

**The Relationship Between Sport Confidence, Sport Competence, Psychological Well-Being
and Dispositional Optimism of Division III Athletes During COVID-19**

Mikaili Robertson

Department of Psychology, Hood College

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Advisor: Dr. Graves

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Abstract

The present study explores the relationship of the abrupt termination of sports activities on sport confidence, sport competence, dispositional optimism, and psychological well-being of Division 3 athletes. Thirty-eight Division 3 student-athletes took part in this research study by taking a survey that included items from three separate measures: The Carolina Sport Confidence, The State Sport Confidence Inventory, and the Ryff Psychological Well-Being Scale. The results found statistically significant correlations between specific subscales of the measures, which have further implications for the student-athletes who participated in this study.

Keywords: sport confidence, dispositional optimism, sport competence, psychological well-being, COVID-19

The Relationship Between Sport Confidence, Sport Competence, Psychological Well-Being and Dispositional Optimism of Division III Athletes During COVID-19

Over the last year, our world has been blindsided by unforeseen challenges. A global pandemic changed our way of life and has forced us to alter the way we look at the world. In the United States alone, there have been 8.19 million confirmed cases and over 238,000 deaths (CDC, n.d.). As a result of restrictions to spread out the rate of infection so as to not overwhelm our health care system and infrastructure (“flatten the curve”), the things people enjoy and love to do were restricted without warning. This holds especially true for athletes around the globe for which sports holds a sense of identity, purpose, and structure that is vital to their lives and well-being. Sports may also be a safe place for athletes where they can truly express themselves in ways they cannot outside the realm of their playing fields. When sports are taken away from them, it could be detrimental to not only their physical health but their mental health as well. In addition to this, sports are a way for students to regiment their schedules. This is important because it teaches time management skills which have been seen to be essential when preparing to transition into a life outside of sports (Macquet & Skalej, 2015).

Athletes everywhere are simultaneously coping with the loss of sport while trying to fill that void that their sport cannot provide for them at this time. So much time and energy are invested into their sport and when they cannot play anymore, they must figure out what to do with it. A recent study done by Dr. Tim McGuine at the University of Wisconsin-Madison investigated the effect of the cancellation of sports on the mental health of high school athletes. 3,243 student-athletes were surveyed on questions about their current state of feelings and emotions about sports being taken away this year. The study found that at least two-thirds of athletes are struggling with mental health issues following the cancellation of their respective sports and twenty-five percent are experiencing severe anxiety (Wilson, 2020). For most athletes,

their entire lives have been spent playing a sport and they have grown accustomed to that being a part of who they are as a person. A student-athlete who participated in this study echoed this sentiment by saying, “As a senior, my whole class decided to stop participating in our sport this season. This completely changed my day-to-day life. I had much more free time, which was nice, but I also felt a little lost. I also felt disconnected from the team which had been a major part of my social life for 3 years. We adjusted to our new situation fairly quickly, but the initial change did have a significant impact on my college experience.” Sports are deeply intertwined in the identity of athletes, and when that part of their identity is suspended for an indefinite amount of time, it has the potential to create a significant internal conflict.

Control and Stress

While this is interesting to think about, there may not be a direct correlation between stress and control (Folkman, 1984). If there is higher level of control in a situation, it does not necessarily mean that there is less stress associated with that situation. The same holds true for when there is lower control for a situation and then a perceived higher level of stress to go along with it. However, the coronavirus pandemic is unlike any kind of injury an athlete has ever had to deal with. It is not one that could have been prevented, nor is there a timeline for recovery. COVID-19 restricts a certain amount of control from the athlete, and they must find a way to navigate this situation without a definite end date or time they can return to playing the sport they love.

Sport Confidence, Sport Competence, and Dispositional Optimism

Within sports, certain athletes are affected by various mental barriers that may impact the way in which they compete. The first of these mental barriers could be their sport competence. Sport competence provides a framework from which athletes can assess their own abilities.

