

The Influence of Self-Confidence on Athletics
in Male Collegiate Lacrosse Players

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ABSTRACT

The purpose of the study was to examine the relationship of certain variables, which consist of Course Load, GPA/Academic Standing, Study Skills, Time Management, Player-Coach Relations, Coaching Communication, Team Chemistry, Reps at Practice, Team Discipline, Competitiveness at Practice, Depth Chart Standing, Team Record, Individual Recognition, Overall Preparation, Physical Conditioning, Stick Work, Playbook Mastery, Scouting Report Implementation, Injury, Rest, Nutrition, Social Distractions, Family Support, Parental Involvement, Sense of Independence, Substance Use & Abuse, and the athletic confidence of NCAA Division I and Division III male lacrosse players. One team from each Division completed a questionnaire that consisted of 33 questions: 26 of the 33 questions used a self-anchoring, 10-point scale to measure the athletes' self-defined levels of confidence for each category. Using the Spearman Correlation Coefficient Test, none of the 26 variables tested achieved the level of statistical significance on athletic self-confidence. However, this analysis did find a negative relationship between injury and an athlete's social confidence as well as a positive relationship between family support and academic confidence. The study's samples of the Division I and Division III men's lacrosse players in the NCAA are small, so a larger sample size would need to be conducted to increase validity; and more importantly, to determine if a different design beyond a correlation study might suggest why these relationships exist.

CHAPTER I

INTRODUCTION

Overview

The student-athlete's athletic confidence is a fragile concoction made up of numerous variables. Without a healthy sense of self-confidence, neither the individual player nor his or her team can reach their potential. And, particularly, in the case of team sports, the team will not be successful. Division I and Division III coaches spend a great deal of time analyzing all of their players both athletically and psychologically in order to help them reach their potential. Understanding which variables have a relationship with athletic confidence would be very valuable to any coach at any collegiate level.

Throughout the researcher's coaching career, there have appeared to be a number of variables that can affect athletes' self-confidence on the playing field. This study has been designed to test these variables on a sample of men's lacrosse players. The purpose of the study is to determine which variables among the 26 tested, have a relationship with the athletic confidence of male lacrosse players at Division I, University of Richmond and Division III, Randolph-Macon College.

To achieve this purpose, a 33-question survey was completed by 61 men's lacrosse players from the two teams. The first four questions were demographic in nature. They were used to define the subjects as: A Division I or a Division III athlete; academic status; position played on the field; and whether or not siblings have played NCAA athletics. The second part of the questionnaire tested the level the athlete personally felt each variable (of the 26) influenced

his athletic self-confidence. The framework for the analysis was devised in order to determine which areas of the student-athlete's daily life have a relationship to his athletic self-confidence.

Statement of Problem

The purpose of the study was to analyze different variables that may have a relationship with the self-confidence of NCAA Division I and Division III men's lacrosse players.

Hypothesis

Athletic confidence is affected by a myriad of social, academic, and athletic variables. The researcher selected 26 specific variables which were anticipated to have a relationship with the athletic confidence of male, collegiate lacrosse players.

Operational Definitions

The definitions of the 26 variables were not explained to the subjects in order for the survey to be self-defining and self-anchoring to eliminate the risk of outside bias and influence. However, for the purpose of understanding this survey for those who aren't part of the lacrosse community, there is lacrosse-specific vocabulary that is clarified and defined below.

NCAA: National Collegiate Athletic Association. Institutions must be a sanctioned member of the NCAA in order to compete at the Division I, II, or III level. Each institution must abide by the rules and regulations for each division set by the NCAA.

Division I: The NCAA level in which athletes can be given scholarships based solely on their athletic ability to compete in athletics for an institution.

Division III: The NCAA level in which athletes cannot be given athletic scholarships by the institution they attend.

Depth Chart: The positional ranking set by the coaching staff of the participating team. These rankings can change daily, weekly, or yearly. The rankings are often based on performance, attitude, leadership, injuries, and/or behavior and can affect an athlete's playing time.

Repetitions at Practice: The amount of times an athlete gets to complete a lacrosse task, movement, or situation during the team's practices.

Individual Recognition: Recognition can come in different forms. There is formal recognition that comes from the institution, NCAA, or conference affiliations such as All Conference and All-American Awards, or informal recognition from the coaching staff after a practice or game.

Overall Preparation: The readiness of the student-athlete based on the physical and psychological repetitions he has performed. This is a broad variable because readiness for each position can be achieved in different ways with different skills.

Stick Work: This is the practice and mastery of using a lacrosse stick successfully and efficiently to complete lacrosse tasks on the field such as passing, catching, picking up the ball, or applying defensive pressure on opponents.

Playbook Mastery: The knowledge and understanding of all of the required plays, terminology, and movements the coaching staff assigns for each position that players should be able to recall on site.

Scouting Report: The weekly profile of the upcoming opponents, which can include but is not limited to their offensive and defensive tendencies both schematically and individually, their strengths and weaknesses, as well as any situational play-calling opponents use on the field.

A scouting report is prepared for each opponent and given to every member of the team in order to help him or her be prepared.

Upperclassmen: Student-Athletes in their Junior and Senior years of college at an NCAA institution. No data was collected from Post-Graduate players, despite being included in the questionnaire.

Positions: There are four positions in men's lacrosse: attack, midfield, defense, and goalie.

CHAPTER II

REVIEW OF THE LITERATURE

Throughout this literature review, the issue of confidence in athletes will be examined. The first section will describe the relationship between confidence and athletic performance. The second section will discuss the impact sports psychology classes have on athletes. The role of coach, including his or her psychological effect on an athlete's self-confidence, will also be discussed, as will other influences on athletes and ways for them to improve self-confidence. In the third section, measurement of self-confidence in athletes will be reviewed.

