

Identifying Sources of Self Confidence in Collegiate Athletes and Factors that Affect it

A Synthesis Project

Presented to the

Department of Kinesiology, Sport Studies, and Physical Education

SUNY Brockport, State University of New York

In Partial Fulfillment

of the Requirements for the Degree

Master of Science in Education

(Athletic Administration)

by

Morgan Flamholtz

December 12, 2021

SUNY BROCKPORT
STATE UNIVERSITY OF NEW YORK
BROCKPORT, NEW YORK

Department of Kinesiology, Sport Studies, and Physical Education

Title of Synthesis Project:

Identifying Sources of Self Confidence in Collegiate Athletes and Factors That Affect it

Catly Houston-Wilson

12/16/21

Instructor Approval

Date

Accepted by the Department of Kinesiology, Sport Studies, and Physical Education, The College at Brockport, State University of New York, in partial fulfillment of the requirements for the degree Master of Science in Education (Physical Education).

Catly Houston-Wilson

12/17/21

Chairperson Approval

Date

Acknowledgements

Thank you to my family and friends for their endless support they have provided me the past six and a half years throughout my academic journey. Thank you to all of my professors and coaches for sharing their knowledge and insight over my time at SUNY Brockport. Thank you to all of the opportunities that the institution has allowed me to do to help me grow personally and professionally. I am enterally grateful for this ride and I would not change it for the world.

Table of Contents

Title Page.....1

Signature Page.....2

Acknowledgements.....3

Table of Contents.....4

Abstract.....5

Chapter One.....6

Chapter Two.....9

Chapter Three.....12

Chapter Four.....23

Reference Page.....30

Appendix A.....32

Abstract

The importance of self-confidence within collegiate level athletes has increased tremendously in recent years. Identifying the sources of self-confidence is the first step to understanding the roots of it within collegiate athletes. The next step is reviewing factors that influence it. These factors could include coaches, peers, or the climate the athlete competes in. Understanding how to positively or negatively affect self-confidence, could allow an athlete to compete to their highest potential. The purpose of this synthesis project is to review the literature on the sources of self-confidence in collegiate athletes.

Chapter One: Introduction

Confidence can be defined as an important mental skill for athletes by both coaches and athletes themselves (Machida et al., 2012). It is a key factor that allows athletes to excel in their career. Self-confidence gives athletes the internal belief that they can overcome setbacks and obstacles to achieve their personal goals. If an athlete has a negative perception of their own self-confidence, it could ruin their career. When an athlete exhibits positive self-confidence, they will be able to have success individually and help their team overall.

The source of self-confidence has been studied by multiple researchers within the sports community. Gillham and Gillham (2014) identified some sources of self-confidence as being either internal or external. Internal sources included uncertainty, investment, and letting others down. External sources included spectators, setting, and consequences. Sources of self-confidence have also been identified as controllable and uncontrollable occurrences (Machida et al., 2012). Controllable sources included mastery and preparation and uncontrollable included social support, vicarious experience, and coach's leadership. Rintaugu et al. (2018) also found similar sources of self-confidence among Kenyatta University athletes. Specific sources of self-confidence became apparent depending on the gender of the athletes. Vicarious experience was an important source for male athletes, while social support was important for female athletes (Rintaugu et al., 2018).

An athlete's self-confidence can be affected in a positive or negative way based by coaches' actions. Actions made by coaches can be viewed as verbal and non-verbal (van Kleef et al., 2019). These non-verbal actions include the emotional expressions of coaches. Research has shown that the emotional expressions of a coach can affect athlete's cognitive, affective, and behavior domains (van Kleef et al., 2019). Verbal actions included communication of coach

confirmation to the athletes. Positive lines of communication and confirmation from coaches can improve team cohesion and overall performance of athletes (Cranmer et al., 2020). Open, clear, and direct lines of coach-athlete communication can be an influencer of self-confidence and motivation in student athletes (Buning & Thompson, 2015).

Studies have looked at peer support in relation to self-confidence of athletes. High levels of peer support have helped lessen the performance related stress athletes experience in relation to self-confidence (Freeman & Rees, 2015). The overall environment that athlete competes in will affect their own self-confidence. When they perceive their motivational climate positively, their self-confidence is higher and in essence able to increase their chances of being successful in their sport (Ibrahim et al., 2016). This climate can be created by a coach depending on their actions. A positive environment created by a coach can help their team be successful and increase the self-confidence of athletes (Forlenza et al., 2018).

Statement of Problem

There are almost half a million student athletes across the three divisions in the NCAA (National Collegiate Athletic Association [NCAA], 2018). Collegiate coaches must ensure their athletes are performing optimally during competitions. Since athletes control the tempo and outcome of competitions, it is essential to know how their self-confidence is affected in a positive or negative way. In order for this to be achieved, coaches need to be aware of the sources of self-confidence and factors that influence it. A negative perception of self-confidence for an athlete can be detrimental for their career. Overall, having knowledge about self-confidence and the factors that affect it, will allow coaches to create a positive experience for their athletes.

Purpose of the study

The purpose of this synthesis project is to review the literature on the sources of self-confidence in collegiate athletes.

Operational Definitions

- 1) Confidence is “a well-known psychological quality that is relevant for performing at one’s best” (Forlenza et al., 2018).
- 2) Perceive is “to recognize, discern, envision, or understand” (Dictionary.com, n.d., pp. 1).

Research Questions

1. What are perceived sources of self-confidence within collegiate athletes?
2. How are collegiate athletes’ perceived self-confidence influenced by coaches?
3. What strategies can be used to create a positive climate that collegiate athletes can be successful in?

Delimitations

- 1) The articles used in the literature review of the synthesis were peer reviewed and full text.
- 2) The articles used in the literature review of the synthesis were published between 2010 and 2021.
- 3) Peer reviewed scholarly articles focused on sources of self-confidence in student athletes, ways coaches can influence self-confidence, and determinates that influence the climate of student athletes as it relates to self-confidence.

