Failure Response and Coping among Female Collegiate Athletes

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The current study explores the failure response and coping skills of 37 female collegiate athletes. All athletes completed the Athletic Coping Skill Inventory (ACSI-28) the Performance Failure Appraisal Inventory, and four athletes were interviewed. Descriptive statistics for the five subscales of the Performance Failure Appraisal Inventory (Form A) for the entire sample showed that fear of experiencing shame and embarrassment was the highest fear (M=3.27, SD=0.80), followed by fear of upsetting important others (M=2.77, SD=0.89). Descriptive statistics for the seven subscales of the Athletic Coping Skills Inventory for the entire sample showed that coachability had the highest score (M=10.06, SD=1.51), followed by confidence and achievement motivation (M=8.63, SD=1.74). Comparisons were also made based on athlete status (underclassman vs upperclassman) and by team status (team vs individual). Based on athlete status, a significance difference (p=0.05) on the PFAI inventory was found for fear of shame and embarrassment (under 3.5 mean, upper 2.89 mean, p=0.02), fear of uncertain future (under 1.26 mean, upper 0.60 mean, p=0.02), and overall score (under 2.61 mean, upper 2.15 mean, p=0.03). For all of these categories, upperclassmen were less likely than underclassmen to describe themselves as feeling fear of shame and embarrassment, fear of an uncertain future, and overall score. On the ACSI inventory, a significance difference was found for freedom from worry (under 4.8 mean, upper 6.84 mean, p=0.05). As indicated, upperclassmen are free from worry more than are underclassmen. Based on team status, no significant differences were found between team vs individual sport athletes on the PFAI inventory. On the ACSI inventory, a difference was found for peaking under pressure (team 7.84 mean, 5.66 individual mean, p=0.02). This finding indicates that team sport athletes, more so than individual sport athletes, feel challenged rather than threatened under pressure situations and perform well under pressure.

Keywords: *coping, athletes, coaches, failure*

Introduction

The world of athletics is constantly addressing success and failure at all levels of sport. From youth sports to Olympic qualifiers, there are similar situations that athletes will face. How does an athlete respond when an action or event does not go the way it is intended? Does that wrong action result in failure? Split second actions, decisions, and moments can be the difference between success and failure.

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Are athletes ready to respond to the negative possibility as well as they respond to the positive possibility? Having a failure plan or failure response benefits athletes in returning to their peak performance faster, helping them learn from experiences to overcome previous failures, and brings them a step closer to excellence and success.

How a person responds to failure is classified as 'coping' (Loscalzo 2014). Coping refers to constantly changing cognitive and behavioral efforts to manage specific and/or internal demands that are appraised as taxing or exceeding the resources of the person (Lazarus and Folkman 1984). That reaction will look different for each individual, and when studied, a pattern of reactions has been classified as styles of coping. It is important to note that coping does not state the level of effectiveness or success, it is only a focused attempt to manage situational demands. The reaction or lack of reaction is an attempt to work through or past failure, and with athletes, it goes hand in hand with performance. Coping has been viewed as reactions (during or right after performance responses) and long-term adaptations (or strategies or purposeful actions) that can be either maladaptive or adaptive, and either can be deemed effective or ineffective (Poczwardowski and Conroy 2002). Sometimes athletes will be able to successfully move past the failures through coping, while other times the coping strategies may not be of any use, or even increase the detriment of performance.

Athletes have different methods to respond to failure (Moreno-Murcia et al. 2019). Poczwardowski and Conroy (2002) have identified four styles of coping that frequently appear in athletes responding to failure. These coping styles are described as: problem-focused coping (problem-oriented strategies directed to the environment and self), emotion-focused coping (managing emotional responses to stress and changing the meaning of situations), appraisal-focused coping (appraising or reappraising stressful situations using reframing of situations or logical analysis), and avoidance-focused coping (behavioral and psychological efforts to disengage from the demanding situation). Similar to the four styles described by Poczwardowski and Conroy (2002), Anshel (1996) described two primary coping styles, approach coping and avoidance coping.

The value of studying an athlete's coping style improves the ability to predict an athlete's use of coping strategies in response to stressful events in the future (Anshel et al. 2010). This further improves the ability to predict an athlete's use of coping strategies in response to events of similar stressors in the future.

The approach coping style, can be defined as attention, sensitization, monitoring, engagement, and vigilance, and consists of a conscious overt action or thought in response to a stressful stimulus or event in which the person attends to the stressor for the purpose of reducing or managing the unpleasant experience (Anshel et al. 2010). An approach coping style reflects cognition, emotion, or behavior that is oriented towards threats. Actively seeking a solution for the feeling, actions, problems that have arisen within performance is the best illustrator of this particular style.

