.5
	Will always be present	10	18.5	18.5	100.0
	Total	54	100.0	100.0	

Cause affects competitive dives versus other areas of your life

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Influences just this situation	4	7.4	7.4	7.4
	2	3	5.6	5.6	13.0
	3	5	9.3	9.3	22.2
	4	8	14.8	14.8	37.0
	5	13	24.1	24.1	61.1
	6	17	31.5	31.5	92.6
	Influences all situation in my life	4	7.4	7.4	100.0
	Total	54	100.0	100.0	

YOUR COACH HAS BEEN GIVING YOU MORE ATTENTION.

Cause of the performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	2	3.7	3.8	3.8
	3	6	11.1	11.3	15.1
	4	13	24.1	24.5	39.6
	5	14	25.9	26.4	66.0
	6	14	25.9	26.4	92.5
	Totally due to me	4	7.4	7.5	100.0
	Total	53	98.1	100.0	
Missing	System	1	1.9		
Total		54	100.0		

Cause will again be present

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	1	1.9	1.9	1.9
	4	21	38.9	39.6	41.5
	5	12	22.2	22.6	64.2
	6	11	20.4	20.8	84.9
	Will always be present	8	14.8	15.1	100.0
	Total	53	98.1	100.0	
Missing	System	1	1.9		
Total		54	100.0		

Cause affects competitive dives versus other areas of your life

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Influences just this situation	7	13.0	13.2	13.2
	2	6	11.1	11.3	24.5
	3	6	11.1	11.3	35.8
	4	9	16.7	17.0	52.8
	5	12	22.2	22.6	75.5
	6	9	16.7	17.0	92.5
	Influences all situation in my life	4	7.4	7.5	100.0
	Total	53	98.1	100.0	
Missing	System	1	1.9		
Total		54	100.0		

**YOU COMPETE IN A BIG DIVING MEET IN WHICH YOU
WANT TO FINAL, AND YOU MAKE THE FINALS.**

Cause of the performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	1	1.9	1.9	1.9
	4	8	14.8	15.1	17.0
	5	10	18.5	18.9	35.8
	6	24	44.4	45.3	81.1
	Totally due to me	10	18.5	18.9	100.0
	Total	53	98.1	100.0	
Missing	System	1	1.9		
Total		54	100.0		

Cause will again be present

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Will never again be present	1	1.9	1.9	1.9
	4	3	5.6	5.7	7.5
	5	12	22.2	22.6	30.2
	6	22	40.7	41.5	71.7
	Will always be present	15	27.8	28.3	100.0
	Total	53	98.1	100.0	
Missing	System	1	1.9		
Total		54	100.0		

Cause affects competitive dives versus other areas of your life

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Influences just this situation	5	9.3	9.4	9.4
	2	4	7.4	7.5	17.0
	3	1	1.9	1.9	18.9
	4	2	3.7	3.8	22.6
	5	17	31.5	32.1	54.7
	6	14	25.9	26.4	81.1
	Influences all situation in my life	10	18.5	18.9	100.0
	Total	53	98.1	100.0	
Missing	System	1	1.9		
Total		54	100.0		

**YOU COMPETE IN A BIG DIVING MEET AND YOU
DO POORLY.**

Cause of the performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	1	1.9	1.9	1.9
	3	1	1.9	1.9	3.8
	4	5	9.3	9.4	13.2
	5	7	13.0	13.2	26.4
	6	22	40.7	41.5	67.9
	Totally due to me	17	31.5	32.1	100.0
	Total	53	98.1	100.0	
Missing	System	1	1.9		
Total		54	100.0		

Cause will again be present

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Will never again be present	3	5.6	5.8	5.8
	2	1	1.9	1.9	7.7
	3	5	9.3	9.6	17.3
	4	16	29.6	30.8	48.1
	5	8	14.8	15.4	63.5
	6	10	18.5	19.2	82.7
	Will always be present	9	16.7	17.3	100.0
	Total	52	96.3	100.0	
Missing	System	2	3.7		
Total		54	100.0		

Cause affects competitive dives versus other areas of your life

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Influences just this situation	1	1.9	2.0	2.0
	2	4	7.4	7.8	9.8
	3	6	11.1	11.8	21.6
	4	8	14.8	15.7	37.3
	5	9	16.7	17.6	54.9
	6	15	27.8	29.4	84.3
	Influences all situation in my life	8	14.8	15.7	100.0
	Total	51	94.4	100.0	
Missing	System	3	5.6		
Total		54	100.0		

**YOU WIN A MAJOR DIVING MEET LIKE THE NCAA
CHAMPIONSHIP.**

Cause of the performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	1	1.9	1.9	1.9
	4	13	24.1	24.5	26.4
	5	4	7.4	7.5	34.0
	6	22	40.7	41.5	75.5
	Totally due to me	13	24.1	24.5	100.0
	Total	53	98.1	100.0	
Missing	System	1	1.9		
Total		54	100.0		

Cause will again be present

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	1	1.9	1.9	1.9
	4	6	11.1	11.3	13.2
	5	9	16.7	17.0	30.2
	6	21	38.9	39.6	69.8
	Will always be present	16	29.6	30.2	100.0
	Total	53	98.1	100.0	
Missing	System	1	1.9		
Total		54	100.0		

Cause affects competitive dives versus other areas of your life

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Influences just this situation	1	1.9	1.9	1.9
	2	1	1.9	1.9	3.8
	3	1	1.9	1.9	5.7
	4	5	9.3	9.4	15.1
	5	11	20.4	20.8	35.8
	6	20	37.0	37.7	73.6
	Influences all situation in my life	14	25.9	26.4	100.0
	Total	53	98.1	100.0	
Missing	System	1	1.9		
Total		54	100.0		

APPENDIX R: FREQUENCIES

Frequency Table

YOU RECEIVE A LOWER SCORE ON A DIVE THAN
YOU EXPECTED.

Cause of the performance

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	2	1	3.7	3.7	3.7
		3	2	7.4	7.4	11.1
		4	2	7.4	7.4	18.5
		5	5	18.5	18.5	37.0
		6	14	51.9	51.9	88.9
		Totally due to me	3	11.1	11.1	100.0
		Total	27	100.0	100.0	
Male	Valid	Totally due to others	2	7.4	7.4	7.4
		2	1	3.7	3.7	11.1
		3	4	14.8	14.8	25.9
		4	2	7.4	7.4	33.3
		5	4	14.8	14.8	48.1
		6	7	25.9	25.9	74.1
		Totally due to me	7	25.9	25.9	100.0
		Total	27	100.0	100.0	

Cause will again be present

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	2	2	7.4	7.4	7.4
		3	1	3.7	3.7	11.1
		4	8	29.6	29.6	40.7
		5	7	25.9	25.9	66.7
		6	3	11.1	11.1	77.8
		Will always be present	6	22.2	22.2	100.0
		Total	27	100.0	100.0	
Male	Valid	3	2	7.4	7.4	7.4
		4	10	37.0	37.0	44.4
		5	4	14.8	14.8	59.3
		6	4	14.8	14.8	74.1
		Will always be present	7	25.9	25.9	100.0
		Total	27	100.0	100.0	