According to Fox (1990), this is how an athlete views their own athletic ability as well as their ability to learn sport skills and be confident in their specific sport domain. The next mental barrier is dispositional optimism. This is the generalized positive expectancy about the future (Beck, Weissman, Lester, & Trexler; 1974). A basic way to look at this is an approach of "half-glass-full or half-glass-empty". An athlete with a half-glass-full approach is said to have high dispositional optimism because they tend to believe that good things will happen to them rather than bad. Conversely, an athlete with the half-glass-empty approach will have low levels of dispositional optimism because they have more negative views about their future situation. Lastly, sport confidence is a significant mental tool that athletes use to compete. This is the athlete's belief in themselves and their abilities to be successful in their sport. (Vealy, 1986) Sport confidence allows the athlete to have faith that they can meet the demand of their sport and complete the task at hand.

Confidence is a fundamental concept in sport psychology and has often been cited as an essential quality needed to be successful as an athlete. In practical terms, confidence as it relates to sport refers to the belief in oneself and one's abilities to meet the demands of the sport (Manzo, Silva, & Mink, 2001). Manzo and colleagues (2001) developed the Carolina Sport Confidence Inventory (CSCI) to investigate confidence. This measure looks specifically at the factors of dispositional optimism, perceived competence, and perceived control. After conducting two studies on the efficacy of the measure, Manzo and colleagues found that sport competence is associated with a higher sense of control. The study consisted of 293 college students between the ages of 18 to 43. For the second study, 112 of the participants took the measure again to assess test-retest reliability. The two studies found that dispositional optimism and sport competence were two the two key components when it came to sport confidence.

Competence in sport means that someone believes they have the knowledge and ability to complete a sport-related task. These results suggest that the more an athlete feels capable of doing a task, the more they will feel they have control over the situation. This may in turn give the athlete more confidence in their sport. All the successes and failures throughout an athlete's life play into their perceived competence within their specific sport. (Fox & Corbin, 1989)

In terms of dispositional optimism, it is important for an athlete to have a positive outlook on the future for them to be successful in the long run. If not, there may be potential for a negative mindset to hinder their performance over time. Chen, Kee, & Tsai (2008) found that optimism is negatively correlated with athlete burnout. Athlete burnout occurs when the physical and mental demands of a sport become too much for the athlete over time, resulting in a loss of motivation, passion, and desire for their specific sport domain.

Situation versus Trait Anxiety

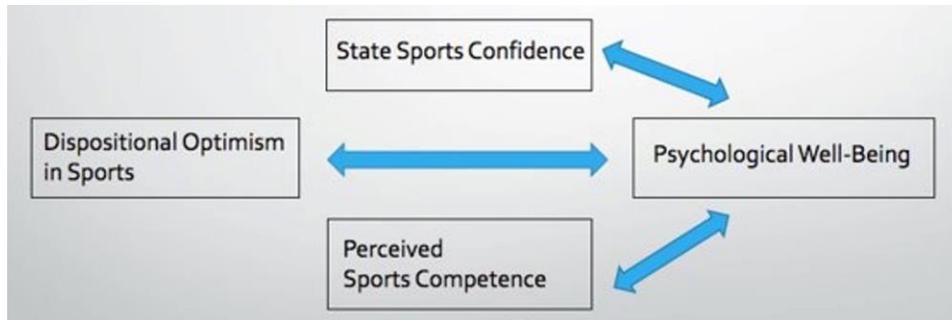
When a person is feeling anxious, does that feeling apply to just that situation or more towards that person's characteristics as an individual? There has been a wealth of prior research done on this idea which is known as trait vs. state anxiety respectively. Vealy (1986) developed two different measures for both forms of anxiety: The Trait Sport Confidence Inventory and the State Sport Confidence Inventory. The latter assesses the inherent beliefs an athlete has about themselves and their capabilities in the sport. The former examines the beliefs and attitudes an athlete has associated with a specific situation in their sport. Both measures can be used to see if an athlete is being affected by performance anxiety, but higher scores on one test rather than the other may suggest that their problems solely relate to sport or other parts of their life as well. COVID-19 presents some interesting questions when it comes to this. There are certain enduring psychological effects from the pandemic that must be explored, especially as it relates to athletes.

While sports play a significant role in the lives of athletes, there are many other areas of life that were affected by the pandemic that may also have a significant impact on these individuals. In addition, social factors may moderate these relationships as we see in the case of racial health disparities.