Avoidance coping style, which embodies desensitization, distraction, repression, blunting, passive, and disengagement coping consists of the conscious decision to physically remove oneself from perceived threat, filtering out

information, or turning away from threatening cues. Examples include walking away from the source, avoiding a threatening or unpleasant situation, psychological distancing, discounting, selective attention, and distraction (Anshel et al. 2010). Removing the action, mistake, or cause for failure and moving onto the next possible opportunity shows coping in its true form.

As consistent as the research is for both avoidance and approach coping strategies, there is very little research that takes the next step and looks for differences between gender or people from different backgrounds or walks of life. Of the little research that is available, results suggest females use more emotion-focused versus problem-focused coping strategies and are more likely to seek social support. Females tend to self-reflect and think about how they might have done things differently, where their male peers do not. Males are more likely to use fate as a coping strategy (Anshel et al. 2010). Additionally, avoidance coping is better learned and more often used by elite athletes under situational conditions. The ability to process, then filter out, and quickly discount the source of stress, or reduce its importance is unique among the better skilled, more successful athletes (Anshel et al. 2010). Limitations present themselves when responses are not an immediate test/evaluation, having to use long term recall instead of getting results right after a competition, practice, or event (Anshel et al. 2010). Being able to gather responses immediately after a competition, practice, or performance would offer more insight into how athletes react to failures and how they respond in the moment to meet the need.

Reactions to high intensity and stressful situations can change the response of athletes. Sometimes one coping style is better for a situation than another. Roth and Cohen (1986) and Mullen et al. (1982) suggested that approach coping is the preferred style in conditions where an athlete has high perceived control of the situation, and when the stress is known to an athlete. Approach coping is preferred when an athlete has relatively high confidence and good communication skills and knows what is going on in the situation, and the situation is individually manageable (Anshel and Anderson 2002). Similarly, a confident athlete will use approach coping after experiencing unexpected failure by analyzing what went wrong if there is sufficient time for introspection. Approach and avoidance coping styles are not conceptually independent, as Roth and Cohen (1986) claimed that people may alternate rapidly between each disposition.

Acute stress creates different actions and reactions. Researchers concluded that avoidance coping techniques protected against interfering thoughts and actions within game play, such as receiving unpleasant information feedback. Anshel (1990), Anshel et al. (1990), and Anshel et al. (1993) each found decreased negative effect and improved sports performance following the intervention in tennis, baseball, and dart -throwing. Avoidance coping was associated with less state anxiety after making performance errors, in comparison to the use of approach coping. Research findings show approach coping is particularly important in tasks classified as continuous and open, that is, in which task demands are externally imposed (Anshel et al. 1996). Apparently then, coping effectiveness in sport is a function of task and situational demands (Anshel and Anderson 2002). In open sports like basketball where there is constant continuous game flow and action,

athletes will use both styles of coping depending on situational need and time that is available for reactions.

The main purpose of this study was to examine the fear of failure and coping strategies of collegiate female athletes. Secondly, personal interviews were conducted to determine if athletes used approach or avoidance coping strategies.

Methods

Participants

Participants were 37 female athletes (8 basketball, 3 cross country/track and field, 4 soccer, 5 softball, 9 track and field only, 6 volleyball, 2 golf) enrolled in a Division 1 University located in the Midwest of the United States. Based on athletic status at the start of the study, 8 participants were considered red-shirt freshman, 10 as freshman, 9 as sophomores, 4 as juniors, 6 as seniors, and 4 as fifth-year seniors. All participants were active members of their squads.

Procedures

Prior to the beginning of data collection, approval was obtained from the University Institutional Review Board (Protocol #IRB0003501). Approval was also obtained from an athletic director and from the various head coaches. After all approvals were obtained, the survey inventories were uploaded to Qualtrics and made available to participants. All female athletes playing varsity sports received an email inviting them to participate in the study. If they agreed to participate, they would open the link on the email which took them to the Qualtrics survey. When they opened the survey, they next had to agree to informed consent. If they agree, they had access to the survey. Three separate emails were sent to athletes inviting them to participate. All participants were informed that their participation was voluntary and that all interview material was confidential. Data were collected in two phases. Phase 1 collection was via quantitative methodology (survey) and occurred during spring semester, 2021. Phase 2 used qualitative methodology (interviews) and occurred during fall semester, 2021.

Phase 1: Quantitative Data Collection
Quantitative data were collected via two separate inventories. The Performance Failure Appraisal Inventory (PFAI; Conroy et al. 2002) was employed to measure dimensions and levels of fear of failure among the players. The measure consists of 25 items measuring beliefs associated with aversive consequences of failure. It has five subscales capturing: fear of experiencing shame and embarrassment (7 items; e.g., "When I am failing, it is embarrassing if others are there to see it."), fear of devaluing one's self-estimate (4 items; e.g., "When I am failing, I blame my lack of talent."), fear of important others losing interest (5 items; e.g., "When I am not succeeding, people are less interested in me."), fear of upsetting important others (5 items; "When I am failing, people who are important to me are

disappointed."), and fear of having an uncertain future (4 items; e.g., "When I am failing, it upsets my 'plan' for the future."). Players were asked to rate how strongly they believed each consequence was likely to occur after failure (i.e., "Please indicate how often you believe each statement is true for you in football."). Responses were recorded on a 5-point scale from 0 (*do not believe at all*) to 4 (*believe 100% of the time*). Scores were computed for each subscale of the PFAI. An overall fear of failure score was also computed.