Cause affects competitive dives versus other areas of your life

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	Influences just this situation	10	37.0	37.0	37.0
		2	7	25.9	25.9	63.0
		3	4	14.8	14.8	77.8
		4	2	7.4	7.4	85.2
		5	3	11.1	11.1	96.3
		Influences all situation in my life	1	3.7	3.7	100.0
	Total	27	100.0	100.0		
Male	Valid	Influences just this situation	12	44.4	46.2	46.2
		2	2	7.4	7.7	53.8
		3	1	3.7	3.8	57.7
		4	4	14.8	15.4	73.1
		5	5	18.5	19.2	92.3
		6	2	7.4	7.7	100.0
		Total	26	96.3	100.0	
	Missing	System	1	3.7		
Total		27	100.0			

**YOU PERFORM A DIFFICULT DIVE BETTER THAN YOU
EVER HAVE BEFORE.**

Cause of the performance

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	3	1	3.7	3.7	3.7
		4	2	7.4	7.4	11.1
		5	4	14.8	14.8	25.9
		6	12	44.4	44.4	70.4
		Totally due to me	8	29.6	29.6	100.0
		Total	27	100.0	100.0	
Male	Valid	2	1	3.7	3.7	3.7
		3	2	7.4	7.4	11.1
		4	3	11.1	11.1	22.2
		5	4	14.8	14.8	37.0
		6	7	25.9	25.9	63.0
		Totally due to me	10	37.0	37.0	100.0
		Total	27	100.0	100.0	

Cause will again be present

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	4	9	33.3	34.6	34.6
		5	9	33.3	34.6	69.2
		6	5	18.5	19.2	88.5
		Will always be present	3	11.1	11.5	100.0
		Total	26	96.3	100.0	
		Missing	System	1	3.7	
Total		27	100.0			
Male	Valid	3	1	3.7	3.7	3.7
		4	6	22.2	22.2	25.9
		5	6	22.2	22.2	48.1
		6	8	29.6	29.6	77.8
		Will always be present	6	22.2	22.2	100.0
		Total	27	100.0	100.0	

Cause affects competitive dives versus other areas of your life

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	Influences just this situation	1	3.7	3.7	3.7
		2	2	7.4	7.4	11.1
		3	4	14.8	14.8	25.9
		4	9	33.3	33.3	59.3
		5	3	11.1	11.1	70.4
		6	8	29.6	29.6	100.0
		Total	27	100.0	100.0	
Male	Valid	Influences just this situation	5	18.5	18.5	18.5
		2	3	11.1	11.1	29.6
		4	5	18.5	18.5	48.1
		5	4	14.8	14.8	63.0
		6	7	25.9	25.9	88.9
		Influences all situation in my life	3	11.1	11.1	100.0
		Total	27	100.0	100.0	

YOU BECOME ONE OF THE BEST DIVERS IN THE COUNTRY.

Cause of becoming one of the best divers in the country

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	2	1	3.7	3.7	3.7
		4	6	22.2	22.2	25.9
		5	7	25.9	25.9	51.9
		6	10	37.0	37.0	88.9
		Totally due to me	3	11.1	11.1	100.0
		Total	27	100.0	100.0	
Male	Valid	Totally due to others	2	7.4	7.4	7.4
		3	1	3.7	3.7	11.1
		4	10	37.0	37.0	48.1
		5	1	3.7	3.7	51.9
		6	9	33.3	33.3	85.2
		Totally due to me	4	14.8	14.8	100.0
		Total	27	100.0	100.0	

Cause will again be present

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	4	4	14.8	14.8	14.8
		5	7	25.9	25.9	40.7
		6	9	33.3	33.3	74.1
		Will always be present	7	25.9	25.9	100.0
		Total	27	100.0	100.0	
Male	Valid	2	1	3.7	3.7	3.7
		4	5	18.5	18.5	22.2
		5	3	11.1	11.1	33.3
		6	8	29.6	29.6	63.0
		Will always be present	10	37.0	37.0	100.0
		Total	27	100.0	100.0	

Cause affects competitive dives versus other areas of your life

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	Influences just this situation	1	3.7	3.7	3.7
		2	1	3.7	3.7	7.4
		4	4	14.8	14.8	22.2
		5	6	22.2	22.2	44.4
		6	6	22.2	22.2	66.7
		Influences all situation in my life	9	33.3	33.3	100.0
		Total	27	100.0	100.0	
Male	Valid	Influences just this situation	2	7.4	7.4	7.4
		3	1	3.7	3.7	11.1
		4	2	7.4	7.4	18.5
		5	4	14.8	14.8	33.3
		6	8	29.6	29.6	63.0
		Influences all situation in my life	10	37.0	37.0	100.0
		Total	27	100.0	100.0	

A TEAM MATE COMES TO YOU WITH A PROBLEM ABOUT
DIVING AND YOU DON'T TRY TO HELP HIM/HER

Cause of the performance

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	Totally due to others	1	3.7	3.8	3.8
		2	2	7.4	7.7	11.5
		3	3	11.1	11.5	23.1
		4	6	22.2	23.1	46.2
		5	5	18.5	19.2	65.4
		6	5	18.5	19.2	84.6
		Totally due to me	4	14.8	15.4	100.0
		Total	26	96.3	100.0	
	Missing	System	1	3.7		
	Total		27	100.0		
Male	Valid	Totally due to others	4	14.8	16.0	16.0
		2	4	14.8	16.0	32.0
		3	2	7.4	8.0	40.0
		4	3	11.1	12.0	52.0
		5	2	7.4	8.0	60.0
		6	3	11.1	12.0	72.0
		Totally due to me	7	25.9	28.0	100.0
		Total	25	92.6	100.0	
	Missing	System	2	7.4		
	Total		27	100.0		

Cause will again be present

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	Will never again be present	1	3.7	4.0	4.0
		2	2	7.4	8.0	12.0
		3	3	11.1	12.0	24.0
		4	12	44.4	48.0	72.0
		5	3	11.1	12.0	84.0
		6	3	11.1	12.0	96.0
		Will always be present	1	3.7	4.0	100.0
		Total	25	92.6	100.0	
	Missing	System	2	7.4		
Total		27	100.0			
Male	Valid	Will never again be present	2	7.4	8.0	8.0
		2	5	18.5	20.0	28.0
		3	4	14.8	16.0	44.0
		4	10	37.0	40.0	84.0
		5	2	7.4	8.0	92.0
		6	1	3.7	4.0	96.0
		Will always be present	1	3.7	4.0	100.0
		Total	25	92.6	100.0	
	Missing	System	2	7.4		
Total		27	100.0			