Chapter Two: Methods

The purpose of this synthesis project is to review the literature on the factors that affect collegiate athletes' self-confidence. A thorough search of literature was completed to identify the information necessary to complete the synthesis. This chapter features the methods used to attain the information needed for the synthesis.

A search was conducted using various databases to identify articles that fit the scope of the synthesis. SUNY Brockport's Drake Library identified research guides by subject of study. Underneath the title Kinesiology, Sport Studies, Physical Education, and Exercise Science, relevant databases were identified. The database used to search for articles was the EBSCO. Within that database searches were completed under the SPORTDiscus with Full Text and Academic Search Complete. The Sports Medicine and Education Index database was also used to identify articles. A combined search of the databases resulted in thousands of articles.

Keywords were used in the search in order to narrow down the number of articles. These keywords included self-confidence, college athletes, factors that affect, coaches, peers, sport confidence, and sources of confidence. The keywords were identified based on their connection to the purpose statement of the synthesis. Keywords that were used as the base of the searches were self-confidence and college athletes. From there, more keywords were added to narrow down the articles found.

The first search conducted within the SPORTDiscus and Academic Search Complete database used the keywords *self-confidence* and *college athletes*. The search resulted in 359 articles. The search was then limited to show results that were full text and scholarly (peer reviewed) journals. The publication dates were then used to narrow the search and went from 2010 to 2021. These adjustments to the search reduced the results to 55 articles.

A second search conducted in the SPORTDiscus and Academic Search Complete database utilized the same limiters of scholarly (peer reviewed) journals, full text and a publication date of 2011 to 2021. The keywords used for this search were *confidence*, *college athletes*, and *coaching*. The search resulted in 21 articles.

The third search was completed within the Sports Medicine and Education Index database. The keywords for this search *self-confidence of athletes*. The search yielded 1,287 results. The limiters of scholarly (peer reviewed) journals, full text and a publication date of 2011-2021. The search resulted in 650 results. More keywords were added to the search within the Sports Medicine and Education Index. These included *factors that affect sport confidence*. The search resulted in 496 results. An additional keyword of *effects of coaching* was added and the search resulted in 170 results. The final delimiter was added that the articles were written in English. The search resulted in 92 results.

Ten total articles were selected through the search process. In order for the article to be included in the synthesis, it need to meet certain criteria. The articles had to relate to self-confidence in college athletes, factors that affect them, coaching, peers, and sources of confidence.

Articles were part of journals that included: *International Review of Sport and Exercise Psychology*, *Sport Science Review*, *Communication Quarterly*, *European Journal of Sports Sciences*, *Anxiety, Stress, & Coping*, *Journal of Sport Behavior*, *Procedia Economics and Finance*, *Journal of Physical Education and Sport*, *Psychology of Sport and Exercise*, and *International Sport Coaching Journal*.

The critical mass for this synthesis included 2,051 individuals. These individuals were student athletes who competed across the range of Division I, II, III, NAIA, NJCAA, club level, and foreign institutions. These athletes were both men and women that competed in a range of sports. Data were collected within the United States as well as the Netherlands, Kenya, and the United Kingdom. The articles were a mix of qualitative, quantitative, and mixed method approached. The studies collected data using interviews, questionnaires, surveys, instruments, winning percentage, and focus groups. These data collection methods were then analyzed using coding process, statistical analysis, hierarchical regression analyses, PLS-SEM analysis, multiple regressions, descriptive statistics, intervals and correlations.

Chapter Three: Review of Literature

The purpose of this chapter is to present a review of literature on the factors that influence self-confidence within collegiate athletes. In particular, the following topics will be reviewed: sources of self-confidence in collegiate athletes, how coaches' impact self-confidence, and how the climate athletes compete in impacts self-confidence. An analysis of the literature found that these three themes became apparent when looking at factors that influence self-confidence in collegiate athletes.

Successful college athletes are able to perform on the field physically and mentally. Without established self-confidence, an athlete would not be able to transition that talent into their area of competition. The first component of understanding the why and how self-confidence is influenced in collegiate level athletes, is identifying the sources of that self-confidence.

Sources of Self-Confidence in College Athletes

Machida et al. (2012) completed a quantitative study to look at the relationships among professional and social factors, and sources of confidence in collegiate athletes. The researchers utilized the Sport-Confidence Model as a framework for their study. Participants included a total of 206 athletes with ages ranging from 18 to 23 years old. Majority of the participants competed at a NCAA Division I institution, with three competing at a NCAA Division III institution. The participants competed in one of the following sports: basketball, diving, field hockey, football, gold, ice hockey, ice skating, soccer, softball, swimming, tennis, volleyball, or track & field. The athletes were recruited for the study from various institutions around the United States through contact with their coaches. Out of the 206 participants, 84 completed their survey via a paper format and 122 completed their survey through an online version. The surveys were completed at different times throughout their perspective athletic season. There were 103 completed during

the preseason, 49 during the first half of the season, 17 during the second half of the season, ten when the season ended, and 27 during the off season.

The data collection methods during the surveys included multiple different questionnaires. The first was used to assess the demographics of the participants. This included their sex, age, year in school, race, years of experience in their sport, and amount of playing time they have experienced. The Source of Sport-Confidence Questionnaire (SSCQ) measured the nine sources of confidence found in sport. This included mastery, demonstration of ability, mental and physical preparation, physical self-presentation, social support, coach's leadership, experience, environmental comfort, and situational favorableness. The Task and Ego Orientation in Sport Questionnaire (TEQSQ) measured the participants achievements of their goal orientation. The Sport-Multidimensional Perfectionism Scale-2 (Sport-MPS-2) measured personal standards, concerns over mistakes, perceived parental pressure, perceived coach pressures, doubt about actions, and organization. The Perceived Motivational Climate in Sport Questionnaire-2 (PMCSQ-2) measured the participant's perceived motivation climate on their team (Machida et al., 2012).