The Athletic Coping Skills Inventory (ACSI; Smith et al. 1995) was also used to capture information related to athlete coping skills. The ACSI-28 scale measures the coping skills level among athletes and has been shown to be a viable measure for assessing coping skills (Hidrus et al. 2016). It is composed of 28 items and seven subscales. The seven subscales are: coping with adversity (e.g., "When things are going badly, I tell myself to keep calm, and this works for me."), peaking under pressure (e.g., "To me, pressure situations are challenges that I welcome."), goal setting/ mental preparation (e.g., "On a daily basis, I set very specific goals for myself that guide what I do."), concentration (e.g., "When I am playing sports, I can focus my attention and block out distractions."), freedom from worry (e.g., "When competing, I worry about making mistakes or failing to come through."), confidence and achievement motivation (e.g., "I feel confident that I will play well."), and coachability (e.g., "If a coach criticizes or yells at me, I correct the mistake without getting upset about it."). Each of the subscales equally constitutes four items that are measured by a 4-point Likert scale ranging from 0 (almost never) to 3 (almost always). There are six items that are reverse items where higher scores reflect lower coping (items # 3, 7, 10, 12, 19, 23), and the remaining items are higher scores that reflect a high level of coping. A score for each subscale can range from 0-12 and the summation of all scores creates a value ranging from 0-84. Higher scores indicate the ability to cope with the demands of the sport with greater psychological skills (Beckford et al. 2016).

Phase 2: Qualitative Data Collection

Interviews were used to collect qualitative data. One investigator was present for every interview. Time and pace of interviews were scheduled via email with the interview participants and interviews were then conducted in a room dedicated to qualitative research. No participants refused to answer any questions during the interviews. Questions (Figure 1) explored participants' experiences regarding failure, success, and coping in the particular sport. The interview guide was followed as closely as possible. The duration of the interviews ranged from 20 to 30 minutes. The interviews were recorded using Yuja and automatically transcribed verbatim via Word.

Figure 1. *Interview Questions*

1. **Background** - Tell me a little bit about your-self.
    ● Specific character for you.
    ● Sport.
    ● Sport experiences.
        ○ For how long, this specific sport and total.
        ○ Different sports.

2. **Controllable fails**
    ● How do you define controllable failures in your sport?
    ● What are examples of controllable failures ?
    ● Coping responses for controllable failures.

3. **Uncontrollable fails**
    ● How do you define uncontrollable failures in your sport?
    ● What are examples of uncontrollable failures?
    ● Coping responses for uncontrollable failures.

4. **Define success**
    ● Feelings.
    ● Effects positive and negative.
    ● Consequences
    ● Are success and failure important for you in sport?

6. **Define failure**
    ● Feelings.
    ● Effects positive and negative.
    ● Consequences
    ● Are success and failure important for you in sport?

7. **Coping Mechanisms**
    ● In what ways do you prepare before a competition?
    ● In what ways does your coach help you to deal with situations where you
    ● feel the need to cope?
    ● Identify coping strategies that you use.
    ● What help do you have from other peoples?
    ● Do you think that this interview is about something that you believe is relevant and important for the sport?
    ● Debriefing and other questions.

Data Analysis

The PFAI and ACSI were analyzed via SPSS (version 27) for descriptive statistics (means and standard deviation) to identify players' levels and dimensions of fear of failure and coping skills. Independent t-tests were used to make comparisons between team and individual sport athletes and between upperclassmen and underclassmen. The interviews were transcribed by one of the investigators.

The second investigator analyzed each transcribed interview. After analyzing each interview, the subjects reviewed the analysis for accuracy and meaning.

Results

Quantitative Results

Descriptive statistics for the five subscales of the Performance Failure Appraisal Inventory (Form A) for the entire sample showed that fear of experiencing shame and embarrassment was the highest fear (M=3.27, SD=0.80), followed by fear of upsetting important others (M=2.77, SD=0.89), fear of devaluing self-estimate (M=2.71, SD=0.83), fear of important others losing interest (M=2.58, SD=0.91), fear of devaluing one's self-esteem (M=2.71, SD=0.83), and fear of having an uncertain future (M=1.01, SD=0.90). The general fear of failure score, which tabulated all five subscales, indicated a M=2.44, SD=0.67 (See Table 1).