Confidence and Performance

Performance in the athletic arena does not always come down to which individual is the most physically fit or the strongest competitor. There are many additional factors that influence athletes during competition. One influence, which can provide an athlete with a mental edge, is confidence. A confident athlete enters the arena knowing his or her performance capacity and possibly even believing he or she is capable of performing at a level outside their ability. This belief helps an athlete stay poised and composed before and during competition. An athlete may face very challenging situations throughout competition, such as a scoring drought, penalties, injuries, or a close game that could lead to overtime.

Mellalieu, Neil, and Hanton (2006) studied self-confidence from the perspective of competitive anxiety in athletes. These researchers found that with elite athletes, self-confidence reduced worry symptoms, while at the same time maintaining a high level of intensity. Contrasting evidence was found in non-elite athletes, whose self-confidence was forecasted by the level of anxiety and intensity. The study looked at controlled anxiety as it relates to self-

confidence, and was administered using, “cognitive confidence management strategies,” (Hanton & Connaughton, 2002). The Sports Anxiety Scale (SAS), developed by Smith, Smoll, and Schutz in 1990, “was used to measure the intensity of the competitive trait anxiety components of worry and somatic anxiety”. The Mellalieu et al., (2006) study found that there was a direct correlation between elite athletes’ self-confidence and their worry intensity and direction.

Mack and Ragan (2008) explore and discuss the avenue of developing a mental toughness measurement test for athletes. The test they developed was called the Mental, Emotional, and Bodily Toughness Inventory. It was influenced by Sports Psychologist Jim Loehr, *Mental Toughness Training for Sports: Achieving Athletic Excellence* (1986). The researchers used a sample of 261 undergraduate students to complete their 45-item questionnaire. Mack and Ragan (2008) explain the meaning of mental toughness as an athlete’s “ability to cope with stress and anxiety associated with competitive situations (p.2).” Among the 261 undergraduates who were administered the test, just 29 percent were athletes (n=76). The information acquired from the study administered by Mack and Ragan, (2008) that was directed toward mental toughness did not directly study the relationship between mental toughness and athletic self-confidence.

Routhan and Ruhela (2014) found that chanting has a positive influence on an athlete’s competitive anxiety. This study was administered to 84 college students. Among this sample, 64, or 76 percent, completed chanting sessions prior to competition and it was concluded that, “...chanting significantly reduces the sports competitive anxiety and hence can be used as a therapeutic treatment to control [anxiety] (p.1).” Among the 20 students in Group C who did not perform the chanting session prior to competition, they had significantly higher sports anxiety than Group A or Group B.

There are many successful teams, such as the All Blacks rugby team from New Zealand that use chants to mentally prepare for competition. The New Zealand national rugby team performs the traditional Haka prior to the opening kick off of each game according to Sherer and Jackson (2013). It comes from an ancient tradition, and it is a dance and chant which originated as an offering to the gods. It is an intense performance, distinct to their culture, which helps the All Blacks stay focused, helping to diminish the build-up of anxiety prior to competition. The All Blacks have experienced great success, and have an understanding and appreciation for the role psychology plays in competition.

The influence of confidence in athletic performance is prevalent. There are different strategies for building competitive self-confidence. They all result in the improvement of athletic performance levels. These studies, along with Axtell's *The Making of a Scholarship-Athlete* (1991), show the significance of the different strategies, and importance of self-confidence during competition.

Sports Psychology

When considering the influence of confidence on an athlete's performance, the subject of sports psychology must be discussed. While the previously mentioned literature discusses the aspect of self-confidence, there is also the related topic of the use of sports psychology among athletes, coaches, and even parents in order to influence athletic performance. There are sports psychology classes in which athletes can enroll, in order to learn techniques to gain a mental edge over their opponents prior to and during competition. Coaches can also use sports psychology in many different ways to encourage, motivate, control, and influence their athletes as well.

Rees and Freeman (2007) focused their research on the effects of perceived and received support on self-confidence. Their study sampled 222 athletes of different abilities. These researchers discovered correlations between social support and self-confidence, as well as stress and self-confidence. The influence of the environment can determine both an athlete's performance and the mindset entering a performance a great deal. With proper advice and encouragement, an athlete's confidence can be elevated; although if outside stress is introduced to athletes before competition, they can lose confidence in themselves.

Clough (1988) reviewed the Seven Steps to Peak Performance by Suinn (1986) in the April-June, 1988 volume of *Applied Cognitive Psychology*, where he discusses the points which Suinn believes impact performance. Suinn's (1986) seven bullet points are: relaxation training, stress management, positive thought control, self-regulation, mental rehearsal, concentration, and energy control. In his review, Clough says, "Overall, I feel that this (Suinn's) book does not meet its stated aim of being relevant to both competitive and recreational athletes (p.170)." Nowhere do Clough (1988) or Suinn (1986) discuss the effect of athletic confidence.

Sports psychology classes are now offered on many campuses around the country in order to help athletes understand their own psyches, along with those of their competitors and coaches, in order to improve athletically. According to the field notes cited in December 2003's *The Physician and Sportsmedicine*, a sports psychology class can have a direct and immediate impact on these athletes. The article reviews a study, "Psychological Skills Boost Sports Performance." Based upon a sample of 168 athletes at a NCAA Division I college who were enrolled in a sports psychology class, the article noted that, "...college athletes perform better in their sports when they take a class to sharpen their mental skills (p.17)." The coaches of the athletes in this study reported that their athletes performed at a higher level in many aspects.

Curry and Maniar (2004) believed intervention strategies could influence an athlete's self-confidence in a university setting. Curry and Maniar (2004) explored their hypothesis in an attempt to explain the content and strategies of a sports psychology course offered at an NCAA Division I University. The class offered a broad spectrum of influences on athletic performance both on and off the field by studying sports confidence and self-esteem, along with many of the reoccurring themes aforementioned, in addition to performance targeting and arousal/affect control.