Cause affects competitive dives versus other areas of your life

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	Influences just this situation	2	7.4	8.0	8.0
		2	1	3.7	4.0	12.0
		3	4	14.8	16.0	28.0
		4	11	40.7	44.0	72.0
		5	4	14.8	16.0	88.0
		6	3	11.1	12.0	100.0
		Total	25	92.6	100.0	
		Missing	System	2	7.4	
	Total	27	100.0			
Male	Valid	Influences just this situation	3	11.1	12.0	12.0
		2	5	18.5	20.0	32.0
		3	3	11.1	12.0	44.0
		4	8	29.6	32.0	76.0
		5	2	7.4	8.0	84.0
		6	3	11.1	12.0	96.0
		Influences all situation in my life	1	3.7	4.0	100.0
		Total	25	92.6	100.0	
	Missing	System	2	7.4		
Total	27	100.0				

**YOU GIVE A TALK IN FRONT OF A GROUP OF DIVERS
AND THE AUDIENCE REACTS NEGATIVELY.**

Cause of the performance

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	Totally due to others	1	3.7	3.8	3.8
		3	3	11.1	11.5	15.4
		4	12	44.4	46.2	61.5
		5	6	22.2	23.1	84.6
		6	3	11.1	11.5	96.2
		Totally due to me	1	3.7	3.8	100.0
		Total	26	96.3	100.0	
	Missing	System	1	3.7		
Total		27	100.0			
Male	Valid	2	1	3.7	3.7	3.7
		3	1	3.7	3.7	7.4
		4	11	40.7	40.7	48.1
		5	4	14.8	14.8	63.0
		6	7	25.9	25.9	88.9
		Totally due to me	3	11.1	11.1	100.0
		Total	27	100.0	100.0	

Cause will again be present

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	2	1	3.7	3.8	3.8
		3	3	11.1	11.5	15.4
		4	10	37.0	38.5	53.8
		5	7	25.9	26.9	80.8
		6	2	7.4	7.7	88.5
		Will always be present	3	11.1	11.5	100.0
		Total	26	96.3	100.0	
	Missing	System	1	3.7		
Total		27	100.0			
Male	Valid	Will never again be present	1	3.7	3.7	3.7
		2	2	7.4	7.4	11.1
		3	2	7.4	7.4	18.5
		4	16	59.3	59.3	77.8
		5	1	3.7	3.7	81.5
		6	3	11.1	11.1	92.6
		Will always be present	2	7.4	7.4	100.0
		Total	27	100.0	100.0	

Cause affects competitive dives versus other areas of your life

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	Influences just this situation	1	3.7	3.8	3.8
		2	5	18.5	19.2	23.1
		3	1	3.7	3.8	26.9
		4	6	22.2	23.1	50.0
		5	7	25.9	26.9	76.9
		6	3	11.1	11.5	88.5
		Influences all situation in my life	3	11.1	11.5	100.0
		Total	26	96.3	100.0	
	Missing	System	1	3.7		
Total		27	100.0			
Male	Valid	Influences just this situation	1	3.7	3.7	3.7
		2	2	7.4	7.4	11.1
		3	3	11.1	11.1	22.2
		4	9	33.3	33.3	55.6
		5	8	29.6	29.6	85.2
		6	4	14.8	14.8	100.0
		Total	27	100.0	100.0	

YOU WIN A BIG DIVING MEET AND YOU ARE
HIGHLY PRAISED.

Cause of the performance

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	3	1	3.7	3.8	3.8
		4	6	22.2	23.1	26.9
		5	9	33.3	34.6	61.5
		6	5	18.5	19.2	80.8
		Totally due to me	5	18.5	19.2	100.0
		Total	26	96.3	100.0	
	Missing	System	1	3.7		
	Total	27	100.0			
Male	Valid	Totally due to others	1	3.7	3.7	3.7
		2	2	7.4	7.4	11.1
		4	4	14.8	14.8	25.9
		5	8	29.6	29.6	55.6
		6	5	18.5	18.5	74.1
		Totally due to me	7	25.9	25.9	100.0
	Total	27	100.0	100.0		

Cause will again be present

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	3	1	3.7	3.8	3.8
		4	6	22.2	23.1	26.9
		5	5	18.5	19.2	46.2
		6	6	22.2	23.1	69.2
		Will always be present	8	29.6	30.8	100.0
		Total	26	96.3	100.0	
	Missing	System	1	3.7		
	Total	27	100.0			
Male	Valid	3	1	3.7	3.7	3.7
		4	3	11.1	11.1	14.8
		5	2	7.4	7.4	22.2
		6	9	33.3	33.3	55.6
		Will always be present	12	44.4	44.4	100.0
		Total	27	100.0	100.0	

Cause affects competitive dives versus other areas of your life

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	Influences just this situation	1	3.7	3.8	3.8
		2	2	7.4	7.7	11.5
		3	4	14.8	15.4	26.9
		4	4	14.8	15.4	42.3
		5	5	18.5	19.2	61.5
		6	7	25.9	26.9	88.5
		Influences all situation in my life	3	11.1	11.5	100.0
		Total	26	96.3	100.0	
	Missing	System	1	3.7		
Total		27	100.0			
Male	Valid	Influences just this situation	2	7.4	7.4	7.4
		3	1	3.7	3.7	11.1
		4	3	11.1	11.1	22.2
		5	5	18.5	18.5	40.7
		6	8	29.6	29.6	70.4
		Influences all situation in my life	8	29.6	29.6	100.0
		Total	27	100.0	100.0	

**YOU MEET A TEAM MATE WHO ACTS HOSTILELY
TOWARDS YOU.**

Cause of the performance

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	Totally due to others	2	7.4	7.4	7.4
		2	5	18.5	18.5	25.9
		3	1	3.7	3.7	29.6
		4	12	44.4	44.4	74.1
		5	5	18.5	18.5	92.6
		6	2	7.4	7.4	100.0
		Total	27	100.0	100.0	
Male	Valid	Totally due to others	4	14.8	14.8	14.8
		2	5	18.5	18.5	33.3
		4	8	29.6	29.6	63.0
		5	6	22.2	22.2	85.2
		6	3	11.1	11.1	96.3
		Totally due to me	1	3.7	3.7	100.0
		Total	27	100.0	100.0	

Cause will again be present

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	Will never again be present	1	3.7	3.7	3.7
		2	4	14.8	14.8	18.5
		3	2	7.4	7.4	25.9
		4	9	33.3	33.3	59.3
		5	5	18.5	18.5	77.8
		6	5	18.5	18.5	96.3
		Will always be present	1	3.7	3.7	100.0
		Total	27	100.0	100.0	
Male	Valid	Will never again be present	1	3.7	3.7	3.7
		2	3	11.1	11.1	14.8
		3	1	3.7	3.7	18.5
		4	10	37.0	37.0	55.6
		5	3	11.1	11.1	66.7
		6	5	18.5	18.5	85.2
		Will always be present	4	14.8	14.8	100.0
		Total	27	100.0	100.0	

Cause affects competitive dives versus other areas of your life

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	Influences just this situation	1	3.7	3.7	3.7
		2	3	11.1	11.1	14.8
		3	2	7.4	7.4	22.2
		4	9	33.3	33.3	55.6
		5	6	22.2	22.2	77.8
		6	3	11.1	11.1	88.9
		Influences all situation in my life	3	11.1	11.1	100.0
		Total	27	100.0	100.0	
Male	Valid	Influences just this situation	3	11.1	11.1	11.1
		2	2	7.4	7.4	18.5
		3	3	11.1	11.1	29.6
		4	8	29.6	29.6	59.3
		5	3	11.1	11.1	70.4
		6	4	14.8	14.8	85.2
		Influences all situation in my life	4	14.8	14.8	100.0
		Total	27	100.0	100.0	