Table 1. *Summary of PFAI scores*

Subcategories	Minimum	Maximum	Mean	Std. Dev.
Feat of Shame and Embarrassment	1.42	4.85	3.27	0.80
Fear of Devaluing Self-estimate	1.25	5.00	2.71	0.83
Fear of Uncertain Future	-0.50	2.75	1.01	0.90
Fear of Important Others Losing Interest	1.00	4.60	2.58	0.91
Fear of Upsetting Important Others	1.20	4.20	2.77	0.89
Overall PFAI	1.09	3.82	2.44	0.67

Descriptive statistics for the seven subscales of the Athletic Coping Skills Inventory for the entire sample showed that coachability had the highest score (M=10.06, SD=1.51), followed by confidence and achievement motivation (M=8.63, SD=1.74), goal setting and mental preparation (M=7.54, SD=2.98), concentration (M=7.09, SD=1.75), coping with adversity (M=6.9, SD=1.82) and peaking under pressure (M=6.9, SD=2.62), and freedom from worry (M=5.6, SD=3.02). The overall athletic coping skills score was (M=52.06, SD=9.39) (See Table 2).

Table 2. *Summary of ACSI Scores*

Subcategories	Minimum	Maximum	Mean	Std. Dev
Coping with Adversity	4	11	6.90	1.82
Coachability	6	12	10.06	1.51
Concentration	2	11	7.09	1.75
Confidence and Achievement Motivation	5	12	8.63	1.74
Goal Setting and Mental Preparation	2	12	7.54	2.98
Peaking Under Pressure	2	12	6.90	2.62
Freedom from Worry	0	12	5.60	3.02
Overall ACSI	37	76	52.06	9.39

Comparisons were also made based on athlete status (underclassman vs upperclassman) and by team status (team vs individual). Based on athlete status, a significance difference (p=0.05) on the PFAI inventory was found for fear of shame and embarrassment (under 3.5 mean, upper 2.89 mean, p=0.02), fear of uncertain future (under 1.26 mean, upper 0.60 mean, p=0.02), and overall score (under 2.61 mean, upper 2.15 mean, p=0.03). For all of these categories, upperclassmen were less likely than underclassmen to describe themselves as feeling fear of shame and embarrassment, fear of an uncertain future, and overall score. On the ACSI inventory, a significance difference was found for freedom from worry (under 4.8 mean, upper 6.84 mean, p=0.05). Freedom from worry assesses whether an athlete puts pressure on herself by worrying about performing poorly or making mistakes. Scoring on this category is reversed so a higher score indicates a greater strength. As indicated, upperclassmen are free from worry more than are underclassmen.

Based on team status, no significant differences were found between team vs individual sport athletes on the PFAI inventory. On the ACSI inventory, a difference was found for peaking under pressure (team 7.84 mean, 5.66 individual mean, p=0.02). This finding indicates that team sport athletes, more so than individual sport athletes, feel challenged rather than threatened under pressure situations and perform well under pressure.

Qualitative Results

Interviews were conducted with four athletes who volunteered to be interviewed. Tables 3 and 4 show the individual PFAI and ACSI scores for each of the interviewed athletes. Overall, athletes 1 and 2 had more positive PFAI and ACSI scores then did athletes 3 and 4.

Table 3. *Summary of PFAI Scores for Interviewed Athletes*

Subcategories	Athlete #1	Athlete #2	Athlete #3	Athlete #4
Feat of Shame and Embarrassment	2.14	3.10	4.17	4.85
Fear of Devaluing Self-estimate	1.75	3.30	3.50	3.75
Fear of Uncertain Future	0.50	0.80	2.50	2.75
Fear of Important Others Losing Interest	1.80	1.60	3.40	3.80
Fear of Upsetting Important Others	1.40	2.40	4.00	3.80
Overall PFAI	1.51	2.20	3.62	0.3.79

Table 4. *Summary of ACSI Scores for Interviewed Athletes*

Subcategories	Athlete #1	Athlete #2	Athlete #3	Athlete #4
Coping with Adversity	7	8	6	7
Coachability	12	10	10	9
Concentration	7	7	8	7
Confidence and Achievement Motivation	10	9	10	6
Goal Setting and Mental Preparation	4	9	12	6
Peaking Under Pressure	8	10	3	4
Freedom From Worry	8	2	0	3
Overall ACSI	56	55	49	42

For each athlete individually, we present their brief responses to the interview questions concerning success and failure, controllable and uncontrollable failure, and coping mechanisms.

Athlete #1 - During the time of the interview, athlete #1 was a sophomore track and field athlete (hurdler). As a high school athlete, she placed in the top 4 at the state track and field meet in two events as a sophomore, junior, and senior. A multi-sport athlete, she also competed in hockey and lacrosse, and cross-country during freshman year. As a freshman in college, she placed 6th individually in the league championships and was a member of a relay team that set a school record.