The researchers initially compared the demographics of the athlete to look at the possible similarities and differences in the variables. They went on to utilize a path analysis to compare the questionnaires to their research questions. The research questions were: Does the personal factors of achievement goal orientations (i.e. task- and ego-goal) and perfectionistic characteristics (i.e. adaptive and maladaptive) predict the athletes' controllable and uncontrollable sources of sport-confidence; and Does the social factors of motivational climate (i.e. task- and ego-involving) predict the athletes' controllable and uncontrollable sources of sport-confidence (Machida et al., 2012). There were no significant differences in the initial

analysis of the demographic variables. The path analysis showed that task-goal orientation positively predicted athletes' selection of controllable and uncontrollable sources of sport-confidence. Ego-goal orientation was found as not a predictor of controllable or uncontrollable sources of sport-confidence. The study also found that perfectionism characteristics positively predicted an athletes' perceived importance to sources of sport-confidence. Overall, the highest rated sources of sport-confidence for the athletes were social support, mastery, physical/mental preparation, coaches' leadership, and demonstration of ability.

Coincidentally, researchers have used the Source of Sport-Confidence Questionnaire (SSCQ) as their sole method of data collection. Rintaugu et al. (2018) used it during their cross-sectional research design to reveal the sources of sport confidence among Kenyan University athletes. Participants in the study included a total of 183 athletes with ages ranging from 19 to 25 years old. The participants were competing at an interuniversity sports championship held at Kenyatta University located in Nairobi, Kenya. The participants competed in one of the following sports: handball, volleyball, soccer, netball, or hockey. Unlike Machida et al. (2012), Rintaugu et al. (2018) only used the SSCQ as their method of data collection. The SSCQ was administered in person at the conclusion of the athletes' league matches.

Rintaugu et al. (2018) utilized the Statistical Package for Social Sciences (SPSS) Version 20 to code and analyze the data. The program broke down the SSCQ into frequencies, means, and percentages. The scores showed that the athletes identified coaches' leadership, vicarious experience, and mastery in their sports as the most important sources of confidence. The results showed that situational favorableness and social support were identified as the least important source of sport-confidence. When looking at the results based on gender the important sources of sport-confidence were different than the results all together. When looking at the female athlete

scores, social support was identified as a meaningful source of their confidence. On the other hand, male athletes identified their vicarious experience as an important source of their sport confidence

Alternatively, Gillham and Gillham (2014) completed a qualitative study through the constructivist paradigm. The researchers strived to identify the common sources of competitive sport anxiety through the perspective of the students. The participants of the study included thirteen college students that were enrolled in an institution's health, physical education, recreation, and dance department. The ages of the participants ranged from 20 to 26 years old. Sports that participants competed in included basketball, volleyball, swimming, football, baseball, golf, tennis, soccer, ski racing, cheerleading, gymnastics, wrestling, and track and field.

Each focus group was videotaped to ensure that data were accurately collected. After the focus groups were completed, the researchers transcribed them verbatim. To help maintain the participants confidentially, they were provided pseudonyms. The data was then analyzed using a primarily inductive process. The researchers read through the transcripts to gain an understanding of the data. Gillham and Gillham then read through the data again and open coded them separately from each other to identify meaningful units. Then the open codes from each researcher were compared to create categories. The final step was selective coding to identify themes that came from the categories.

The data identified two main themes: internal and external sources of competitive state anxiety. There were eleven categories that were underneath the themes. These included: spectators, time, competitive level, setting, consequences, investment, uncertainty, self-confidence, letting self or others down, self vs. others and expectations.

Coaches' Impact Self-Confidence

There is a variety of ways that coaches' can impact the self-confidence of their athletes. Bunning and Thompson (2015) completed a qualitative study to explore female softball athletes' perceptions on how their motivation to play is influenced by coaching behavior. Participants included 41 softball players who competed at the NCAA Division I level who were both starters and non-starters for their programs. An important factor the researchers noted was that 58.5% of athletes played for their head coach for less than a year (Bunning and Thompson, 2015).

Data collection methods included audio-recorded interviews with the athletes that were then transcribed verbatim. The interviews were conducted via phone call during the fall season or via email. The researchers also kept a journal of field notes to record personal thoughts and occurrences that arose during the interviews or research process. To maintain trustworthiness, the researchers emailed athletes a summary of the interviews to ensure it was accurate. They also met with an external professional with athletic expertise to help eliminate author bias. The transcribed interviews were coded to and then grouped into themes and sub-themes.

The findings revealed that athletes' motivation comes from value placed on relationships with teammates, excitement or enjoyment of the sport, and success within the sport. The three themes that formed included perceived competence or confidence, coach-related factors, and perceived coach-athlete communication. Overall, female softball athletes identified specific behaviors and feedback methods that they believed positively or negatively affected their motivation to play.

Similarly, researchers have completed studies to look at how a coaches' emotions affect their athletes. Van Kleef et al. (2019) completed a cross sectional design study to show the effects of coaches' emotional expression (happiness and anger) on players' affective, cognitive, and

behavior domains. They did this by conducting two studies to show the impact that these emotional expressions have on an athletes' sport performance. The first study included 268 Dutch baseball and softball athletes and 29 coaches within the sports. The coaches were rewarded lottery tickets if they chose to participate. The second study included 376 Dutch soccer athletes and 30 coaches. The data was collected using questionnaires that contained a 7-point Likert scale. The questionnaires asked athletes questions about emotions the coach expressed during the competition and how they felt the coach would respond to the outcome of the competition. The baseball and softball athletes completed the questionnaire after the competition was completed. The soccer athletes filled them out before the game, during halftime, and at the end of the game. The researchers also noted the outcome of the competitions.

Data were analyzed during the first study by looking at the outcome variables of the players levels using multi-level modeling, specifying the coaches' emotional expressions as the fixed predictors at level 2 and players individual response as outcomes at level 1. During the second study, researchers looked at the associations between coaches' emotional expressions and team performance. The results of the first study provided initial evidence that the emotional expressions of coaches were tied with the players' affective, cognitive, and behavior outcomes. The results of the second study provided more evidence that there is a relationship between coaches' emotional expressions and player' affective, cognitive, and behavior outcomes. Overall, the findings from the study shows there is a connection between coaches' emotional expressions and functioning of their teams.