**YOU DON'T FINISH WORKOUTS THAT OTHERS
EXPECT YOU TO COMPLETE.**

Cause of the performance

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	Totally due to others	1	3.7	3.7	3.7
		2	2	7.4	7.4	11.1
		4	2	7.4	7.4	18.5
		5	3	11.1	11.1	29.6
		6	7	25.9	25.9	55.6
		Totally due to me	12	44.4	44.4	100.0
		Total	27	100.0	100.0	
Male	Valid	Totally due to others	1	3.7	3.7	3.7
		2	2	7.4	7.4	11.1
		3	3	11.1	11.1	22.2
		4	4	14.8	14.8	37.0
		6	6	22.2	22.2	59.3
		Totally due to me	11	40.7	40.7	100.0
		Total	27	100.0	100.0	

Cause will again be present

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	Will never again be present	2	7.4	7.4	7.4
		3	2	7.4	7.4	14.8
		4	8	29.6	29.6	44.4
		5	5	18.5	18.5	63.0
		6	7	25.9	25.9	88.9
		Will always be present	3	11.1	11.1	100.0
		Total	27	100.0	100.0	
Male	Valid	Will never again be present	2	7.4	7.4	7.4
		2	2	7.4	7.4	14.8
		3	1	3.7	3.7	18.5
		4	7	25.9	25.9	44.4
		5	4	14.8	14.8	59.3
		6	4	14.8	14.8	74.1
		Will always be present	7	25.9	25.9	100.0
Total	27	100.0	100.0			

Cause affects competitive dives versus other areas of your life

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	Influences just this situation	2	7.4	7.4	7.4
		2	3	11.1	11.1	18.5
		3	3	11.1	11.1	29.6
		4	5	18.5	18.5	48.1
		5	5	18.5	18.5	66.7
		6	7	25.9	25.9	92.6
		Influences all situation in my life	2	7.4	7.4	100.0
		Total	27	100.0	100.0	
Male	Valid	Influences just this situation	2	7.4	7.4	7.4
		3	2	7.4	7.4	14.8
		4	3	11.1	11.1	25.9
		5	8	29.6	29.6	55.6
		6	10	37.0	37.0	92.6
		Influences all situation in my life	2	7.4	7.4	100.0
		Total	27	100.0	100.0	

YOUR COACH HAS BEEN GIVING YOU MORE ATTENTION.

Cause of the performance

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	2	1	3.7	3.7	3.7
		3	3	11.1	11.1	14.8
		4	8	29.6	29.6	44.4
		5	8	29.6	29.6	74.1
		6	7	25.9	25.9	100.0
		Total	27	100.0	100.0	
Male	Valid	2	1	3.7	3.8	3.8
		3	3	11.1	11.5	15.4
		4	5	18.5	19.2	34.6
		5	6	22.2	23.1	57.7
		6	7	25.9	26.9	84.6
		Totally due to me	4	14.8	15.4	100.0
		Total	26	96.3	100.0	
	Missing	System	1	3.7		
Total		27	100.0			

Cause will again be present

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	3	1	3.7	3.7	3.7
		4	13	48.1	48.1	51.9
		5	6	22.2	22.2	74.1
		6	5	18.5	18.5	92.6
		Will always be present	2	7.4	7.4	100.0
		Total	27	100.0	100.0	
Male	Valid	4	8	29.6	30.8	30.8
		5	6	22.2	23.1	53.8
		6	6	22.2	23.1	76.9
		Will always be present	6	22.2	23.1	100.0
		Total	26	96.3	100.0	
		Missing	System	1	3.7	
Total		27	100.0			

Cause affects competitive dives versus other areas of your life

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	Influences just this situation	3	11.1	11.1	11.1
		2	5	18.5	18.5	29.6
		3	4	14.8	14.8	44.4
		4	4	14.8	14.8	59.3
		5	7	25.9	25.9	85.2
		6	3	11.1	11.1	96.3
		Influences all situation in my life	1	3.7	3.7	100.0
	Total	27	100.0	100.0		
Male	Valid	Influences just this situation	4	14.8	15.4	15.4
		2	1	3.7	3.8	19.2
		3	2	7.4	7.7	26.9
		4	5	18.5	19.2	46.2
		5	5	18.5	19.2	65.4
		6	6	22.2	23.1	88.5
		Influences all situation in my life	3	11.1	11.5	100.0
	Total	26	96.3	100.0		
	Missing	System	1	3.7		
Total			27	100.0		

YOU COMPETE IN A BIG DIVING MEET IN WHICH YOU
WANT TO FINAL, AND YOU MAKE THE FINALS.

Cause of the performance

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	3	1	3.7	3.7	3.7
		4	5	18.5	18.5	22.2
		5	7	25.9	25.9	48.1
		6	10	37.0	37.0	85.2
		Totally due to me	4	14.8	14.8	100.0
		Total	27	100.0	100.0	
Male	Valid	4	3	11.1	11.5	11.5
		5	3	11.1	11.5	23.1
		6	14	51.9	53.8	76.9
		Totally due to me	6	22.2	23.1	100.0
		Total	26	96.3	100.0	
		Missing	System	1	3.7	
Total			27	100.0		

Cause will again be present

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	4	3	11.1	11.1	11.1
		5	9	33.3	33.3	44.4
		6	10	37.0	37.0	81.5
		Will always be present	5	18.5	18.5	100.0
		Total	27	100.0	100.0	
Male	Valid	Will never again be present	1	3.7	3.8	3.8
		5	3	11.1	11.5	15.4
		6	12	44.4	46.2	61.5
		Will always be present	10	37.0	38.5	100.0
		Total	26	96.3	100.0	
		Missing	System	1	3.7	
Total			27	100.0		

Cause affects competitive dives versus other areas of your life

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	Influences just this situation	2	7.4	7.4	7.4
		2	4	14.8	14.8	22.2
		3	1	3.7	3.7	25.9
		4	1	3.7	3.7	29.6
		5	10	37.0	37.0	66.7
		6	6	22.2	22.2	88.9
		Influences all situation in my life	3	11.1	11.1	100.0
	Total	27	100.0	100.0		
Male	Valid	Influences just this situation	3	11.1	11.5	11.5
		4	1	3.7	3.8	15.4
		5	7	25.9	26.9	42.3
		6	8	29.6	30.8	73.1
		Influences all situation in my life	7	25.9	26.9	100.0
		Total	26	96.3	100.0	
	Missing	System	1	3.7		
Total		27	100.0			