Athlete #1 described success as "feeling like I could run forever and I'm like dead, but I feel like I could run. Just keep doing it and it feels awesome….. I just feel so happy like everything kind of came together." She said that having success gave her confidence and self-efficacy increased. She described failure, "like anger, and I lose a lot of self-confidence and doubt myself." A positive effect of failure is wanting to work harder, not make that mistake again, or having a drive to not do that again. Another positive effect of failure is that it shows people, especially young athletes, that everyone makes mistakes and that it is okay that you made a mistake. She stated that an oblivious consequence of failure is not winning but also that one can now hone in on the mistake in practice and hopefully not make that mistake again.

With a controllable failure, she stated that "she watches video of herself, talks through what could have been done differently in terms of technique, and then focuses on that in practice and hopefully it doesn't become a failure again." She also suggested having a short memory and getting over it quickly. In terms of uncontrollable failures, she said she still gets mad because she puts a lot of pressure on herself to do well, and when she does not do well, even if it is because of the wind or something else, she still gets upset. However, she said that she focuses on what she can control vs the uncontrollables and looks to her teammates to pick her up and help her move on.

Athlete #1 prepares for her competition by sitting in her room imagining what to do correctly and sometimes watching videos of practice with her coach explaining how to do something. Sometimes she likes to get to the meet early to let her nerves go away because when she gets to the track, she is super excited and anxious. She said that watching other people helps her relax and then she warms

up to get mentally focused. She likes to talk to her coach and other people to just get ready and then once she actually has to get to the blocks, she just makes a straight face. She indicated she doesn't ever remember the races because she is in flow. She said she just kind of blacks out and does not hear anyone either.

Her coach helps her deal with stressful situations in that he is big on communication and tends to know all of the athletes' tendencies, what they like and what they do not like. She said that one of her coping strategies is messing with her hair, "It's like I get my mind off the thing that might be stressing me out and trying to be positive instead of negative."

Athlete #2 - During the time of the interview, athlete #2 was a sophomore soccer athlete (goalkeeper). In high school she was a three-year varsity starter, team captain, and all-conference. As a collegiate freshman she started four games and redshirted this year. Soccer is the only sport she has played throughout the course of 14 years.

Athlete #2 described success as "relief, if I make a great save, or if I make a good pass, it's relieving because I know I'm making my teammates look good as well as I'm making the program look good." She described failure as "depression, it's one of those things where you get mad and then you just move on because you don't really have time to dwell on it. But definitely, some feelings I get are, I let the team down or I let the coaches down or I let the program down. I made it look bad so you put all the blame on yourself, even though it's a team sport, you feel all the blame just comes down on you for being the goalkeeper. You know a lot of people remember the goals scored but don't remember the goals that were saved. If I mess up, my mistake is a goal, but if somebody else messes up it's just a giveaway."

She indicated that a negative of success is a feeling of cockiness and getting comfortable while a positive of success is the reward you get from working hard. Regarding failure, she said that learning cannot succeed without failure. You look back at your film, look at your mistakes, and fix them so they do not happen again. The negative of failure is not having happy coaches. She said, "You're not performing the way you want to and it's very frustrating. I'm frustrated because I feel like I should be able to get everything, but I don't, so I always feel frustrated. If you fail so many times, it's really easy to just lay down and die after failure after failure after failure and I would definitely say that was a huge consequence of this season. It's like our team mentality, we're going to hope that we show up today, oh well, I guess I'm just going to fail again."

To manage controllable failures, such as giving up a goal, athlete #2 said, "once we get scored on, we always go in a huddle and in our huddle we kind of talk about what is the breakdown that happened? How do we fix it? And then we try to move on from it." For an uncontrollable failure, such as fouling, she said, "I kind of get angry because I don't like when people push me. Makes me so mad. I'm like there's no need for it. But I kind of just shake it off and I'm great, just keep playing. You have like three seconds to be mad and then you get over it."

One of her coping strategies is to tell herself to get mad or if a stressful situation is about to happen, to take a deep breath. Before competition she copes by using music. She indicated that she likes to be hyped and likes to be dancing around the locker room getting her teammates hyped up. As for the mental side,

she talks to people, coaches, or a sports psychologist. If she needs an outside view, she will talk to one of her friends. In stressful situations she also goes to her coaches. With one of the assistant coaches, she talks more about her personal life and with another she talks about the technical aspects of her position as a goalkeeper.

Athlete #3 - During the time of the interview, athlete #3 was a freshman cross country and track and field athlete (distance). As a high school cross country athlete, she placed in the top 30 at the state cross country meet in five of her six years of competing. She was a multiple-time state track meet qualifier, and also swam competitively during high school.

Athlete #3 described success as "really being confident when you are going to practice or competitions and being confident that you are going to do well." Failure, she says, is when you are not succeeding and feel loveless and a lot more nervous about going to compete. She said when you fail you feel disappointment. She described the positive effects of success as reinforcement that you are training correctly and that the coach is helping you not overtrain. Closely related to that, she stated is that success "helps reinforce that you are doing a good job in your sport, knowing that it's correct and has been correct for the amount of time spent in the sport." She described the negative effect of success as having a target on your back.