While an athlete can enroll in a course to learn new techniques to gain a mental boost on the competition and gain self-confidence, there is another major influence on an athlete, which can negate the affects of any class or athlete's efforts. This influence is the coaches' conscious or unconscious effort to build up or break down players mentally. There are courses available for coaches to learn techniques to raise confidence, attention levels, performance and other traits in their athletes. Howland's (2006) goal is to help coaches understand how their attitudes can be extremely influential to their athletes. Howland explores the strategies of relaxation, visualization, goal setting, positive self-talk, focusing, and re-focusing as coach-influenced psychological factors. Howland (2006) uses the research of other sports psychologists to support his claim that a coach's strategies and attitudes toward their players can motivate a player to reach unimaginable potential, or devastating lows, just as easily. The use of vocabulary, timing, and energy of a coach can determine a player or team's response in a positive or negative manner.

Various preparations can take place months and weeks, hours or minutes before competition. Mellalieu et al., (2006) focuses on using self-confidence to reduce competitive

anxiety. This strategy clearly addresses the belief that the increase of anxiety only hinders athletic performance.

It is apparent that many writers and researchers concentrate on different aspects of sports psychology. While this sport psychology section has been enlightening, the literature reviewed has failed to produce the best way to quantify and to build self-confidence in athletes.

Measurement

There have been many attempts to develop assessments which can measure intangible characteristics like mental toughness, determination, and trust, as well as tests that measure anxiety, self-confidence and other psychological aspects of athletics. These tests have been put to good use in order to find the right recipe for a successful, confident athlete. Tutko and Ogilvie (1969) designed the Athletic Motivation Inventory (AMI), to measure the attitudes of coaches and athletes over the age of 13. Having a sample of fewer than 500, the study used a test-retest period of nine weeks. John Shepard, reviewing the AMI in 2014, said, “The AMI addresses key attitudinal components necessary to develop and perform successfully as an athlete.” The AMI measures eleven key attitudinal components: drive, aggressiveness, determination, responsibility, leadership, self-confidence, emotional control, mental toughness, coachability, conscientiousness and trust, as well as three validity scales: accuracy, desirability, and completion rate.

Cox, Martens, and Russell (2003) studied the measurement of anxiety in athletes. Their test, using 167 secondary school athletes and 164 Division I post-secondary student-athletes produced a total sample of 331. Those sampled, both male and female, participated in several

different sports. They preferred the Revised CSAI-2 as a better measurement of competitive sports anxiety than the earlier CSAI-2 for research.

Neil et al., also conducted another separate study in 2006, which explored the use of self-confidence relative to athletic anxiety. The Neil et al., (2006) study used the original, un-revised Competitive State Anxiety Inventory-2. They explored the use of self-confidence strategies in athletes to produce or reduce anxiety in competition.

Mack and Ragan (2008) used a 45-item questionnaire to produce information on mental toughness primarily for the use in rehabilitation of athletes. They developed a new measurement known as the MeBTough, which stood for mental, emotional, and bodily toughness inventory, and used a sample of 261 undergraduate student-athletes to complete the study.

Rees and Freeman (2007) used a sample of 222 collegiate athletes with an average age of 19.8 years. They tested athletes two weeks prior to an important match and on the day of the competition using the CSAI-2 R in order to measure stress reduction and self-confidence improvement. They were able to establish that higher stress is associated with lower self-confidence.

Although these three measurement studies were illuminating, they did not provide specific insights into how best to measure and build self-confidence in athletes.

Summary

There are many different psychological aspects of athletics and coaching, but the one factor that can influence, or be influenced by all the rest, is self-confidence. At very least, athletes have been affected by the presence or lack of this trait since the beginning of organized athletics. Self-confidence is a difficult trait to measure and track regularly because every athlete

and coach is different, each using his or her own unique personality during competition. Yet nearly all the literature considers one common, prevailing trait and that is the importance of confidence in a successful athlete. It is, however, believed by many in the athletic community that there are certain ways to increase such traits in an athlete that can lead to greater success. A coach, parent, athlete, pre-game ritual, a sports psychology course, chant and more can influence self-confidence, which can affect other psychological aspects of competition such as stress, mental toughness, and, as stated above, competitive anxiety. It is widely held that the higher an athlete's self-confidence, the less competitive anxiety and stress he/she will feel. Unfortunately, all the literature reviewed focused on competitive anxiety rather than on the growth and development of self-confidence in collegiate athletes.

CHAPTER III

METHODS

Design

The study utilized the correlational methodology. A survey was designed to determine both demographic information as well as information specific to the problem statement. The objective of this study is to determine the relationships among a number of variables on athletic confidence in NCAA student-athletes, specifically Division I and III men's lacrosse players.

Participants

The researcher surveyed 61 participants from two NCAA men's lacrosse programs: The University of Richmond and Randolph-Macon College. Richmond represented Division I athletes while Randolph-Macon represented Division III. Both teams were comprised of male participants between the ages of 18-to-22 years. Each team had four positions represented from their rosters: attackmen, midfielders, defenders, and goalies.

Instruments

The questionnaire consisted of 33 questions; 26 of the 33 questions used a self-anchoring, 10-point scale to determine the athletes' self-defined levels of confidence for three distinct categories. The researcher used this quantitative method in order to determine which common influences, among athletes, have a relationship to the participants' confidence.