Unique Experience of the Student-Athlete and Black Student-Athlete

On college campuses, student athletes share an experience that is different from other students on campus who do not participate in sports. On top of busy class schedules full of exams and projects, they need to manage a hectic practice and game schedule that can take up multiple hours in their week. Even before the onset of a global pandemic, student-athletes live very stressful lives. When trying to manage something so challenging, it is important to have the full support of the campus community. However, this is not always the case for student athletes.

The purpose of the present study is to see if the perceptions of sports confidence and competence are related to the psychological well-being of Division III (D3) athletes. If so, there are significant implications for the mental health needs of athletes who manifest a decrease in sports confidence and perceived competence in their sport in part due to the uncontrollable cancellations and restrictions on sports participation caused by COVID-19. The proposed model below explains the hypothesis of this study which is that both State Sport Confidence and Perceived Sport Confidence having a positive correlation with overall Psychological Well-Being. This means that the higher levels of sport confidence and perceived competence that a student-athlete has, the higher levels of overall Psychological Well-Being they will have (vice versa). Additionally, the model shows dispositional optimism having a positive correlation with overall Psychological Well-Being.



Methodology

Participants

There was a total of 38 student athletes from NCAA Division III institutions who participated in this study. The majority of the sample was Caucasian (66%, n=30), male (51%, n=23) and in their first year of college (33%, n=15), See table 1 for additional details. There were 9 sports represented in this study: Baseball, Softball, Basketball, Soccer, Volleyball, Field Hockey, Lacrosse, Cross Country, and Swimming. The top 3 sports represented in the data were Baseball (N=19), Soccer (N=8), and Lacrosse (N=3). See Table 1 below for details.

Table 1

Demographics: Year in school, Race, Sex, and Top 3 Sports Represented

	N	%
Year in School		
Freshman	15	33.3
Sophomore	11	24.4
Junior	1	2.2
Senior	10	22.2
Graduate Student	1	2.2
Race		
African-American	3	6.7
Asian/Pacific-Islander	1	2.2
Caucasian	30	66.7
Bi-racial	1	2.2
Multi-racial	3	6.7

Sex		
Male	23	51.1
Female	15	33.3
Top 3 Sports Represented		
Baseball	19	42
Soccer	8	18
Lacrosse	3	7

Procedure and Measures

Following approval from the Hood College's Institutional Review Board, participants completed an online survey. This survey contained a demographics questionnaire that included background items such as sex, age, race/ethnicity, major, year in school, primary sport, and years participating competitively in primary sport, along with open questions about the general impact of the coronavirus restrictions on their sport participation. Participants then completed three additional measures: the State Sport Confidence Inventory (Vealy, 1986), Carolina Sport Confidence Inventory (Manzo, Silva, & Mink, 2001), and the 18-item Ryff Psychological Well-Being Scale (Ryff & Keyes, 1995). These questionnaires assessed their levels of confidence and well-being as it relates to sport.

The State Sport Confidence Inventory asks respondents to compare themselves to the most confident athlete they know in certain situations within their sport. For example, an item may ask the person to compare their confidence in their ability to perform under pressure to the most confident athlete that they know. Participants respond using a Likert scale from 1 (lowest) to 9 (highest).

The Carolina Sport Confidence Inventory is divided into two subscales: Dispositional Optimism and Perceived Competence. Within the measure, participants are given two statements and then asked to select the one that best describes them. Following this, they are asked if the

statement they selected was very true or somewhat true for them. A sample item from this measure is: *“I feel that things will never work out the way I want them to during sport activities. OR I believe that things will work out for me during sporting activities.”* The scores for Dispositional Optimism range from 7 to 28 and the scores for Perceived Competence range from 6 to 24.