In addition, researchers completed research to look at the action's coaches can do to help increase their athletes' confidence. Forlenza et al. (2018) conducted a pragmatic qualitative study to identify specific actions coaches can do to build confidence in their athletes and teams from

the perspective of the athletes themselves. The study included 264 student athletes who competed at a NCAA Division I, II, III institution, NAIA institution, or on club teams. The athletes competed in a variety of sports, but the most common were cross-country, volleyball, soccer, track and field, and swimming. To gain the perspectives of the student athletes, a questionnaire was used to ask two main questions. Participants also completed an additional questionnaire to provide information about their sport, gender, age, year in school, and competitive level. To ensure that the athletes did not feel pressure from coaches, a third party proctored the questionnaires and then sealed them in an envelope after completion.

The questionnaires were analyzed using a hierarchical content analysis. The first step was to identify two lists of interpretable meanings. These included building confidence for athletes and building confidence in teams. The second step included the four researchers going through the two lists and identifying common themes or patterns in the data. The third step was to group those themes or patterns into overall categories that was obtained from the data. These categories included: nurturing positive environment, responding to athletes, developing effective practices, interpersonal skill and relationships, and interpersonal qualities of coach. Overall, the findings supported that coaches are sources of confidence for teams and athletes. There are also specific behaviors coaches can do to make their athletes and teams feel more or less confident.

Alternatively, Cranmer et al. (2020) conducted a quantitative study to investigate how sport communication research contributes to the objectives of elite levels of athletics focusing on communication and social relationships as potential mechanisms of team performance. Participants included 117 athletes from five NCAA Division I universities. They were members of baseball, men's and women's basketball, women's crew, football, softball, men's and women's soccer, and women's volleyball.

Data were collected using the following measurement tools: Cranmer et al.'s Coach Confirmation Instrument, Vealey's State Sport-Confidence Inventory, Eys, Loughhead, Bray, and Carron task cohesion subscale, and winning percentage. Cranmer et al.'s Coach Confirmation Instrument measured coaches' use of confirmation to their athletes using a 15-item measurement tool. Vealey's State Sport-Confidence Inventory measured an athlete's self-confidence using a 13-item measurement tool. Eys, Loughhead, Bray, and Carron task cohesion subscale measured the participants perception of team unity using an 8- item subscale measurement.

Data were analyzed differently depending on the hypothesis. The first two hypothesis were analyzed using a hierarchal regression. The measurements were separated into different blocks. Block one was athlete-related variables, block two was dimensions of confirmation, and block three was the interactions between the two. The third hypothesis was tested using two simple mediation models in PROCESS. Overall, the study showed that the use of coach confirmation would positively predict student-athlete self-confidence in their sport related ability. The research also showed that an athlete's starting position played a part in their self-confidence. The findings showed when a challenge was presented to athletes, there was team cohesion apparent.

Climate Athletes Compete In

The overall climate that athletes compete in can affect their self-confidence. Ibrahim et al. (2015) conducted a study to determine the mediating effect of self-confidence on the relationship between perceived motivational climate and goal orientation (perceived success) of student athletes. The study included 80 student athletes from the Universiti Sains Malaysia. They were members of the soccer, hockey, netball, badminton, swimming, basketball, track and field,

and volleyball teams. Data were collected using a 5-point Likert scale questionnaire that focused on three main constructs: perceived motivational climate, self-confidence, and perceived success.

The questionnaires were distributed to team leaders and then self-administered among teams. PLS-SEM analysis brought three reflective constraints to light from the data: perceived motivational climate, self-confidence, and perceived success. Overall, the data showed that how student athletes perceive their motivational climate will affect their self-confidence and ultimately change their perception of success in their sporting event.

Alternatively, Freeman and Rees (2010) looked at how peers can affect an athlete's self-confidence. They conducted a study to examine the levels of perceived support available from teammates and whether this support predicted self-confidence. The participants included 152 student athletes who were competing in the knockout stages of the British Universities Sports Association competition. The participants genders were almost equal with 74 females and 78 males. The student athletes competed in football, hockey, netball, or rugby.

The data collection methods included questionnaires to measure perceived support, stressors, and self-confidence. After hierarchical regression analyses was conducted, the means and standard deviations of the variables were found. The findings concluded that high levels of emotional, esteem, and informational support from teammates may have influenced the effect of performance-related stressors on self-confidence.

In addition, Garinger et al. (2018) focused on the environment that athletes are put in and how it affects their performance and stress levels. They completed a cross-sectional design to look at the relationship among perfectionism, stress, and burnout in specialized and multiple sport college athletes. The participants included 351 total student athletes from NCAA Division II and III institutions. Out of the participants, 159 specialized in a specific event in track and

field and 192 participated in an additional sport outside of track and field. Other sports the participants competed in included football, basketball, softball, soccer, lacrosse, field hockey, wrestling, volleyball, and cross country.

The researchers used multiple methods of data collection throughout the study. They included the sport-multidimensional perfectionism scale-2, the perceived stress scale, and the athlete burnout questionnaire. The sport-multidimensional perfectionism scale-2 was a 42-item questionnaire that looked at perceived coach pressure, perceived parental pressure, concern over mistakes, personal standards, organization, and doubts about actions. The perceived stress scale was a 10-item questionnaire that measured the stress appraisal assessing control, overload, and thoughts and feeling of stressful events. The athlete burnout questionnaire was a 15-item measure that assessed an athlete's experience of burnout (Garinger et al., 2018). The data concluded that there is a positive path from perfectionistic concerns to burnout, making the mediation of stress only a partial factor.

Summary

Research has shown that there are different variables that can affect a collegiate athletes' self-confidence overall. These included the sources of self-confidence in collegiate athletes, how coaches' impact their self-confidence, and how the climate athletes compete in impacts their self-confidence. There was not one overall source of self-confidence or factor that affected it, but there were similarities across the studies. It is important for coaches to be aware of the main sources and factors to ensure that they are positively affecting their athletes throughout their career.