Procedure

All 61 participants took the survey with their respective teams. The University of Richmond team completed the 33-question survey following an afternoon practice on October

23, 2015 while the Randolph-Macon team completed the survey following a morning team workout on the same day (October 23, 2015). Each participant completed the survey in an untimed setting. The first four questions were used to categorize the participants by division, age, position, and whether or not they had siblings who currently play or have played an NCAA sport. The next three questions establish the participants' perceived levels of self confidence in three settings: athletics, academics, and social/personal. The final 26 questions used a 10-point scale to determine the level these elements of student-athletes' daily lives have an "influence" on their individual athletic confidence. The methodology created with the support of The Cromer Group of Washington, D.C. was derived from Cantril's self-anchoring striving scale (1965). The results of the survey has provided quantitative information about which factors are influential on both Division I and Division III male, lacrosse player's confidence.

CHAPTER IV

RESULTS

The purpose of this study is to examine the relationships among a series of variables that may play an important role in the development of confidence among collegiate athletes at the Division I and Division III levels.

To begin this study a three-part questionnaire was administered to the subjects. The first part determined the perceived levels of confidence among the 61 Division I and Division III men's collegiate, lacrosse athletes (whether it was High, Average, or Low) when it comes to their Academic performance, in Social/Personal settings, and in their Athletic performance.

The second part of the questionnaire tested 26 variables that might relate to the athletes' confidence in Academic Performance (Course Load, GPA/Academic Standing, Study Skills, and Time Management); Social/Personal Settings (Injury, Rest, Nutrition, Social Distractions, Family Support, Parental Involvement, Sense of Independence, and Substance Use and Abuse); and lastly in Athletics (Player-Coach Relations, Coaching Communications, Team Chemistry, Reps at Practice, Team Discipline, Competitiveness at Practice, Depth Chart Standing, Team Record, Individual Recognition, Overall Preparation, Physical Conditioning, Stick Work, Playbook Mastery, and Scouting Report Implementation).

All of these 26 variables were tested on a Cantril's Ladder Scale using a 10-point, self-anchoring test.

In addition, the Questionnaire administered to the 61 student athletes, included four demographic questions: 1) Are they enrolled in a Division I or Division III institution? 2) Are they a Freshman, Sophomore, Junior, Senior or Post Graduate? 3) In Lacrosse, do they generally

play Attack, Midfield, Defense, or Goalie? 4) Do they have siblings who currently or have played NCAA athletics?

After the questionnaire was administered and the results were entered and tabulated, a series of correlations were run to examine these relationships. The Spearman Correlation Coefficient was used for all analyses since it is robust for correlations between ordinal, interval and ratio data. The first set of relationships examined were those between social, academic, and athletic self-confidence. The issue was whether these were independent constructs or so highly related that running each correlation related to them would not be necessary. However, as shown in Table 1, they are independent and have no statistically significant relationship.

Table 1
Correlation Between Social, Academic, and Athletic Self-Confidence

			Academic Confidence	Social Confidence	Athletic Confidence
Spearman's rho	AcademicConfidence	Correlation Coefficient	1.000	.070	-.071
		Sig. (2-tailed)		.596	.585
		N	62	60	61
	SocialConfidence	Correlation Coefficient	.070	1.000	.126
		Sig. (2-tailed)	.596		.338
		N	60	60	60
	AthleticConfidence	Correlation Coefficient	-.071	.126	1.000
		Sig. (2-tailed)	.585	.338	
		N	61	60	61

This lack of relationship then meant that the other variables needed to be examined. The following tables indicate the variables studied.

In Table 2, the Spearman Correlation Coefficient Test indicates a correlation between injury and social confidence among the athletes surveyed.

Table 2
Correlation Between Injury and Academic, Social/Personal,
and Athletic Confidence

		Academic Confidence	Social Confidence	Athletic Confidence
Injury	Correlation Coefficient	.213	-.340**	-.178
	Sig. (2-tailed)	.099	.008	.170
	N	61	60	61

Given that the main objective of the study was to evaluate all the variables relative to athletic confidence, and given the 61 subjects studied are student-athletes, it was anticipated that Injury would have more of a relationship with Athletic Confidence than on Social/Personal or even Academic Confidence. However, as noted in Table 2, there is a negative correlation between Injury and Social Confidence: with an injury, an athlete’s social confidence decreases.

A ruptured Achilles, a damaged ACL, a broken wrist, a torn meniscus is not unheard of in lacrosse. Yet as noted in Table 2, the correlation between injury and social confidence is more significant than athletic confidence, underscoring the larger role athletics, itself, plays in the overall student’s perceived social status and identity on campus.

Again, using the Spearman Correlation Coefficient Test, it also revealed a statistically significant relationship between Family Support and Academic Confidence as noted in Table 3.

Table 3

Correlation Between Family Support and Academic,
Social/Personal and Athletic Confidence

		AcademicConfidence	SocialConfidence	AthleticConfidence
Family Support	Correlation Coefficient	.301*	-.164	-.218
	Sig. (2-tailed)	.018	.210	.091
	N	61	60	61

Though Injury and Family Support have significant correlative effects on Social/Personal and Academic Confidence respectively, among the 26 variables tested, as they relate to athletic confidence, none achieved the level of statistical significance to have a relationship with athletic self-confidence.

CHAPTER V

DISCUSSION

The hypothesis sought to discover which, among the 26 variables tested, had a relationship with the athletic confidence of male, collegiate, lacrosse players. Using the Spearman Correlation Coefficient, none of these 26 variables tested achieved the level of statistical significance on athletic self-confidence.

Implications of Results

The analyses did not yield statistically significant results pertaining to athletic confidence using the Spearman Correlation Coefficient. The data examined using the Spearman Correlation Coefficient did find two relationships within the 26 anticipated variables. The first was a negative correlation between Injury and Social Confidence. As injuries among male collegiate lacrosse players increased/occurred, social confidence decreased. The second correlation discovered that there was a positive correlation between Family Support and Academic Confidence. As family support increased, academic confidence grew as well.

Despite the lack of significance of these variables on athletic confidence, certain variables in some of the data examined in a tabular setting, appeared to influence the athletic confidence of male, collegiate, lacrosse players.