**YOU COMPETE IN A BIG DIVING MEET AND YOU
DO POORLY.**

Cause of the performance

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	3	1	3.7	3.7	3.7
		4	4	14.8	14.8	18.5
		5	5	18.5	18.5	37.0
		6	8	29.6	29.6	66.7
		Totally due to me	9	33.3	33.3	100.0
		Total	27	100.0	100.0	
Male	Valid	2	1	3.7	3.8	3.8
		4	1	3.7	3.8	7.7
		5	2	7.4	7.7	15.4
		6	14	51.9	53.8	69.2
		Totally due to me	8	29.6	30.8	100.0
		Total	26	96.3	100.0	
		Missing	System	1	3.7	
Total		27	100.0			

Cause will again be present

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	Will never again be present	2	7.4	7.4	7.4
		2	1	3.7	3.7	11.1
		3	2	7.4	7.4	18.5
		4	10	37.0	37.0	55.6
		5	3	11.1	11.1	66.7
		6	6	22.2	22.2	88.9
		Will always be present	3	11.1	11.1	100.0
		Total	27	100.0	100.0	
Male	Valid	Will never again be present	1	3.7	4.0	4.0
		3	3	11.1	12.0	16.0
		4	6	22.2	24.0	40.0
		5	5	18.5	20.0	60.0
		6	4	14.8	16.0	76.0
		Will always be present	6	22.2	24.0	100.0
		Total	25	92.6	100.0	
		Missing	System	2	7.4	
Total		27	100.0			

Cause affects competitive dives versus other areas of your life

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	2	4	14.8	14.8	14.8
		3	2	7.4	7.4	22.2
		4	6	22.2	22.2	44.4
		5	3	11.1	11.1	55.6
		6	8	29.6	29.6	85.2
		Influences all situation in my life	4	14.8	14.8	100.0
		Total	27	100.0	100.0	
Male	Valid	Influences just this situation	1	3.7	4.2	4.2
		3	4	14.8	16.7	20.8
		4	2	7.4	8.3	29.2
		5	6	22.2	25.0	54.2
		6	7	25.9	29.2	83.3
		Influences all situation in my life	4	14.8	16.7	100.0
		Total	24	88.9	100.0	
		Missing	System	3	11.1	
Total		27	100.0			

YOU WIN A MAJOR DIVING MEET LIKE THE NCAA
CHAMPIONSHIPS.

Cause of the performance

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	4	10	37.0	37.0	37.0
		5	3	11.1	11.1	48.1
		6	7	25.9	25.9	74.1
		Totally due to me	7	25.9	25.9	100.0
		Total	27	100.0	100.0	
Male	Valid	2	1	3.7	3.8	3.8
		4	3	11.1	11.5	15.4
		5	1	3.7	3.8	19.2
		6	15	55.6	57.7	76.9
		Totally due to me	6	22.2	23.1	100.0
		Total	26	96.3	100.0	
	Missing	System	1	3.7		
Total		27	100.0			

Cause will again be present

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	4	5	18.5	18.5	18.5
		5	6	22.2	22.2	40.7
		6	10	37.0	37.0	77.8
		Will always be present	6	22.2	22.2	100.0
		Total	27	100.0	100.0	
Male	Valid	3	1	3.7	3.8	3.8
		4	1	3.7	3.8	7.7
		5	3	11.1	11.5	19.2
		6	11	40.7	42.3	61.5
		Will always be present	10	37.0	38.5	100.0
		Total	26	96.3	100.0	
	Missing	System	1	3.7		
Total		27	100.0			

Cause affects competitive dives versus other areas of your life

Sex			Frequency	Percent	Valid Percent	Cumulative Percent
.	Missing	System	1	100.0		
Female	Valid	2	1	3.7	3.7	3.7
		4	3	11.1	11.1	14.8
		5	8	29.6	29.6	44.4
		6	11	40.7	40.7	85.2
		Influences all situation in my life	4	14.8	14.8	100.0
		Total	27	100.0	100.0	
Male	Valid	Influences just this situation	1	3.7	3.8	3.8
		3	1	3.7	3.8	7.7
		4	2	7.4	7.7	15.4
		5	3	11.1	11.5	26.9
		6	9	33.3	34.6	61.5
		Influences all situation in my life	10	37.0	38.5	100.0
		Total	26	96.3	100.0	
		Missing System	1	3.7		
Total	27	100.0				

APPENDIX S: CROSSTABULATIONS

Sex * Cause of the performance Crosstabulation

			Cause of the performance			Total
			1	4	7	
Sex	Female	Count	3	2	22	27
		% within Sex	11.1%	7.4%	81.5%	100.0%
	Male	Count	7	2	18	27
		% within Sex	25.9%	7.4%	66.7%	100.0%
Total		Count	10	4	40	54
		% within Sex	18.5%	7.4%	74.1%	100.0%

Sex * Cause will again be present Crosstabulation

			Cause will again be present			Total
			1	4	7	
Sex	Female	Count	3	8	16	27
		% within Sex	11.1%	29.6%	59.3%	100.0%
	Male	Count	2	10	15	27
		% within Sex	7.4%	37.0%	55.6%	100.0%
Total		Count	5	18	31	54
		% within Sex	9.3%	33.3%	57.4%	100.0%

Sex * Cause affects competitive dives versus other areas of your life Crosstabulation

			Cause affects competitive dives versus other areas of your life			Total
			1	4	7	
Sex	Female	Count	21	2	4	27
		% within Sex	77.8%	7.4%	14.8%	100.0%
	Male	Count	15	4	7	26
		% within Sex	57.7%	15.4%	26.9%	100.0%
Total		Count	36	6	11	53
		% within Sex	67.9%	11.3%	20.8%	100.0%

Sex * Cause of the performance Crosstabulation

			Cause of the performance			Total
			1	4	7	
Sex	Female	Count	1	2	24	27
		% within Sex	3.7%	7.4%	88.9%	100.0%
	Male	Count	3	3	21	27
		% within Sex	11.1%	11.1%	77.8%	100.0%
Total		Count	4	5	45	54
		% within Sex	7.4%	9.3%	83.3%	100.0%

Sex * Cause will again be present Crosstabulation

			Cause will again be present			Total
			1	4	7	
Sex	Female	Count		9	17	26
		% within Sex		34.6%	65.4%	100.0%
	Male	Count	1	6	20	27
		% within Sex	3.7%	22.2%	74.1%	100.0%
Total		Count	1	15	37	53
		% within Sex	1.9%	28.3%	69.8%	100.0%

Sex * Cause affects competitive dives versus other areas of your life Crosstabulation

			Cause affects competitive dives versus other areas of your life			Total
			1	4	7	
Sex	Female	Count	7	9	11	27
		% within Sex	25.9%	33.3%	40.7%	100.0%
	Male	Count	8	5	14	27
		% within Sex	29.6%	18.5%	51.9%	100.0%
Total		Count	15	14	25	54
		% within Sex	27.8%	25.9%	46.3%	100.0%

Sex * Cause of the performance Crosstabulation

			Cause of the performance			Total
			1	4	7	
Sex	Female	Count	1	6	20	27
		% within Sex	3.7%	22.2%	74.1%	100.0%
	Male	Count	3	10	14	27
		% within Sex	11.1%	37.0%	51.9%	100.0%
Total		Count	4	16	34	54
		% within Sex	7.4%	29.6%	63.0%	100.0%