Identifying the sources of self-confidence within collegiate athletes, will help them reach their highest potential in their sport. These sources included social support, mastery of skill,

physical and mental preparation, vicarious experience, coach leadership, and vicarious experience. Social support was identified across multiple studies as being a source of self-confidence, especially in female athletes. For male athletes, a vicarious experience was an important predictor of their self-confidence. There is not one source that will predict self-confidence in all athletes, but there are common ones that were identified. Successful coaches will acknowledge these sources and then positively influence their athletes.

Coaches themselves can influence the self-confidence in their athletes in a tremendous way. They need to be aware what they, do, or say and how that will affect the athletes around them. The research identified that the behavior, emotional expressions, and feedback that coaches give or portray with affect the self-confidence of the athletes. Behaviors that were identified included body language and lines of communication between the coach and athletes. Emotional expressions that include happiness or anger will affect the self-confidence in an athlete during a competition. The amount of feedback and confirmation that a coach gives to their athletes will influence the levels of self-confidence in an athlete as well.

The overall climate that an athlete competes in can also affect the amount of self-confidence an athlete has. Athletes need to be in an environment where they feel motivated and supported to ensure their self-confidence is positive. They also need to feel that they can make mistakes and not let the stress of being successful take over their career. These climates are influenced by the coaches and peers that are involved within it.

Regardless of the source of self-confidence or the factor that influences it, coaches need to be aware of them. A student-athlete can have all the physical talent in the world, but poor self-confidence and not be able to compete effectively. This will allow their athletes to reach their fullest potential and be successful throughout their career.

Chapter Four

Results, Discussion and Recommendations for Future Research

The purpose of this chapter is to present the results of the review of literature on the sources of self-confidence in collegiate athletes and factors that affect it and how these results align with the purposed research questions which guided this synthesis project. In addition, recommendations for future research as it relates to sources of self-confidence in collegiate athletes and factors that affects it are presented.

The results of this review of literature revealed many sources of self-confidence in student athletes. These sources stemmed from a range of studies completed of various types of student athletes at different levels of competition. Similar sources of self-confidence came to light despite the differences of the student athletes. These sources included social support, mastery of skill, physical and mental preparation, coach leadership, and vicarious experience. The literature review has also displayed how a coach can affect self-confidence within student athletes. These ways included behavior, emotional expressions, and feedback that coaches give or portray will affect the self-confidence of the athletes. The way a coach communicates with their athletes was also found to affect their self-confidence. Lastly, the review of literature identified how the climate an athlete competes in can affect their self-confidence. This climate would include how motivated athletes are, how much support they receive from their peers, and the stress of being able to compete successfully.

Discussion

Interpretations

As part of the literature review, several research questions were posed. The first research question synthesized was: what are perceived sources of self-confidence within collegiate

athletes? There are many sources of self-confidence within student athletes that were identified from the research. The results of the literature showed that an athlete's level of mastery, physical and mental preparation, and demonstration of ability were the most supported sources of confidence in athletes (Machida et al., 2012). Similarly, the research of Rintaugu et al. (2018) also displayed the same sources were identified to be vital sources of confidence within athletes with the addition of coaches' leadership. Their findings also identified different highly rated sources based on the gender of the athlete. Vicarious experience was a highly rated source of confidence within male athletes and social support was a highly rated source of confidence within female athletes (Rintaugu et al., 2018). Machida et al. (2012) also found that social support was a highly popular source of sport confidence. A notable mention was that two thirds of their participants were female athletes. Gillham and Gillham (2014) identified internal and external sources of sport related anxiety. The findings related similarly to past research, but identified time as an explicated external source. Time was in relation to prior to, during, and at the completion of related competition.

The second research question that was examined was: how are collegiate athletes' perceived self-confidence influenced by coaches? The results shown through the studies displayed a variety of ways coaches can affect a student athlete by their communication methods. Buning and Thompson (2015) found an importance of the perception of coach communication was a prominent influence on student athlete motivation. Athletes also were found to prefer the type of feedback they received in a positive and corrective manner. Similarly, Cranmer et al. (2020) found that the use of coach confirmation would positively predict a student athletes' self-confidence in their sport related ability. Within a team setting, when large amounts of coach confirmation was apparent, the whole team was found to experience success and team cohesion.

Identifying specific behaviors coaches can exhibit can help lead to an increase of confidence of both individual athletes and team (Forlenza et al., 2018). These specific behaviors can be seen as direct or indirect. Van Kleef et al. (2019) revealed direct behaviors when expressing their emotions. When a coach shows expressions of happiness, it is more conducive to athletes than expressions of anger. Positive expressions such as happiness, will allow for athletes to experience positive emotions and increased levels of self-confidence. Forlenza et al. (2018) identified indirect behaviors such as demonstrating confidence. A coach can allow their athletes to know that they are confident with themselves and skills that they bring to the team. Athletes will then be able to recognize this and allow to exhibit their own self-confidence.

The final research question that was examined was: what strategies can be used to create a positive climate that collegiate athletes can be successful in? The results of the literature review showed a variety of strategies to help create a positive climate for athletes to succeed in. Ibrahim et al. (2015) identified that how student athletes perceive their motivational climate, will affect their own self-confidence. Creating a positive environment for athletes to succeed in will allow them to also gain self-confidence. Garinger et al. (2018) found a direct connection between athletes striving for perfectionism and burnout in their sport. Striving for perfectionism could be created by the environment that the athletes compete in. A key factor into creating a nurturing environment is to use a positive approach and allow for confidence to be gained instead of deteriorated (Forlenza et al., 2018). Creating this space to allow for successful experiences will let student athletes feel confidence and be able to see success in their career. Freeman and Rees (2015) found that the social support from teammates athletes experience can affect their self-confidence. Creating a supportive environment within teams can allow help develop perceived social support and increase the self-confidence of the athletes.

Implications

Previous research on the sources of self-confidence in student athletes and factors that influence them have been identified as an important topic in the athletic community. Based on the results of the literature review, there are a variety of implications that can be used to help maintain the self-confidence of student athletes when they are competing in their perspective sport.