Theoretical Consequences

There were not any theoretical consequences discovered throughout this study.

Threats to the Validity

Using a research group of 61 participants out of a total of 84 team members provides a glance at how the majority of two teams perceive their confidence; however, there was a solid 73 percent participation rate. In addition, two teams are a small fraction of the number of NCAA lacrosse teams in the United States (over 250 teams). Another threat to validity is the time frame available for administering the questionnaire. Time constraints did not allow for giving additional options to the student-athletes who could not attend the only opportunities for completing the survey at each location.

Connections to Previous Studies/Literature

The previous studies did not aid understanding of the development and measurement of athletic confidence in male, collegiate, lacrosse players. Throughout the review of the literature, there weren't any studies discovered that considered the development, measurement, or implications of athletic self-confidence in collegiate athletes. Throughout the previously published literature, there was consistent information on competitive anxiety, stress related to athletics, arousal in athletes, as well as sports psychology, all of which are enlightening but do not provide useful data to aid in my research.

Implications for Future Research

The Survey of Athletes, which was designed to test the different variables that have a relationship with athletic confidence, opens the door for future studies that can increase validity by using a larger sample sizes and different groups of athletes. Future research can help determine new variables as well as a different design to help determine why the tested variables have a relationship to the athletic self-confidence of collegiate athletes. While the Survey of Athletes strictly examined male collegiate athletes, there could be an entirely different response or list of variables for female athletes as well as other sports, which would be extremely useful data for coaches all across the athletic field.

Conclusion

After a lengthy review of both data and literature, the attractiveness of discovering how to develop and measure athletic self-confidence is still very appealing. Despite the fact that under rigorous testing, the data collected did not find a statistical significant correlational relationships; nevertheless, certain variables anecdotally proved to be influential and will continue to influence the direction the researcher takes in coaching, recruiting, and management of Division III athletes. Stick Work, Overall Preparation, Physical Conditioning, Competitiveness at Practice, Time Management and the NCAA sibling connection all are quite beneficial to the arsenal of coaching strategies.

APPENDIX A

SURVEY OF ATHLETES INTERVIEWS CONDUCTED: OCTOBER 23, 2015

(n = 61)

1. First, please tell me if you are enrolled at a Division I or Division III institution? **(CIRCLE ONE)**

1. Division I 31 (51%)

2. Division III 30 (49%)

2. Academically, are you a...**(CIRCLE ONE)**

1. Freshman, 23 (38%)

2. Sophomore, 16 (26%)

3. Junior, 15 (25%)

4. Senior, or 7 (11%)

5. Post Graduate? 0

3. In Lacrosse, what position do you generally play? **(CIRCLE ONE)**

1. Attack 10 (16%)

2. Midfield 28 (46%)

3. Defense 20 (33%)

4. Goalie 3 (5%)

4. Do any of your siblings play or have played NCAA athletics, or not? **(CIRCLE ONE)**

1. Yes 22 (36%)

2. No 39 (64%)

5. When it comes to your **academics**, would you say your overall level of confidence in your academic performance is: High; Average; or Low? **(CIRCLE ONE)**

1. High 28 (46%)

2. Average 30 (49%)

3. Low 3 (5%)

D1 AVG: 1.68 D3 AVG: 1.5

6. How about in **social** settings, would you say that your confidence in social settings is: High; Average; or Low? **(CIRCLE ONE)**

1. High 37 (61%)

2. Average 24 (39%)

3. Low 0

D1 AVG: 1.26 D3 AVG: 1.53

7. And how about your **athletics**? Would you say that your confidence in your athletic performance is High; Average; or Low? **(CIRCLE ONE)**

1. High 38 (62%)

2. Average 21 (34%)

3. Low 2 (3%)

D1 AVG: 1.32 D3 AVG: 1.5

Now, let's look deeper into **athletic** elements that are thought to affect your athletic confidence. Using a 10-point scale where "1" is not influential at all to your personal athletic confidence, and "10" is extremely influential to your personal athletic confidence; please rate each of the following on this 1 to 10 scale.

	Not at all Influential to your confidence										Extremely Influential to your confidence
8. Player-Coach Relations	01	02	03	04	05	06	07	08	09	10	
OVERALL AVG: D1 AVG: 7.81 D3 AVG: 8.1											
9. Coaching Communication	01	02	03	04	05	06	07	08	09	10	
OVERALL AVG: D1 AVG: 7.58 D3 AVG: 7.9											
10. Team Chemistry	01	02	03	04	05	06	07	08	09	10	
OVERALL AVG: D1 AVG: 8.55 D3 AVG: 7.83											
11. Reps at Practice	01	02	03	04	05	06	07	08	09	10	
OVERALL AVG: D1 AVG: 8.29 D3 AVG: 8.23											
12. Team Discipline	01	02	03	04	05	06	07	08	09	10	
OVERALL AVG: D1 AVG: 8.19 D3 AVG: 7.47											
13. Competitiveness at Practice	01	02	03	04	05	06	07	08	09	10	
OVERALL AVG: D1 AVG: 8.45 D3 AVG: 8.5											
14. Depth Chart Standing	01	02	03	04	05	06	07	08	09	10	
OVERALL AVG: D1 AVG: 7.9 D3 AVG: 8.2											

15. Team Record	01	02	03	04	05	06	07	08	09	10
OVERALL AVG: D1 AVG: 7.1 D3 AVG: 6.87										
16. Individual Recognition	01	02	03	04	05	06	07	08	09	10
OVERALL AVG: D1 AVG: 6.58 D3 AVG: 7.3										

In this set, let's look deeper into **preparation** elements that are thought to affect your athletic confidence. Again, using a 10-point scale where "1" is not influential at all to your personal athletic confidence, and "10" is extremely influential to your personal athletic confidence; please rate each of the following.