Sex * Cause will again be present Crosstabulation

			Cause will again be present			Total
			1	4	7	
Sex	Female	Count		4	23	27
		% within Sex		14.8%	85.2%	100.0%
	Male	Count	1	5	21	27
		% within Sex	3.7%	18.5%	77.8%	100.0%
Total		Count	1	9	44	54
		% within Sex	1.9%	16.7%	81.5%	100.0%

**Sex * Cause affects competitive dives versus other areas of your life
Crosstabulation**

			Cause affects competitive dives versus other areas of your life			Total
			1	4	7	
Sex	Female	Count	2	4	21	27
		% within Sex	7.4%	14.8%	77.8%	100.0%
	Male	Count	3	2	22	27
		% within Sex	11.1%	7.4%	81.5%	100.0%
Total		Count	5	6	43	54
		% within Sex	9.3%	11.1%	79.6%	100.0%

Sex * Cause of the performance Crosstabulation

			Cause of the performance			Total
			1	4	7	
Sex	Female	Count	6	6	14	26
		% within Sex	23.1%	23.1%	53.8%	100.0%
	Male	Count	10	3	12	25
		% within Sex	40.0%	12.0%	48.0%	100.0%
Total		Count	16	9	26	51
		% within Sex	31.4%	17.6%	51.0%	100.0%

Sex * Cause will again be present Crosstabulation

			Cause will again be present			Total
			1	4	7	
Sex	Female	Count	6	12	7	25
		% within Sex	24.0%	48.0%	28.0%	100.0%
	Male	Count	11	10	4	25
		% within Sex	44.0%	40.0%	16.0%	100.0%
Total		Count	17	22	11	50
		% within Sex	34.0%	44.0%	22.0%	100.0%

**Sex * Cause affects competitive dives versus other areas of your life
Crosstabulation**

			Cause affects competitive dives versus other areas of your life			Total
			1	4	7	
Sex	Female	Count	7	11	7	25
		% within Sex	28.0%	44.0%	28.0%	100.0%
	Male	Count	11	8	6	25
		% within Sex	44.0%	32.0%	24.0%	100.0%
Total		Count	18	19	13	50
		% within Sex	36.0%	38.0%	26.0%	100.0%

Sex * Cause of the performance Crosstabulation

			Cause of the performance			Total
			1	4	7	
Sex	Female	Count	4	12	10	26
		% within Sex	15.4%	46.2%	38.5%	100.0%
	Male	Count	2	11	14	27
		% within Sex	7.4%	40.7%	51.9%	100.0%
Total		Count	6	23	24	53
		% within Sex	11.3%	43.4%	45.3%	100.0%

Sex * Cause will again be present Crosstabulation

			Cause will again be present			Total
			1	4	7	
Sex	Female	Count	4	10	12	26
		% within Sex	15.4%	38.5%	46.2%	100.0%
	Male	Count	5	16	6	27
		% within Sex	18.5%	59.3%	22.2%	100.0%
Total		Count	9	26	18	53
		% within Sex	17.0%	49.1%	34.0%	100.0%

Sex * Cause affects competitive dives versus other areas of your life Crosstabulation

			Cause affects competitive dives versus other areas of your life			Total
			1	4	7	
Sex	Female	Count	7	6	13	26
		% within Sex	26.9%	23.1%	50.0%	100.0%
	Male	Count	6	9	12	27
		% within Sex	22.2%	33.3%	44.4%	100.0%
Total		Count	13	15	25	53
		% within Sex	24.5%	28.3%	47.2%	100.0%

Sex * Cause of the performance Crosstabulation

			Cause of the performance			Total
			1	4	7	
Sex	Female	Count	1	6	19	26
		% within Sex	3.8%	23.1%	73.1%	100.0%
	Male	Count	3	4	20	27
		% within Sex	11.1%	14.8%	74.1%	100.0%
Total		Count	4	10	39	53
		% within Sex	7.5%	18.9%	73.6%	100.0%

Sex * Cause will again be present Crosstabulation

			Cause will again be present			Total
			1	4	7	
Sex	Female	Count	1	6	19	26
		% within Sex	3.8%	23.1%	73.1%	100.0%
	Male	Count	1	3	23	27
		% within Sex	3.7%	11.1%	85.2%	100.0%
Total		Count	2	9	42	53
		% within Sex	3.8%	17.0%	79.2%	100.0%

Sex * Cause affects competitive dives versus other areas of your life Crosstabulation

			Cause affects competitive dives versus other areas of your life			Total
			1	4	7	
Sex	Female	Count	7	4	15	26
		% within Sex	26.9%	15.4%	57.7%	100.0%
	Male	Count	3	3	21	27
		% within Sex	11.1%	11.1%	77.8%	100.0%
Total		Count	10	7	36	53
		% within Sex	18.9%	13.2%	67.9%	100.0%

Sex * Cause of the performance Crosstabulation

			Cause of the performance			Total
			1	4	7	
Sex	Female	Count	8	12	7	27
		% within Sex	29.6%	44.4%	25.9%	100.0%
	Male	Count	9	8	10	27
		% within Sex	33.3%	29.6%	37.0%	100.0%
Total		Count	17	20	17	54
		% within Sex	31.5%	37.0%	31.5%	100.0%

Sex * Cause will again be present Crosstabulation

			Cause will again be present			Total
			1	4	7	
Sex	Female	Count	7	9	11	27
		% within Sex	25.9%	33.3%	40.7%	100.0%
	Male	Count	5	10	12	27
		% within Sex	18.5%	37.0%	44.4%	100.0%
Total		Count	12	19	23	54
		% within Sex	22.2%	35.2%	42.6%	100.0%

**Sex * Cause affects competitive dives versus other areas of your life
Crosstabulation**

			Cause affects competitive dives versus other areas of your life			Total
			1	4	7	
Sex	Female	Count	6	9	12	27
		% within Sex	22.2%	33.3%	44.4%	100.0%
	Male	Count	8	8	11	27
		% within Sex	29.6%	29.6%	40.7%	100.0%
Total		Count	14	17	23	54
		% within Sex	25.9%	31.5%	42.6%	100.0%

Sex * Cause of the performance Crosstabulation

			Cause of the performance			Total
			1	4	7	
Sex	Female	Count	3	2	22	27
		% within Sex	11.1%	7.4%	81.5%	100.0%
	Male	Count	6	4	17	27
		% within Sex	22.2%	14.8%	63.0%	100.0%
Total		Count	9	6	39	54
		% within Sex	16.7%	11.1%	72.2%	100.0%

Sex * Cause will again be present Crosstabulation

			Cause will again be present			Total
			1	4	7	
Sex	Female	Count	4	8	15	27
		% within Sex	14.8%	29.6%	55.6%	100.0%
	Male	Count	5	7	15	27
		% within Sex	18.5%	25.9%	55.6%	100.0%
Total		Count	9	15	30	54
		% within Sex	16.7%	27.8%	55.6%	100.0%