The Ryff Psychological Well-Being Scale contains 18 items that can be averaged together to assess overall well-being as well as divided into 6 different subscales each containing three questions: Autonomy, Environmental Mastery, Personal Growth, Positive Relations, Purpose in Life, and Self-acceptance. Autonomy involves having independent thoughts or views and being secure within these thoughts or views. A sample item for Autonomy is *“I have confidence in my opinions, even if they are contrary to the general consensus.”* Environmental Mastery is the ability to manage your surroundings to suit your needs and create opportunities for yourself. A sample item from the measure is *“In general, I feel I am in charge of the situation in which I live.”* Personal growth is associated with the feeling of development and expansion in a person’s life over time, and also improvements in themselves. An example of this would be *“I think it is important to have new experiences that challenge how you think about yourself and the world.”* Positive Relations involves having healthy, trust-based relationships with people and understanding what it takes to maintain those relationships. A sample item of this is *“People would describe me as a giving person, willing to share my time with others.”* Purpose in Life means that the person believes there is something they are meant to do, and they have a sense of direction in their life. An example of this is *“Some people wander aimlessly through life, but I am not one of them.”* Lastly, Self-acceptance means having a positive self-attitude and the acceptance of the good and bad parts of life. A sample item of this would be *“When I look at the story of my life, I am*

pleased with how things have turned out.” Participants responded using a Likert scale ranging from 1 (Strongly Agree) to 7 (Strongly Disagree).

Results

Average scores of sport confidence from the State Sport Confidence Inventory (SSCI) were 6.7 (SD= 1.35). The average scores of Dispositional Optimism and Sport Competence as measured by the Carolina Sport Confidence Inventory (CSCI) were 18.7 (SD= 1.80) and 16.5 (SD=1.36). See Table 2.

Table 2

*Mean and Standard Deviation of scores from SSCI and the two subscales of the CSCI:
Dispositional Optimism and Sport Competence*

Measures	M	SD
SSCI		
Sports Confidence <i>(range 1-9)</i>	6.7	1.35
CSCI		
Dispositional Optimism-Sports <i>(range 7-28)</i>	18.7	1.80
Perceived Competence-Sports <i>(range 6-24)</i>	16.5	1.36

The average scores for the Autonomy subscale of the Ryff was 15.97 (SD=3.63). Average scores for Environmental Master were 15.5 (SD= 3.31). Average scores for Personal Growth were 18.24 (SD= 2.77). Average scores for Positive Relations were 15.88 (SD= 3.72). Average scores for Purpose in Life were 16.29 (SD=2.76). Lastly, the average scores for Self-acceptance were 17.35 (SD= 3.25). See Table 3 below for details.

Table 3

Mean and standard deviation of Ryff subscales: Autonomy, Environmental Mastery, Personal Growth, Positive Relations, Purpose in Life, and Self-acceptance

RYFF Subscales	M	SD
Autonomy	15.97	3.63
Env. mastery	15.5	3.31
Personal growth	18.24	2.77
Positive relations	15.88	3.72
Purpose in life	16.29	2.76
Self-acceptance	17.35	3.25

Correlational analyses were conducted between the CSCI dispositional optimism and perceived competence subscales and the SSCI. There were significant correlations between the CSCI Perceived Competence and the CSCI Dispositional Optimism subscales ($r=.466, p<.01$). Significant relationships were also found between the SSCI and the CSCI Dispositional Optimism subscale ($r=.490, p<.01$) and the SSCI and the CSCI Perceived Competence subscale ($r=.532, p<.01$). See Table 4 for details.

Table 4

*The Pearson Correlations of two subscales of the CSCI: Dispositional Optimism and Perceived Sport Competence, and Sport Confidence from the SSCI (** $p<.01$)*

	CSCI: Dispositional Optimism in Sport	CSCI: Perceived Competence In Sport
CSCI: Perceived Competence in Sport	.466**	--
SSCI: Sports Confidence	.490**	.532**

Correlational analyses were conducted between Dispositional Optimism, Perceived Competence, & Sports Confidence and the six subscales of the Ryff. There were significant correlations between Dispositional Optimism and Environmental Mastery ($r=.615, p<.01$),

Personal Growth ($r=.428, p<.05$), Positive Relations ($r=.475, p<.01$), Self-acceptance ($r=.512, p<.01$), and Total Well-Being ($r=.619, p<.01$). There were also significant correlations found between Perceived Competence and Environmental Mastery ($r=.482, p<.01$), Self-Acceptance ($r=.363, p<.05$), and Total Well-Being ($r=.517, p<.01$). Lastly, there were significant correlations found between Sports Confidence and Self-Acceptance ($r=.360, p<.05$) and Total Well-Being ($r=.384, p<.05$). See Table 5 for details.