	Not at all Influential to your confidence										Extremely Influential to your confidence
17. Overall Preparation	01	02	03	04	05	06	07	08	09	10	
OVERALL AVG: D1 AVG: 8.52 D3 AVG: 8.7											
18. Physical Conditioning	01	02	03	04	05	06	07	08	09	10	
OVERALL AVG: D1 AVG: 8.71 D3 AVG: 8.4											
19. Stick Work	01	02	03	04	05	06	07	08	09	10	
OVERALL AVG: D1 AVG: 8.74 D3 AVG: 8.93											
20. Playbook Mastery	01	02	03	04	05	06	07	08	09	10	
OVERALL AVG: D1 AVG: 7.71 D3 AVG: 8.27											
21. Scouting Report Implementation	01	02	03	04	05	06	07	08	09	10	
OVERALL AVG: D1 AVG: 7.71 D3 AVG: 7.40											

Next, let's look further into the **personal** elements that can affect your athletic confidence. Using the same 10-point scale where "1" is not influential at all to your personal athletic confidence, and "10" is extremely influential to your personal athletic confidence; please rate each of the following.

	Not at all Influential to your confidence										Extremely Influential to your confidence
22. Injury	01	02	03	04	05	06	07	08	09	10	
OVERALL AVG: D1 AVG: 7.71 D3 AVG: 6.8											
23. Rest	01	02	03	04	05	06	07	08	09	10	
OVERALL AVG: D1 AVG: 8.03 D3 AVG: 7.2											
24. Nutrition	01	02	03	04	05	06	07	08	09	10	
OVERALL AVG: D1 AVG: 8.06 D3 AVG: 7.17											
25. Social Distractions	01	02	03	04	05	06	07	08	09	10	
OVERALL AVG: D1 AVG: 6.16 D3 AVG: 6.07											
26. Family Support	01	02	03	04	05	06	07	08	09	10	
OVERALL AVG: D1 AVG: 7.74 D3 AVG: 7.63											
27. Parental Involvement	01	02	03	04	05	06	07	08	09	10	
OVERALL AVG: D1 AVG: 5.81 D3 AVG: 6.03											
28. Sense of Independence	01	02	03	04	05	06	07	08	09	10	
OVERALL AVG: D1 AVG: 6.84 D3 AVG: 7.23											
29. Substance Use & Abuse	01	02	03	04	05	06	07	08	09	10	
OVERALL AVG: D1 AVG: 4.61 D3 AVG: 4.53											

Lastly, let's look deeper into **academic** elements that can affect your athletic confidence. Again, using the same 10-point scale where "1" is not influential at all to your personal athletic confidence, and "10" is extremely influential to your personal athletic confidence; please rate each of the following.

	Not at all Influential to your confidence										Extremely Influential to your confidence
30. Course Load	01	02	03	04	05	06	07	08	09	10	
OVERALL AVG: D1 AVG: 7.45 D3 AVG: 7.3											
31. GPA/Academic Standing	01	02	03	04	05	06	07	08	09	10	
OVERALL AVG: D1 AVG: 7.26 D3 AVG: 7.3											
32. Study Skills	01	02	03	04	05	06	07	08	09	10	
OVERALL AVG: D1 AVG: 7.1 D3 AVG: 7.13											
33. Time Management	01	02	03	04	05	06	07	08	09	10	
OVERALL AVG: D1 AVG: 8.48 D3 AVG: 8.47											

THANK YOU FOR COMPLETEING THIS SURVEY!!