For example, coaches who can identify sources of self-confidence within their athletes and help create a positive experience, will allow the athletes to compete to their elite level. Experienced coaches would benefit by recognizing the controllable and uncontrollable sources of self-confidence within athletes. They would be able to put athletes in positions to create positive experiences with the controllable sources. Ideally, this would allow for uncontrollable sources to be supported because of the environment set by the coach.

Coaches need to also be aware of how they affect their athlete's self-confidence. These could be intentional actions that they do or how they respond to situations. Coaches need to be able to create a balance of support and demanding environment for their athletes. They can do this by creating open lines of communication and building relationships with their athletes. When coaches communicate with their athletes, it should be framed in a positive and corrective manner. Studies have shown that athletes respond positively when feedback is specific and corrective to their actions. This will help lead to individual and team conduciveness more rather than actions of anger and frustration would.

Overall, the environment that a coach creates for their athletes will help foster positive experiences and cohesion. This will then allow for athletes' self-confidence to be affected in an positive way. An important key to the environment is making it motivating and supportive for

athletes. This means athletes feel support from their coaches and peers. This will help increase their overall self-confidence and make sure they can perform to a high level. Understanding the sources of self-confidence and how it is affected is crucial for coaches to ensure their athletes will perform to the best of their ability.

Limitations & Recommendations for Future Research

In reviewing the database on sources of self-confidence and factors that affect it, the following limitations were noted regarding the studies under review. The studies were restricted to information that was collected within each institution throughout their season or event. Another limitation was the type of institution the athletes competed at. They were NCAA, NAIA, club, or international institutions and competitions. The use of surveys in multiple studies was limited to a certain number due to the response rates of participants. Some studies used surveys that needed to be completed over the course of a season and participants would drop off throughout the season. Another limitation within this study was that the results were based directly off of the athlete responses. This is apparent in studies looking at coaching behaviors specifically. Some athletes would be reporting their answers off of their specific coaches, while others would be responding about others. A final limitation is that the studies include college aged participants from eighteen to twenty-five. Results may have varied if athletes were at the professional level or youth aged.

Based on these limitations and other insights related to the literature the following recommendations for future research should be considered:

1. Future research should collect data from a certain level of institution, such as NCAA Division I, II, or III to see if their sources of self-confidence changes depending on the level of competitions.

2. Future research should include more mixed methods and include the outcomes of competitions. This would allow researchers to make direct correlation between the self-confidence of athletes and outcomes.
3. Future research should look at specific coaches to allow athletes to include responses on the same person.

Summary

The purpose of this synthesis was to review the literature to identify the sources of self-confidence in collegiate athletes. An exhaustive search of online databases using specific delimiting techniques and keywords revealed 10 articles that were selected for this synthesis. These articles were then systematically used to identify sources of self-confidence and factors that affect it within collegiate athletes.

Research revealed that self-confidence is created based on a variety of sources depending on the athlete. These sources would include level of mastery, physical and mental preparation, demonstration of ability, vicarious experience, coaches' leadership, and social support. The research also identified how a coach can specifically affect an athlete's self-confidence. These ways would highlight how a coach communicates with athletes and how their reactions to situation affects the athletes. The research would also identify how to create a positive climate to allow athletes to be successful in. This positive climate could be created by understanding the sources of self-confidence that the athletes experience, paired with open lines of communication with coaches.

In order to fully understand self-confidence within collegiate athletes, it has to be important for the coaches. Coaches need to use data they have been found and adjust their styles of coaching to create a positive and motivating climate for athletes to compete in. Future

research will allow researchers to look at athletes at specific levels of competition, how self-confidence is in relation to the outcome of the competitions, and how a large number of athletes feel about specific coaches. Overall, there are a variety of sources and ways to affect self-confidence within athletes.

References

- Buning, M. M., & Thompson, M. A. (2015). Coaching Behaviors and Athlete Motivation: Female Softball Athletes' Perspectives. *Sport Science Review*, 24(5–6), 345–370.
<https://doi.org/10.1515/ssr-2015-0023>
- Cranmer, G., Ash, E., Fontana, J. L., & Mikkilineni, S. (2020). Communication for the win: Task benefits of coach confirmation in collegiate athletics. *Communication Quarterly*, 68(5), 539–559. <https://doi.org/10.1080/01463373.2020.1850491>
- Dictionary.com. (n.d.). Perceive definition & meaning. Dictionary.com. Retrieved December 12, 2021, from <https://www.dictionary.com/browse/perceive>.
- Forlenza, S. T., Pierce, S., Vealey, R. S., & Mackersie, J. (2018). Coaching Behaviors That Enhance Confidence in Athletes and Teams. *International Sport Coaching Journal*, 5(3), 205–212. <https://doi.org/10.1123/iscj.2017-0040>
- Freeman, P., & Rees, T. (2010). Perceived social support from team-mates: Direct and stress-buffering effects on self-confidence. *European Journal of Sport Science*, 10(1), 59–67.
<https://doi.org/10.1080/17461390903049998>
- Garinger, L. M., Chow, G. M., & Luzzi, M. (2018). The effect of perceived stress and specialization on the relationship between perfectionism and burnout in collegiate athletes. *Anxiety, Stress, & Coping*, 31(6), 714–727.
<https://doi.org/10.1080/10615806.2018.1521514>
- Gillham, E., & Gillham, A. D. (2014). Identifying Athletes' Sources of Competitive State Anxiety. *Journal of Sport Behavior*, 37(1), 37–55.

Ibrahim, H. I., Jaafar, A. H., Kassim, M. A. M., & Isa, A. (2016). Motivational Climate, Self-Confidence and Perceived Success among Student Athletes. *Procedia Economics and Finance*, 35, 503–508. [https://doi.org/10.1016/S2212-5671\(16\)00062-9](https://doi.org/10.1016/S2212-5671(16)00062-9)

Machida, M., Otten, M., Magyar, T. M., Vealey, R. S., & Ward, R. M. (2017). Examining multidimensional sport-confidence in athletes and non-athlete sport performers. *Journal of Sports Sciences*, 35(5), 410–418. <https://doi.org/10.1080/02640414.2016.1167934>

Rintaugu, E., Mwangi, F., & Toriola, A. (2018). Sources of sports confidence and contextual factors among university athletes. *Journal of Physical Education and Sport*, 2018(02), 889–895.

van Kleef, G. A., Cheshin, A., Koning, L. F., & Wolf, S. A. (2019). Emotional games: How coaches' emotional expressions shape players' emotions, inferences, and team performance. *Psychology of Sport and Exercise*, 41, 1–11.