**Sex * Cause affects competitive dives versus other areas of your life
Crosstabulation**

			Cause affects competitive dives versus other areas of your life			Total
			1	4	7	
Sex	Female	Count	8	5	14	27
		% within Sex	29.6%	18.5%	51.9%	100.0%
	Male	Count	4	3	20	27
		% within Sex	14.8%	11.1%	74.1%	100.0%
Total		Count	12	8	34	54
		% within Sex	22.2%	14.8%	63.0%	100.0%

Sex * Cause of the performance Crosstabulation

			Cause of the performance			Total
			1	4	7	
Sex	Female	Count	4	8	15	27
		% within Sex	14.8%	29.6%	55.6%	100.0%
	Male	Count	4	5	17	26
		% within Sex	15.4%	19.2%	65.4%	100.0%
Total		Count	8	13	32	53
		% within Sex	15.1%	24.5%	60.4%	100.0%

Sex * Cause will again be present Crosstabulation

			Cause will again be present			Total
			1	4	7	
Sex	Female	Count	1	13	13	27
		% within Sex	3.7%	48.1%	48.1%	100.0%
	Male	Count		8	18	26
		% within Sex		30.8%	69.2%	100.0%
Total		Count	1	21	31	53
		% within Sex	1.9%	39.6%	58.5%	100.0%

Sex * Cause affects competitive dives versus other areas of your life Crosstabulation

			Cause affects competitive dives versus other areas of your life			Total
			1	4	7	
Sex	Female	Count	12	4	11	27
		% within Sex	44.4%	14.8%	40.7%	100.0%
	Male	Count	7	5	14	26
		% within Sex	26.9%	19.2%	53.8%	100.0%
Total		Count	19	9	25	53
		% within Sex	35.8%	17.0%	47.2%	100.0%

Sex * Cause of the performance Crosstabulation

			Cause of the performance			Total
			1	4	7	
Sex	Female	Count	1	5	21	27
		% within Sex	3.7%	18.5%	77.8%	100.0%
	Male	Count		3	23	26
		% within Sex		11.5%	88.5%	100.0%
Total		Count	1	8	44	53
		% within Sex	1.9%	15.1%	83.0%	100.0%

Sex * Cause will again be present Crosstabulation

			Cause will again be present			Total
			1	4	7	
Sex	Female	Count		3	24	27
		% within Sex		11.1%	88.9%	100.0%
	Male	Count	1		25	26
		% within Sex	3.8%		96.2%	100.0%
Total		Count	1	3	49	53
		% within Sex	1.9%	5.7%	92.5%	100.0%

Sex * Cause affects competitive dives versus other areas of your life Crosstabulation

			Cause affects competitive dives versus other areas of your life			Total
			1	4	7	
Sex	Female	Count	7	1	19	27
		% within Sex	25.9%	3.7%	70.4%	100.0%
	Male	Count	3	1	22	26
		% within Sex	11.5%	3.8%	84.6%	100.0%
Total		Count	10	2	41	53
		% within Sex	18.9%	3.8%	77.4%	100.0%

Sex * Cause of the performance Crosstabulation

			Cause of the performance			Total
			1	4	7	
Sex	Female	Count	1	4	22	27
		% within Sex	3.7%	14.8%	81.5%	100.0%
	Male	Count	1	1	24	26
		% within Sex	3.8%	3.8%	92.3%	100.0%
Total		Count	2	5	46	53
		% within Sex	3.8%	9.4%	86.8%	100.0%

Sex * Cause will again be present Crosstabulation

			Cause will again be present			Total
			1	4	7	
Sex	Female	Count	5	10	12	27
		% within Sex	18.5%	37.0%	44.4%	100.0%
	Male	Count	4	6	15	25
		% within Sex	16.0%	24.0%	60.0%	100.0%
Total		Count	9	16	27	52
		% within Sex	17.3%	30.8%	51.9%	100.0%

**Sex * Cause affects competitive dives versus other areas of your life
Crosstabulation**

			Cause affects competitive dives versus other areas of your life			Total
			1	4	7	
Sex	Female	Count	6	6	15	27
		% within Sex	22.2%	22.2%	55.6%	100.0%
	Male	Count	5	2	17	24
		% within Sex	20.8%	8.3%	70.8%	100.0%
Total		Count	11	8	32	51
		% within Sex	21.6%	15.7%	62.7%	100.0%

Sex * Cause of the performance Crosstabulation

			Cause of the performance			Total
			1	4	7	
Sex	Female	Count		10	17	27
		% within Sex		37.0%	63.0%	100.0%
	Male	Count	1	3	22	26
		% within Sex	3.8%	11.5%	84.6%	100.0%
Total		Count	1	13	39	53
		% within Sex	1.9%	24.5%	73.6%	100.0%

Sex * Cause will again be present Crosstabulation

			Cause will again be present			Total
			1	4	7	
Sex	Female	Count		5	22	27
		% within Sex		18.5%	81.5%	100.0%
	Male	Count	1	1	24	26
		% within Sex	3.8%	3.8%	92.3%	100.0%
Total		Count	1	6	46	53
		% within Sex	1.9%	11.3%	86.8%	100.0%

**Sex * Cause affects competitive dives versus other areas of your life
Crosstabulation**

			Cause affects competitive dives versus other areas of your life			Total
			1	4	7	
Sex	Female	Count	1	3	23	27
		% within Sex	3.7%	11.1%	85.2%	100.0%
	Male	Count	2	2	22	26
		% within Sex	7.7%	7.7%	84.6%	100.0%
Total		Count	3	5	45	53
		% within Sex	5.7%	9.4%	84.9%	100.0%

APPENDIX T: DESCRIPTIVES

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Composite Negative	46	9.00	16.67	13.2899	1.81027
Composite Positive	50	10.17	21.00	15.9400	1.98142
Composite Difference	44	-2.83	7.50	2.5455	2.18562
Internal Negative	49	3.67	6.83	4.8844	.70727
Internal Positive	51	3.67	7.00	5.3824	.74184
Stable Negative	47	2.17	6.17	4.4291	.92910
Stable Positive	50	4.17	7.00	5.6067	.67407
Global Negative	46	1.50	5.83	4.0181	1.08992
Global Positive	51	2.00	7.00	4.9444	1.02289
Hopelessness	46	2.25	6.00	4.2138	.84266
Hopefulness	50	3.08	7.00	5.2750	.75485
Valid N (listwise)	44				

APPENDIX U: MEANS

Female versus Male

Group Statistics

	Sex	N	Mean	Std. Deviation	Std. Error Mean
Composite Negative	Female	24	13.3333	1.83958	.37550
	Male	22	13.2424	1.81974	.38797
Composite Positive	Female	25	15.4200	1.67230	.33446
	Male	25	16.4600	2.15772	.43154
Composite Difference	Female	22	2.0833	2.01433	.42946
	Male	22	3.0076	2.29704	.48973
Internal Negative	Female	25	4.9400	.57711	.11542
	Male	24	4.8264	.83040	.16950
Internal Positive	Female	26	5.3141	.66387	.13020
	Male	25	5.4533	.82288	.16458
Stable Negative	Female	24	4.4444	.91902	.18760
	Male	23	4.4130	.95989	.20015
Stable Positive	Female	25	5.4267	.62376	.12475
	Male	25	5.7867	.68638	.13728
Global Negative	Female	24	3.9583	1.03589	.21145
	Male	22	4.0833	1.16695	.24879
Global Positive	Female	26	4.6795	.88434	.17343
	Male	25	5.2200	1.10000	.22000
Hopelessness	Female	24	4.2014	.86878	.17734
	Male	22	4.2273	.83341	.17768
Hopefulness	Female	25	5.0467	.63148	.12630
	Male	25	5.5033	.80991	.16198