APPENDIX B

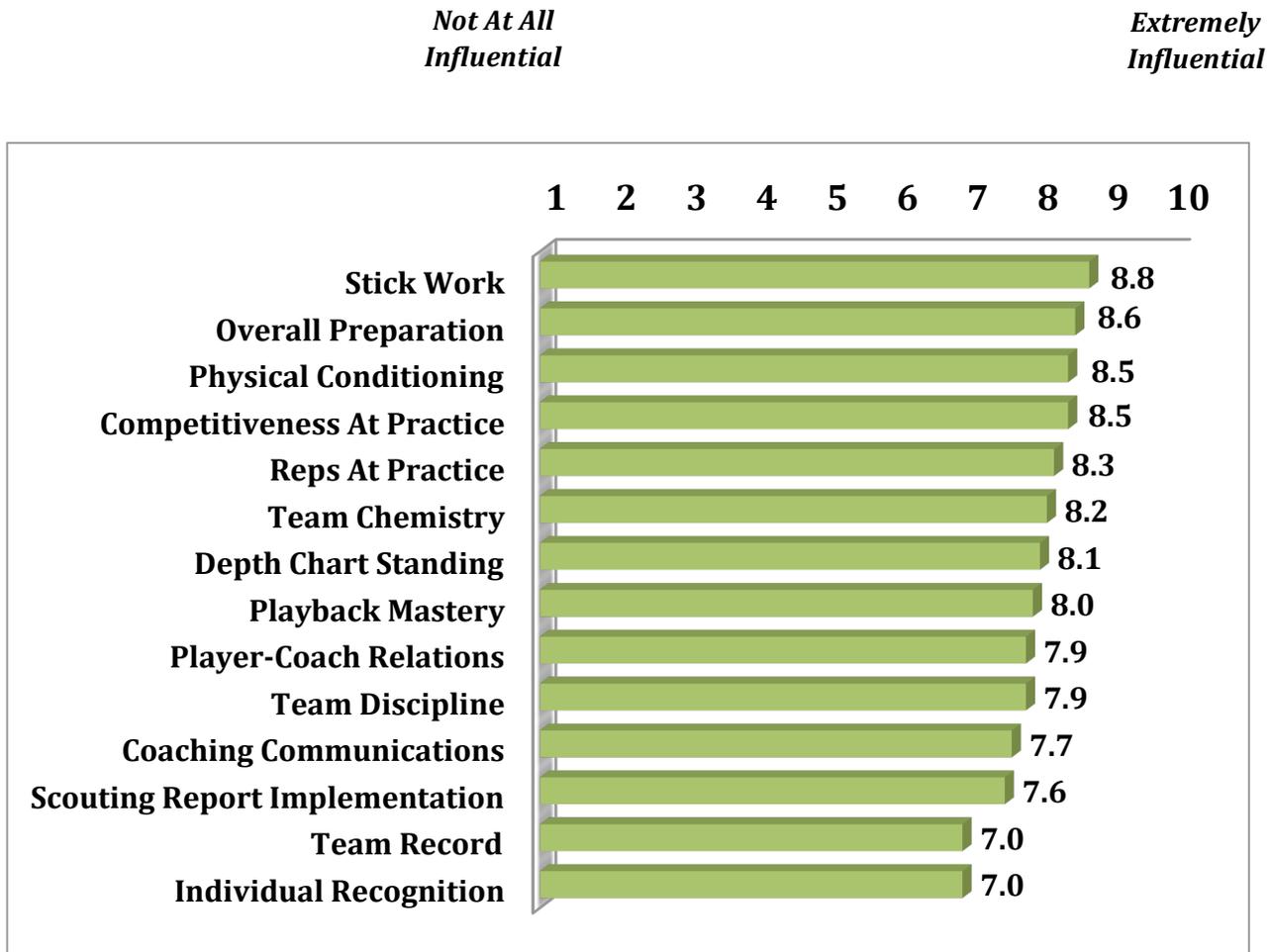
ADDITIONAL OBSERVATIONS

After analyzing the data through the multivariate tests for significance, we then looked at the 26 variables in a univariate, cross-tabular setting.

Table 4 ranks the 14 athletic variables tested on the 10-point, self-anchoring scale. The ranking is based upon the mean scores from all the 61 surveyed subjects for each variable. The higher the mean, the greater the influence the variable has on Athletic Confidence.

TABLE 4

**EFFECT OF TESTED ATHLETIC VARIABLES ON
ATHLETIC CONFIDENCE**



Stick Work, Overall Preparation, Physical Conditioning, and Competitiveness At Practice, scored the highest among the fourteen possible athletic influencing variables.

Freshmen scored Stick Work higher (9.0) than Sophomores (8.8), or Upper Class Men (8.6).

Stick Work also scored higher among Defensemen (9.3) than Goalies (8.1), or any other of the position players.

At 8.6, Overall Preparation came in second in the Athletic category.

Once again, the study revealed that Freshman value this (9.0) more than Upper Classman do, at an 8.3.

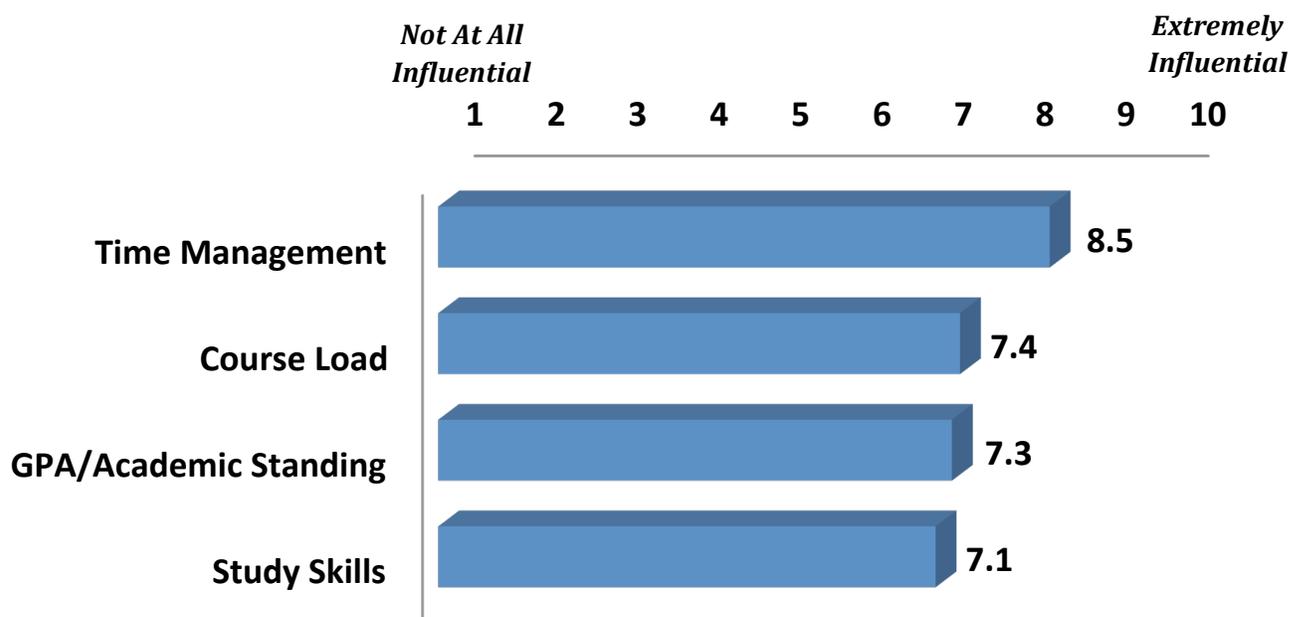
Goalies (8.4) and Defensemen (8.4) rated Overall Preparation much lower on the scale than offensive positional players: Attackmen (8.8) and MidFielders (8.7).

There were interesting differences revealed in the “Competitiveness At Practice,” test. Among those who feel their Athletic Confidence is high, the score they give to Competitiveness at Practice is 8.7, which is greater than the 8.2 given by students who say they have average or low athletic confidence. Sophomores scored “Competitiveness At Practice” higher, at 9.0, than Upper Class Men (8.3) or Freshmen (8.2). Likewise, Attackmen rank this variable at 8.8 while Defensemen give it an 8.2.