Athlete #3 described a controllable failure as "pushing past the point where you can't run, I would say that's kind of a failure that you could have controlled." She also mentioned not taking rest days and not hitting your mileage. She described an uncontrollable failure as a freak accident in which she fell during a race, and in other sports, the referees and fouls. To cope with both types of failure she mentioned talking to her coach, sport psychologist, or teammates. She indicated that it was harder to deal with uncontrollable failures because you do not really have anything to blame it on. She said, "it's just what happened."

She stated that her coach helps her deal with situations that are more stressful or she needs to cope a little bit more, through individual meetings. They talk through the steps, "that race was really ****, what do we do next time, why we thought it went bad, and then looking forward to what can be done better." A personal coping strategy she likes to use is visualization. She said, "Obviously, you want to visualize how you want the race to go, but that's not very likely. Visualizing what you will do when certain situations arise, and how you respond to that. So, you're prepared in the moment, and that's really helpful."

Athlete #4 - During the time of the interview, athlete #4 was a junior softball athlete (catcher/outfield). As a high school athlete, she was two time all conference in both softball and ice hockey and also participated in cross country. As a collegiate athlete she had limited playing time as a freshman and sophomore.

Athlete #4 said, "once you have success you just get motivated to continue that success and I'm more driven to capture that feeling of happiness, enthusiasm." She indicated a positive effect of success is getting awards, like championship rings, but a negative effect is the expectation to continue succeeding. She said, "you have to reach that potential again and again and it can be really hard to continue to produce those successes." A consequence of success is thinking that

you might be better than what you really are and that you do not have to work at it anymore like you did when you succeeded. She said once you get complacent you don't get better or you even work backwards.

Athlete #4 described failure as feeling shame or embarrassment, especially if you are in front of your teammates, "disappointment in myself in the fact that I let my teammates and coaches down." She stated that a negative effect and consequence of failure was a lack of confidence, a decrease in performance, and a loss of playing time. A positive effect of failure is learning from it. When you succeed you do not necessarily learn, you just kind of go, "that felt good, that was cool". When you fail, you break down each thing that happened and see where the failure started so you really learn from it, and get better and succeed.

Athlete #4 said she copes with controllable failures by practicing more and doing more reps relative to physical failures, and for mental failure, like throwing the ball to the wrong base, she would talk about it and write it down. She described an uncontrollable failure as not making solid contact when batting because even though you can have perfect mechanics and perfect timing, the pitcher can put a certain spin on the ball and you still do not hit it. She also mentioned being super windy outside as an uncontrollable failure when perhaps someone hits a homerun with the wind blowing out. When asked how she coped with uncontrollable failures she said, "almost the same as the controllable failures. Just taking more reps to see the controllable failure again. So, you then kind of think, this might happen and it's OK if it happens and also just talking to teammates about it and just kind of accepting that."

In terms of coping strategies, on game days she goes through the game and the warm up in her head and imagines herself doing good things. When she gets to the field, they have a routine they do, such as hitting defense. She said she tries to do the same thing every time, like putting her cleats on at the same time and tucking her jersey in the same way every time. She said her coach slows things down and he does not necessarily deal with it in the middle of competition, he usually waits until after the game. At that point, he tries to walk you through the situation saying things like, "what were you thinking, what did you feel during that, what did you feel like mentally and emotionally, and how can we fix it?"

She stated that when things are not going well, her main coping strategy is focusing on her breathing, taking a couple of deep breaths in the moment just to reset and relax. Taking time to focus on something else besides the failure that just happened and then resetting from that point.

Discussion

Learning more about the mental preparation for success and failure within athletes will aid in more successful training and mentorship for coaches, parents, and others who support athletes as they grow and evolve. Athletes cope with failure in a variety of ways, and coping styles and strategies can dictate how an athlete will respond to failure situations.

The PFAI was analyzed to identify players' levels and dimensions of their fear of failure. Generally speaking, the female athletes in this study indicated their fear of experiencing shame and embarrassment as their greatest performance failures. This was followed by the fear of upsetting important others and fear of devaluing one's self-estimate. Additionally, the fear of shame and embarrassment and fear of an uncertain future were experienced more by underclassmen than by upperclassmen. Statements within the subcategory of shame and embarrassment include: When I am not succeeding, 1) I am less valuable than when I succeed, 2) I get down on myself easily, and 3) my value decreases for some people; and When I am failing, 1) it is embarrassing if others are there to see it, 2) I believe that everyone knows I am failing, 3) I believe that my doubters feel they were right about me, 4) I worry that others think I may not be trying.