APPENDIX V: GENERAL LINEAR MODEL

Between-Subjects Factors

		Value Label	N
Sex	1	Female	22
	2	Male	22

Multivariate Tests^b

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.992	757.850 ^a	6.000	37.000	.000
	Wilks' Lambda	.008	757.850 ^a	6.000	37.000	.000
	Hotelling's Trace	122.895	757.850 ^a	6.000	37.000	.000
	Roy's Largest Root	122.895	757.850 ^a	6.000	37.000	.000
var43	Pillai's Trace	.140	1.007 ^a	6.000	37.000	.435
	Wilks' Lambda	.860	1.007 ^a	6.000	37.000	.435
	Hotelling's Trace	.163	1.007 ^a	6.000	37.000	.435
	Roy's Largest Root	.163	1.007 ^a	6.000	37.000	.435

a. Exact statistic

b. Design: Intercept+var43

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	Composite Negative	.228 ^a	1	.228	.065	.800
	Composite Positive	6.698 ^b	1	6.698	1.710	.198
	Composite Difference	9.396 ^c	1	9.396	2.013	.163
	Internal Negative	.460 ^d	1	.460	.924	.342
	Internal Positive	.001 ^e	1	.001	.001	.974
	Stable Negative	.091 ^f	1	.091	.099	.755
	Stable Positive	.730 ^b	1	.730	1.712	.198
	Global Negative	.253 ^g	1	.253	.202	.655
	Global Positive	3.093 ^h	1	3.093	2.775	.103
	Hopelessness	.010 ⁱ	1	.010	.013	.909
	Hopefulness	1.707 ^j	1	1.707	3.056	.088
Intercept	Composite Negative	7800.016	1	7800.016	2234.391	.000
	Composite Positive	11067.531	1	11067.531	2826.338	.000
	Composite Difference	285.091	1	285.091	61.087	.000
	Internal Negative	1052.198	1	1052.198	2111.887	.000
	Internal Positive	1267.607	1	1267.607	2122.184	.000
	Stable Negative	858.306	1	858.306	931.142	.000
	Stable Positive	1371.639	1	1371.639	3216.737	.000
	Global Negative	706.669	1	706.669	566.289	.000
	Global Positive	1060.364	1	1060.364	951.188	.000
	Hopelessness	780.646	1	780.646	1030.535	.000
	Hopefulness	1211.001	1	1211.001	2168.128	.000
var43	Composite Negative	.228	1	.228	.065	.800
	Composite Positive	6.698	1	6.698	1.710	.198
	Composite Difference	9.396	1	9.396	2.013	.163
	Internal Negative	.460	1	.460	.924	.342
	Internal Positive	.001	1	.001	.001	.974
	Stable Negative	.091	1	.091	.099	.755
	Stable Positive	.730	1	.730	1.712	.198
	Global Negative	.253	1	.253	.202	.655
	Global Positive	3.093	1	3.093	2.775	.103
	Hopelessness	.010	1	.010	.013	.909
	Hopefulness	1.707	1	1.707	3.056	.088
Error	Composite Negative	146.617	42	3.491		
	Composite Positive	164.466	42	3.916		
	Composite Difference	196.013	42	4.667		
	Internal Negative	20.926	42	.498		
	Internal Positive	25.087	42	.597		
	Stable Negative	38.715	42	.922		
	Stable Positive	17.909	42	.426		
	Global Negative	52.412	42	1.248		
	Global Positive	46.821	42	1.115		
	Hopelessness	31.816	42	.758		
	Hopefulness	23.459	42	.559		
Total	Composite Negative	7946.861	44			
	Composite Positive	11238.694	44			
	Composite Difference	490.500	44			
	Internal Negative	1073.583	44			
	Internal Positive	1292.694	44			

APPENDIX W: CORRELATIONS

Correlations

		Composite Negative	Composite Positive	Composite Difference	Place in one Meter
Composite Negative	Pearson Correlation	1	.355*	-.521**	-.001
	Sig. (2-tailed)	.	.018	.000	.997
	N	46	44	44	45
Composite Positive	Pearson Correlation	.355*	1	.613**	-.122
	Sig. (2-tailed)	.018	.	.000	.405
	N	44	50	44	49
Composite Difference	Pearson Correlation	-.521**	.613**	1	-.067
	Sig. (2-tailed)	.000	.000	.	.671
	N	44	44	44	43
Place in one Meter	Pearson Correlation	-.001	-.122	-.067	1
	Sig. (2-tailed)	.997	.405	.671	.
	N	45	49	43	54

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		Internal Negative	Internal Positive	Place in one Meter
Internal Negative	Pearson Correlation	1	.337*	.016
	Sig. (2-tailed)	.	.021	.915
	N	49	47	48
Internal Positive	Pearson Correlation	.337*	1	-.133
	Sig. (2-tailed)	.021	.	.356
	N	47	51	50
Place in one Meter	Pearson Correlation	.016	-.133	1
	Sig. (2-tailed)	.915	.356	.
	N	48	50	54

*. Correlation is significant at the 0.05 level (2-tailed).

Correlations

		Stable Negative	Stable Positive	Place in one Meter
Stable Negative	Pearson Correlation	1	-.020	.024
	Sig. (2-tailed)	.	.897	.872
	N	47	45	46
Stable Positive	Pearson Correlation	-.020	1	.011
	Sig. (2-tailed)	.897	.	.941
	N	45	50	49
Place in one Meter	Pearson Correlation	.024	.011	1
	Sig. (2-tailed)	.872	.941	.
	N	46	49	54

Correlations

		Global Negative	Global Positive	Place in one Meter
Global Negative	Pearson Correlation	1	.597**	-.050
	Sig. (2-tailed)	.	.000	.742
	N	46	45	45
Global Positive	Pearson Correlation	.597**	1	-.145
	Sig. (2-tailed)	.000	.	.314
	N	45	51	50
Place in one Meter	Pearson Correlation	-.050	-.145	1
	Sig. (2-tailed)	.742	.314	.
	N	45	50	54

** . Correlation is significant at the 0.01 level (2-tailed).

Correlations

		Hopelessness	Hopefulness	Place in one Meter
Hopelessness	Pearson Correlation	1	.328*	-.019
	Sig. (2-tailed)	.	.030	.902
	N	46	44	45
Hopefulness	Pearson Correlation	.328*	1	-.096
	Sig. (2-tailed)	.030	.	.513
	N	44	50	49
Place in one Meter	Pearson Correlation	-.019	-.096	1
	Sig. (2-tailed)	.902	.513	.
	N	45	49	54

* . Correlation is significant at the 0.05 level (2-tailed).

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