The next table, Table 5, ranks the influential effect the four academic variables have on the students’ athletic confidence.

TABLE 5

***EFFECT OF TESTED ACADEMIC VARIABLES ON
ATHLETIC CONFIDENCE***

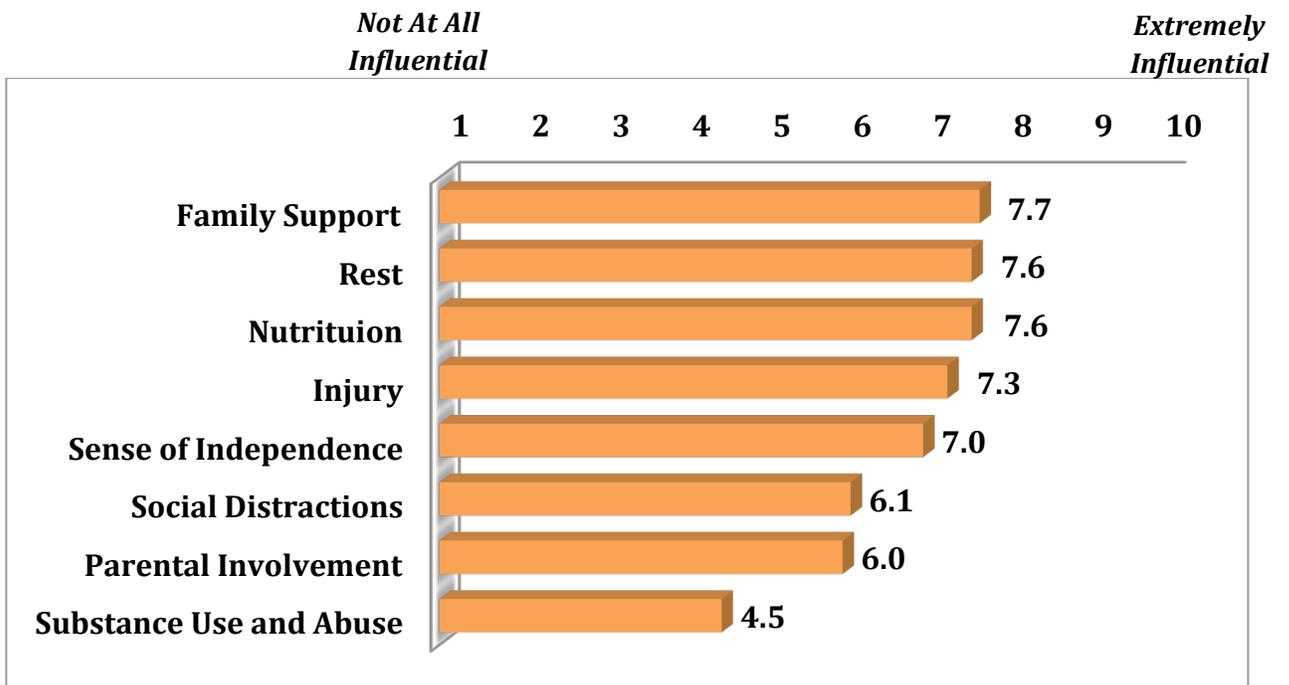


There is quite a noticeable distance between the top ranked Time Management at 8.5 and the second ranked students' Course Load – 7.4.

There is little difference between Division I and Division III in the score they gave to Time Management, 8.4 and 8.5 respectively. However, there is a noticeable difference between the athletes who live in an NCAA family (7.9) and those who don't (8.8). Sophomores score Time Management (8.9) higher than Freshmen (8.5) or Upper Classmen (8.1).

On Table 6 are the scores of the eight Social/Personal variables that may have an influential effect on Athletic Confidence.

TABLE 6
EFFECT OF TESTED SOCIAL/PERSONAL VARIABLES
ON ATHLETIC CONFIDENCE



Family Support, Rest, and Nutrition were the top three in this grouping. Even though Family Support in this group scores highest at 7.7, in absolute terms this 7.7 is considerably

lower than the athletic variable Stick Work is at 8.8, which was the highest score given among all 26 variables.

As one might expect, Family Support scored higher at 8.0 among Freshman than it did among Sophomores (7.8) or Upper Classmen at 7.3.

Additionally, the study revealed a considerable difference that Family Support appears to have based upon ones' level of athletic confidence. If the student says they have a high level of athletic confidence, they score Family Support at 8.1 as having an influence on their athletic confidence. Among those who scored their athletic confidence as average or low, the level they graded Family Support is 6.8 – well below the norm of 7.7.

Rest appears to be of greater importance to Athletic Confidence among Division I students (8.0) than among Division III students – 7.2.

Likewise, Nutrition was rated higher for influencing athletic confidence among Division I players at 8.0 than among Division III players – 7.2. And Lacrosse athletes who have NCAA siblings scored Nutrition higher at 8.3 than those who do not have NCAA siblings, who give Nutrition a below the norm score of 7.2.

There is one last feature from the survey findings that I have already employed in my recruiting of high school athletes for my men's college lacrosse team. It relates to the greater level of athletic confidence found among athletes who come from NCAA families.

TABLE 7

ATHLETIC CONFIDENCE LEVELS AMONG NCAA FAMILIES

	Have An NCAA Sibling %	Do Not Have An NCAA Sibling %
Athletic Confidence Is High	41	59
Athletic Confidence Is Average + Low	29	71

By a ratio of not quite 3:2, among families in which there are at least two students who have in the past or are currently playing in an NCAA sanctioned sport, the Athletic Confidence is more than likely to be higher than if there is no sibling having played NCAA athletics.

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