A number of researchers (Anthanas 2007, Sagar at al. 2010, Sethu 2016, Wilt 2016) have used the PFAI inventory in previous studies. Anthanas (2007) studied the fear of failure with fencers and reported that fencers' experience of precompetitive cognitive anxiety was partially dependent on individual difference in fear of failure. Sagar at al. (2010) studied the fear of failure and coping responses of adolescent male soccer players. They reported that fear of experiencing shame and embarrassment followed by the fear of an uncertain future had the highest scores of the subcategories. Subjects also stated that the fear of failure affected their sporting performance and interpersonal behavior. Further, they reported using effective coping strategies to deal with their fear of failure. Sethu (2016) researched the performance of university men and women volleyball players. He concluded that a significant difference exists between men and women volleyball players on selected performance failure appraisal such as fear of experiencing shame and embarrassment, fear of devaluing one's self-estimate, and fear of having an uncertain future. Wilt (2016) studied the fear of failure and competitive anxiety in female runners. She found a significant relationship between fear of failure and the intensity of cognitive anxiety.

ASCI refers to an athletes' ability to be open to and learn from instruction; while accepting constructive criticism without taking it personally or becoming upset (Beckford et al. 2016). Athletes in this study indicated their greatest ASCI strengths were coachability followed by confidence and achievement. The lowest strength for all athletes, and for underclassmen was freedom from worry. Inventory statements that indicated worry include 1) I worry quite a bit about what others think about my performance, 2) I put a lot of pressure on myself by worrying about how I will perform, 3) While competing, I worry about making mistakes or failing to come through, and 4) I think about and imagine what will happen if I fail or screw up.

Numerous researchers have used the ASCI inventory when studying athlete coping and sport performance. For example, Tara et al. (2018) studied coping skills related to archery performance, Jones (2011) studied mental toughness of intercollegiate athletes, Kimbrough et al. (2008) studied collegiate baseball in an attempt to predict performance, Bila and Hillman (2021) studied anxiety and confidence in short-passing in collegiate soccer, and Beckford et al. (2016) studied mental toughness and coping in male sprinters.

From these studies, and others, it has been suggested that to achieve success, certain psychological skills, principally confidence and achievement motivation, concentration, and coping with pressure during competition, are necessary (Tara et al. 2018); that significant relationships were found between mental toughness and coping strategies for the athletes (Romanova 2021); that anxiety levels seemed to affect athletes of lower skill level more than higher skilled athletes and that high self-confidence enhances performance and has a positive effect on athletes' thoughts, feelings, and behaviors (Bila and Hillman 2021); that elite compared to sub-elite sprinters had a higher ACSI score, that both groups noted coachability as their strongest asset and freedom from worry as their weakest coping asset (Beckford et al. 2016); and that with youth athletes, males scored higher on all subcategories and overall than did females (Gábor et al. 2009).

It is difficult to extrapolate findings from previous research to this current study in that there are many noted differences in age of athletes, skill level of athletes, country where the data was collected, and type of sport studied. Bedi et al. (2020) work perhaps comes closest to this current study in that the population was strictly female and included university level athletes. In that study it was found that university level female athletes listed coachability as their greatest coping strength and fear of freedom of worry as their weakest coping strength. That was the same as this current study. In fact, the overall ACSI for the athletes in both studies varied by only 0.3 points.

Four athletes were interviewed, two of them (athletes #1 and 2) scored higher on the two inventories and two (athletes #3 and 4) scored on the lower end of the inventories. That being said, two of them (3 and 4) had a greater fear of failure than the other two and had overall weaker coping skills. Athletes in this study responded similarly to those reported by Haglind (2004) when describing how they cope with failure. For example, they analyze what happened, turn away negative thoughts, discuss things with other people, realize that failure is just a part of the circle, and utilize their social connections.

All four of the athletes' found value is completing the inventories and learning of their responses. Athlete #2 said, "I would definitely say that having athletes recognize how they cope with failure and with success is very important. Asking 18 – 21-year old's to be self-aware of what's going on is a very hard thing. What are some things I cope with? What are some things that help me? I think it was very important to hear."

Implications for Athletes

Research has suggested that self-compassion may be helpful to athletes in order to manage failures within competitions. Athletes are held to the highest standards when they fail to meet the standards of performance levels, and often endure the consequences of failing to meet expectations that are set just as high. Mental failure is common for athletes, the criticism and consequences that athletes experience when they fail, combined with the pressures of expectations to be "mentally tough" in the face of challenges make experiencing and coping with failure challenging for athletes (Ceccarelli et al. 2019).

The stress that athletes encounter when feeling failure becomes compounded and exaggerated by their tendencies to respond to failure with negative reactions of self-criticism and judgment. These types of reactions take a physical and mental toll on an athlete and can negatively impact one's moving forward. Self-compassion has been positively associated with the ability to accept, tolerate, and experience negative emotions rather than avoid or suppress those feelings. Self-compassion has also been negatively associated with avoidance, thought suppression, and rumination which can have deteriorating effects on our psychological systems (Ceccarelli et al. 2019). Being able to give personal grace can help tremendously in the recovery process of returning to a high level of performance.