<https://doi.org/10.1016/j.psychsport.2018.11.004>

Appendix A: Article Grid

Author	Title	Source	Purpose	Methods & Procedures	Analysis	Findings	Discussion/ Recommendations Research Notes – Commonalities/Differences
Machida, M., Marie Ward, R., & Vealey, R. S. (2012)	Predictors of sources of self-confidence in collegiate athletes	International Journal of Sport and Exercise Psychology	To purpose of this study was to look at the relationships among personal and social factors, and sources of confidence in collegiate athletes.	206 student athletes completed the following questionnaires at different time through their season. The first questionnaire was used to assess the demographics of the participants. The Source of Sport-Confidence Questionnaire (SSCQ) measured the nine sources of confidence in sport: mastery, demonstration of ability, mental and physical	The initial analysis looked at possible differences between the demographic variables of participants. The other questionnaires were analyzed using a path analysis to look at them compared to the research questions. The research questions were: Do the personal factors of achievement goal	There were no significant differences in the initial analysis of the demographic variables. The path analysis showed that task-goal orientation positively predicted athletes' selection of controllable and uncontrollable sources of sport-confidence. Ego-goal orientation was not a predictor of	The results from the study supports past findings from previous studies conducted about this topic. This showed that mastery, physical/mental preparation, and demonstration of ability were the most supported sources of confidence for athletes. Social support was also a highly popular source of sport-confidence in athletes. The findings also noted that 2/3 of the participants were female. It was found that social support was more significant to female athletes than male athletes. I found it interesting that 2/3 of the participants were female athletes. I

				<p>preparation, physical self-presentation, social support, coach's leadership, experience, environmental comfort, and situational favorableness. The Task and Ego Orientation in Sport Questionnaire (TEQSQ) measured the participants; achievements of goal orientation. The Sport-Multidimensional Perfectionism Scale-2 (Sport-MPS-2) measured personal standards, concern over mistake, perceived parental pressure,</p>	<p>orientations (i.e. task- and ego-goal) and perfectionistic characteristics (i.e. adaptive and maladaptive) predict the athletes' controllable and uncontrollable sources of sport-confidence? Do the social factors of motivational climate (i.e. task- and ego-involving) predict the athletes' controllable and uncontrollable sources of sport-confidence? The analysis was conducted</p>	<p>controllable or uncontrollable sources of sport-confidence. Adaptive perfectionistic characteristics positively predicted an athlete perceived importance to both types of sources of sport-confidence. The highest rated sources of sport-confidence for the athletes were social support, mastery, physical/mental preparation, coaches' leadership, and demonstration of ability.</p>	<p>wonder if the authors planned for that much of a skewed gender survey or if that was the participants available during their sampling process. I think it would be interesting to see if this study was completed twice. Once with all male athletes and all female athletes. It would be interesting if the sources of sport-confidence would be similar or different between the genders. The results could provide insight for their programs depending on which gender they coach</p>
--	--	--	--	---	---	---	--

				perceived coach pressures, doubt about actions, and organization. Perceived Motivational Climate in Sport Questionnaire-2 (PMCSQ-2) measured the participant's perceived motivation climate on their team.	using Mplus Version 5.1.		
Buning & Thompson (2015)	Coaching behaviors and athlete motivation: Female softball athletes' perspectives	Sport Science Review	To explore female softball athletes' perceptions on how their motivation to play the sport is influenced by coaching behavior.	41 collegiate female softball players at Division I level. Interviews conducted via phone call or email.	Transcripts were read three times and coded on the fourth. Codes were grouped together to identify themes that became apparent.	Female softball athletes identified specific behaviors and feedback methods that they believe positively or negatively affected their motivation to play.	Use positive feedback and communication methods to positively influence athletes' motivation to play
Cranmer, G., Ash, E., Fontana, J.	Communication for the win: task benefits of	Communication Quarterly	To investigate how sport communication	117 Division I collegiate athletes took part	The first two hypothesis was analyzed	Coaching behaviors and athlete- coach	Positive lines of communication between athletes and coaches can

<p>L., & Mikkilineni, S. (2020)</p>	<p>coach confirmation in collegiate athletics</p>		<p>research contributes to the objectives of elite levels of athletics focusing on communication and social relationships as potential mechanisms of team performance</p>	<p>in multiple data collection tools which included, Cranmer et al.'s Coach Confirmation Instrument, Vealey's State Sport-Confidence Inventory, Eys, Loughhead, Bray, and Carron task cohesion subscale, and winning percentage.</p>	<p>using a hierarchal regression. The measurements were separated into different blocks. Block one was athlete-related variables, block two was dimensions of confirmation, and block three was the interactions between the two. The third hypothesis was tested using two simple mediation models in PROCESS.</p>	<p>interactions can indicate task-related benefits for student athletes. These include how athletes view their ability, work with teammates, and perform in their sport. There were also benefits identified from coaches using confirmation among their athletes.</p>	<p>positively impact an athlete's overall experience at a university. Poor or negative lines of communication can lead to athletes leaving a university.</p>
<p>Freeman & Rees (2010)</p>	<p>Perceived social support from teammates: Direct and</p>	<p>European Journal of Sports Sciences</p>	<p>To examine the levels of perceived support available from</p>	<p>152 university athletes (74 females, 78 males) that competed in</p>	<p>Tested using moderated hierarchical regression analyses.</p>	<p>Self-esteem support was perceived as the most available from</p>	<p>Understand that some individuals may exhibit confidence to initiate supportive relationships with teammates. They</p>