Table 5

The Pearson Correlations of Dispositional Optimism, Perceived Competence, and Sport Confidence with the 6 subscales of the Ryff Scales of Psychological Well-Being ($p<.05$; ** $p<.01$)*

	Autonomy	Env. Mastery	Pers. Gro.	Pos. Relat.	Purpose In Life	Self-Accept.	Total Well-Being
Dispositional Optimism Sports	.308	.615**	.428*	.475**	.013	.512**	.619**
Perceived Competence Sports	.302	.428**	.213	.314	.275	.363**	.517**
Sports Confidence	.312	.305	.283	.315	.148	.360*	.384*

Discussion

Findings from the present research support the proposed model and primary research question. Division 3 student athletes reporting higher sports confidence, sports perceived competence, and dispositional optimism related to their sport reported higher levels of psychological well-being during COVID-19 restrictions. These findings support the research done by Manzo and colleagues (2001), by showing that perceived competence and dispositional optimism are two key factors when it comes to determining one's level of overall sport confidence.

To be specific, Division 3 student-athletes reporting higher levels of dispositional optimism in sports also report higher levels of psychological well-being overall, and specifically in the domains of environmental mastery, personal growth, positive relations, and self-acceptance. In the domain of environmental mastery, higher scores are associated with a sense of competence in managing one's surroundings. In addition, Division 3 student-athletes reporting higher levels of perceived competence in their sport also report higher levels of psychological well-being overall, and specifically in the domains of environmental mastery and self-acceptance. It is also important to highlight that Division 3 student-athletes reporting higher levels of state sports confidence also report higher levels of psychological well-being overall, and specifically in the domain of self-acceptance.

Implications

The modest correlations among the CSCI and SSCI suggest that confidence is multifaceted for D3 student athletes, and each measure was tapping into a unique component. The psychological well-being of these D3 athletes during COVID was significantly related to how they were thinking of themselves within the sport domain. This suggests that the prolonged disruption and disconnection from sport caused by COVID may be linked to poorer well-being, and an increased risk for mental health issues for D3 athletes. These findings suggest coaches and team staff should monitor athletes returning (or not returning) to their sport with reduced confidence, lower sport competence, and/or dispositional pessimism as these students may benefit from additional support services. More research is needed to replicate and expand on these findings.

Limitations & Future Research

One limitation of this research is the small sample size. There were only 38 participants in this study and a small sample size limits the generalizability of the data. Having more people participate in the study would allow for the data to be more representative of the general population, which would as a result lead to stronger and more accurate results.

Another possible limitation of this research was the use of multiple correlations analyses of the results. Doing multiple correlations can lead to having a Type 1 error, which means that there could be false positives within the results. This means the results could show significant findings in the data ($p < .05$ or $p < .01$) when, in reality, they are not.

Unfortunately, no one had prior knowledge of COVID-19. As a result of this, there was no way to collect pre-test data on student-athletes level of confidence and psychological well-being before the pandemic. Having this data would help to contextualize findings that we get post-COVID. If we know what athletes were like before the start of the pandemic, how they are after (and during) will tell us a lot about the effect of the pandemic, and it can help us know the specific areas in which these student-athletes need the most help.

In addition to there being a small sample size, there was a lack of diversity in the sample. As reported earlier, over sixty-six percent of the sample size was Caucasian. In particular, there were only 3 African-American student-athletes represented in the research. Having more diversity in the sample size would help to see how the pandemic is impacting the confidence and psychological well-being of different types of athletes, and it can help us see what specific factors are affecting certain race/ethnicities and not others.

Lastly, it is important to remember that correlation does not mean causation. This study was able to find significant correlations between multiple measures, however, this simply established a potential relationship between these variables. There is always the chance for

extraneous variables to have an impact on them that may take away from the relationships that the results show. Due to this, we cannot have certainty that one variable causes another.

The purpose of the present study was to help find the specific ways in which Division 3 student-athletes perceive sport confidence. Future research may investigate this further by examining how this perception will change when athletes return to normal within their sports domains following the COVID-19 pandemic.

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