Self-forgiveness is a frequently constructive approach to coping with competitive performance failure in a manner that promotes self- development and well-being (Cowden and Worthington 2019). Athletes are often at least partially responsible for failing to meet their performance expectations and acknowledgement of such is key to genuine self-forgiveness. Genuine self-forgiveness – falling between self-punishment and self-exonerations - acknowledges an athlete's role in the sport failure (Cowden and Worthington 2019). Taking personal accountability is a way to take ownership within the coping process. By accepting appropriate responsibility for their role in competitive performance failures, athletes expose their weaknesses and admit their mistakes. This acknowledgement can be an emotionally uncomfortable experience. By stepping into this role and taking responsibility, athletes increase the likelihood of adaptively using the information associated with the failure to determine and embrace areas in which they can technically, strategically, or psychologically improve (Cowden and Worthington 2019). It looks like taking a step back, owning the fault, and applying that fault to provide guidance into the future. When used consistently, self-forgiveness can be a tool to unlock individual learning and growth in the skill of the learning athlete.

Self-compassion and self-forgiveness go hand in hand with how athletes can treat their mental state instead of bringing more negativity into the space of failure. How do athletes learn these skills? There is very little research on the training of self-compassion or self-forgiveness in sport and how the use of these skills impact athlete's responses to failure. Supplying athletes with a set of skills or actions that can be directly applied to help foster learning these skills will positively impact their response time to failure, and their mental perception on the experience of failing. This is critical to understanding the failure response and recovery of athletes and how the process can be positively affected and improved for future stressful or failure prone situations.

Implications for Coaches

Research on athletes, stressors, and coping styles is vast and extensive. On the other side, coaches and their stress management and coping reactions have very little research to compare and contrast. Relatively little is understood about the factors that might contribute to the coping strategies adopted by coaches (Laborde et al. 2017). Usually, coaches are used to understanding the athletes' coping

process and their influence on how the athlete handles stress, or when coaches are asked about how well the athlete is able to cope with stress.

In this study, the findings shed light on differences of athletes and their coping strategies. In further research, coaches should be studied in their own category, as the strategies from athletes may not be a true fit for the coaches' strategies of coping. In comparison to athletes, the main coping responses that coaches exhibit include mastery (controlling the situation and eliminating the stressor), internal regulation (managing internal stress responses), and goal withdrawal (ceasing efforts towards goal attainment) (Laborde et al. 2017). Personality is a base indicator of how a coach will respond (Berger 2013). Similar to athletes, the coping responses and strategies of coaches are on an individual basis and can look different from person to person (Olusoga et al. 2010).

Coaches also have the maturity to evaluate their stressors and think about how it will affect their players as well as themselves. Some research has shown that coaches use techniques to alleviate stress that athletes do not use. Structured planning, rationalization, self-talk, using proactive behaviors, and relaxation are some of the techniques that coaches use (Olusoga et al. 2010). Coaches should look to pass these skills on to the athletes they work with and help teach them to cope in stressful situations. Coaches seem to be more aware, from previous experience, of situations that could warrant a negative stress response, and actively take steps to reduce the possibility of the situations occurring, or for a coach to become overwhelmed (Olusoga et al. 2010). How do coaches foster the growth and awareness that they use on themselves in stressful situations to help their athletes build habits and grow with their coping responses to stress and high-pressure situations? More research is necessary to connect coaches and athletes' responses to stress and how they are related.

Conclusions

Being able to actively and effectively cope, whether it is approach or avoidance style coping, calls for athletes to be versed in how to react to stressors and failure. Having a failure response plan can effectively speed up the coping process and in turn, create a better opportunity for optimum performance. Clarification is necessary to determine whether approach and avoidance coping styles are a function of a person's thoughts, emotions, and sensations relating to an internal stimulus, or if it reflects external input that has common situational characteristics (Anshel 1996). Anshel's continued study explores the nature of flipping between both coping styles. Anshel showed that coping style is one component of a person's response to acute stress. Each stressor was proven to be independent of each other. Clearly, some stressors appear to be more predictive of coping style than others, suggesting that coping style is partly a function of specific, stressful situations (Anshel 1996).

Research where studies examine the planned strategic responses to failure have yet to be discussed or largely studied and provide room for growth in the topic of failure responses. Being able to give athletes a tool kit or blueprint that can

be put into practice immediately as the failure or stressful situation occurs advances how athletes respond to failure and the pace at which an athlete can return to optimum performance. Researching if athletes who have a failure response plan in relation to how other athletes, who may not have a failure response plan, and the differences between return to performance or overcoming failure, advances the field of mental sports preparation. Another area of growth is comparison of gender, race, and socio-economic backgrounds and how these factors affect an athlete's response to failure and how a failure response plan may or may not benefit the return to optimum performance levels within competition.

More research is necessary on how athletes successfully respond to failure in order to further support struggling athletes. Whether or not athletes and coaches have a plan of action when failure strikes are also worthy of research in order to understand the mental roadblocks in athletes and how they can improve their individual responses to failure in their futures and how their coping styles can be used for success.

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