	stress-buffering effects on self-confidence.		teammates and whether this support predicted self-confidence.	football, hockey, netball, or rugby. Perceived support and stressors measured with questionnaire and self-confidence measured with Competitive State Anxiety Inventory-2 (CSAI-2R) scale.	Independent variables were entered in a three-step process (step 1- stressors, step 2- perceived support, step 3- stressors *perceived support). Regression lines were plotted.	teammates followed by emotional support. The findings demonstrate that support available from teammates positively predict self-confidence.	might not perceive that support improves their self-esteem.
Garinger, L. M., Chow, G. M., & Luzzi, M. (2018)	The effect of perceived stress and specialization on the relationship between perfectionism and burnout in collegiate athletes	Anxiety, Stress, & Coping	To examine relationships among perfectionism, stress, and burnout in specialized and multiple sport collegiate athletes.	522 Division II and Division III track athletes completed the Sport-Multidimensional Perfectionism Scale-2 (Sport-MPS-2), the Perceived Stress Scale (PSS), and the Athlete Burnout Questionnaire (ABQ).	Descriptive statistics, bivariate correlations, and internal consistency were plotted on a table. The means, standard deviations, and coefficients were plotted on a separate table. Both tables were analyzed and	Track athletes who strive for perfectionism may experience burnout symptoms. Athletes who take an adaptive approach to perfectionism lower their burnout symptoms. Multisport athletes showed lower levels of stress	More research has to be completed looking at the levels of stress and burnout among multiple sport athletes. Also, more research has to be conducted with non-track athletes.

					a path analysis model was created.	compared to sport specialized ones.	
Gillham, E., & Gillham, A. D. (2014)	Identifying Athletes' Sources of Competitive State Anxiety	Journal of Sport Behavior	To identify the common sources of competitive sport anxiety in athletes who participate at various levels of competition and sport	13 university students with experience competing in athletics at a competitive level were interviewed in focus group of at least 4. Focus groups were videotaped	Interviews were transcribed verbatim and then went through a coding process. Open codes were fit into eleven different categories. From the categories, were classified into two main themes.	Two main themes: external sources and internal sources. Categories under external sources included Spectators, time, competitive level, setting, and consequences. Categories under internal sources included Investment, uncertainty, self-confidence and letting self or others down. Self vs. others and expectations	Understanding an athlete's level of self-confidence and anxiety help predict performance in competitive setting. Understanding these stressors of anxiety can also help ensure athletes perform constantly and to their highest potential.

						were under both themes.	
Ibrahim, Jaafar, Kassim, & Isa (2016)	Motivational climate, self-confidence and perceived success among student athletes	Procedia Economics and Finance	To determine the effect of self-confidence on the relationship between perceived motivational climate and goal orientation (perceived success) of student athlete.	Soccer, hockey, netball badminton, swimming, basketball, track, and volleyball athletes completed a 12-part questionnaire. The parts were measured on a 5-point Likert scale.	Out of 200 questionnaires 80 questionnaires were used for the PLS-SEM analysis method.	Perceived motivational climates has a direct effect on perceived success. This relationship positively affects student athlete's self-confidence.	Coaches and team managers need to address the realm of self-confidence and are required to create a motivational environment to increase it. This climate will influence student athlete's want to succeed.
Rintaugu, Mwangi, & Toriola (2018)	Sources of sports confidence and contextual factors among university athletes	Journal of Physical Education and Sport	To unearth the sources of sport confidence among Kenyan university athletes.	183 athletes completed the Sources of Sport Confidence Questionnaire (SSCQ). The questionnaire consisted of 41 items that identify nine sources of confidence in sport.	Data was analyzed using the Statistical Package for Social Sciences (SPSS) version 20. It reported the frequencies, means, and percentages of each of the items of the questionnaire.	The highest rated sources of confidence in terms of importance for the athletes were coaches' leadership, vicarious experience, mastery and demonstration of ability. The weaker sources of sport confidence were	Athletes sources of confidence are both controllable and uncontrollable. Coaches need to be aware of these sources and create an environment that allows athletes to be successful in. A notable mention is that younger athletes had higher score ratings for social support that comes from teammates and coaches.

						situational favorableness, social support, physical, and mental preparation.	
van Kleef, Cheshin, Koning, & Wolf (2019)	Emotional games: How coaches' emotional expressions shape players' emotions, inferences, and team performance	Psychology of Sport and Exercise	Show the effects of coaches' emotional expression (happiness and anger) on players' affective, cognitive, and behavior domains.	268 Dutch baseball and softball players. 7-point Likert-type scale used. Questionnaires were completed at the end of competition. 376 Dutch soccer players. Questionnaires were completed at the beginning, half-time, and end of competition.	Using multi-level modeling, coaches' emotional expressions as the fixed predictors at level 2 and players individual response as outcomes at level 1. Researchers looked at the associations between coaches' emotional expressions and team performance.	There is a relationship between coaches' emotional expressions and player' affective, cognitive, and behavior outcomes.	When coaches expressed happiness, it was more beneficial for athletes at an individual level rather than anger.
Forlenza, Pierce, Vealey,	Coaching Behaviors That Enhance Confidence in	International Sport Coaching Journal	To identify specific actions that coaches can do to build	264 college athletes at a range of institutions were	A hierarchical content analysis was conducted	Five main themes were identified from the responses.	Coaches are sources of confidence for their team and their athletes. There are also specific things that

<p>Mackersie (2018)</p>	<p>Athletes and Teams</p>		<p>confidence in their athletes and teams from the perspective of athletes themselves.</p>	<p>asked two open ended questions. These questions were aimed have the athletes identify what coaches do to make them feel confident personally and their team.</p>	<p>from the responses of the two questions. The responses were analyzed and meaningful codes were found. From those codes, they were grouped into categories. From the categories, themes were identified.</p>	<p>They included Nurturing Positive Environment, Responding to Athletes, Developing Effective Practices, Interpersonal Skill and Relationships, and Intrapersonal Qualities of Coach.</p>	<p>coaches can do to make their athletes and teams feel more confident.</p>
-------------------------	---------------------------	--	--	---	--	---	---