HOW ELITE ROWERS COPE WITH COMPETITIVE PRESSURE AND EXPECTATIONS TO PERFORM

U.S. NATIONAL TEAM ROWING SUMMARY REPORT
For COACHES and ATHLETES

A USOC Sport Science & Technology Grant Project

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Introduction
The purpose of the study was to better understand the coping strategies used by elite level rowers before and during high pressure competitive events, as well as lessons learned from their experiences. Participants were 25 rowers (10 female and 15 male) that were candidates for the US Olympic and/or National 2000 Rowing Teams, 15 rowers were from the Princeton Training Center and 10 were training independently. All of the rowers participated in an in-depth interview in which they discussed two scenarios, their most and least effective coping experience during elite level training.

From this research, the “Coping-Excellence Model” was developed which is presented below. The model illustrates the key elements that are most strongly related to the rower’s ability to cope effectively with competitive pressure – and thereby optimize performance. After discussing the model the “Points to Consider” for both coaches and rowers will follow. From the interview data, the athletes identified psychological areas that can both help and got in the way of coping effectively with competitive pressure. The “Points to Consider” are ways in which rowers can be helped to learn to cope more effectively with competitive pressure. Finally a brief overview of how the research was conducted and specific results from the interview data will conclude the report.

The Coping-Excellence Model of Elite Rowing
The Coping-Excellence Model includes three interactive dimensions: intrinsic motivation, “Habit of Excellence” continuum, and extrinsic motivation. The dynamic interaction between these factors helps the rower, at all levels of development, do their best when competing. Coping will be briefly discussed and followed by a description and recommendations about how to help the rower enhance each dimension of the model for themselves in their effort to learn how to effectively cope with competitive pressure.

THE COPING-EXCELLENCE MODEL OF ELITE ROWING

[Diagram of the Coping-Excellence Model]

High Extrinsic Motivation
(Medals; Winning; Making Teams; Social Status)

Intrinsic Motivation

Effectively Cope

Novice

In-effectively Cope

Habit of Excellence

High Extrinsic Motivation
(Medals; Winning; Making Teams; Social Status)
Coping can mean a range of adaptive and maladaptive thoughts, feelings and behaviors to a stressful situation. Effective coping means the rower did their best given the constraints of the challenge. Therefore effective coping can result in either winning or losing – but necessarily includes the athlete knowing that they performed to the best of the abilities given the unique factors of time and place. In the current study, effectively coping with competitive pressure was not always related to winning. Effective coping was a function of the athletes perceiving that they handled a challenging experience to the best of their abilities.

Extrinsic Motivation serves as the framework to this model. Extrinsic motivation is represented by the desire or the intention to achieve external success, which is represented by winning races or medals, making teams and achieving related social status, such as receiving a coach’s praise. This type of motivation must be in place to help the rower push themselves through the hard times in both practice and competition. In the current study, all of the rowers experienced high levels of extrinsic motivation – which tends to be consistently high for elite rowers. However developing extrinsic motivation may be an area to be fostered for the novice rower. Essentially aspiring toward accomplishing clear outcome goals (improving erg scores, winning races) helps rowers push through when they don’t feel like it. Athletes can be asked to focus on why they would want to achieve external success and how it would feel. Within this “frame-work” of wanting to do well, there are two ways that the rower can more successfully cope with competitive pressure.

The Habit of Excellence continuum addresses the rower’s current level of thinking, feeling and rowing skills that are “automatic” (habituated) for racing or full-pressure situations. Habits are the way that one learns to respond automatically – which can both be helpful or harmful to performance. Habits are developed over time. The way that the rower can move along the continuum of a novice to a habit of excellence response, when competing, is to aspire to be consistent in training: The habits developed in practice and competition are strongly related to how the athlete performs when under pressure. Rowers race the way that they practice. The rower must challenge themselves every day in both practice and racing. In addition rowers that are willing to learn from practice and competition and apply, in small increments, new insight and information tend to develop better racing habits. The rower’s most practiced, dominant response will surface when the athlete is under pressure to perform.

And of equal importance, rowers that maintain higher levels of intrinsic motivation perform better when under pressure. Intrinsic motivation is the innate desire to do something well and to be in control of that process, in which the athlete accepts their limitations and draws on support of others to help achieve their goal. An athlete with high levels of intrinsic motivation is able to focus on how they can improve fitness, strength, technique and rhythm – in practice and racing – versus worrying about what others think of their performance. Those with high levels of intrinsic motivation, when racing, focus on the factors over which they have control – such as setting a good rhythm and being relaxed – which tends to be strongly related to optimizing performance when under pressure. To enhance the rower’s level of intrinsic motivation, they can be encouraged to write down or think about why they most enjoy(ed) rowing (e.g. when they started), why it is fulfilling to improve/achieve mastery over self, be honest with themselves about where they are (fitness, technique, strength) while working toward their goals and to seek out help from others, such as coaches and team mates, in their effort to improve.
7-Points for COACHES to Consider When “Mentally” Preparing Athletes to Race

Points Highlighted by Rowers during Interviews

1. Positive Social Support
Support and encouragement from coaches, team mates, and family is related to better performance when under pressure to perform.

2. Worry (mental anxiety)
When athletes worry excessively about race outcome and compare themselves to their competitors — (fear and/or dread racing) they tend to perform worse.

3. Determination
When athletes are determined to do as well as they can — regardless of race results — they tend to race well.

4. Physiological Nervousness
Some athletes have trouble with pre-race physiological excitement (excessive butterflies/shaking limbs)

5. Use of “Mental” Skills
Mental preparation for racing — including imagery (of race), clear race plan, and saying positive, constructive self-statements — are strongly related to racing well.

6. Belief that They are Stuck
Some athletes noted not knowing how to improve — their ineffective coping experiences were unsettling primarily because they didn’t know what areas to focus on to make it different for the next high pressure event.

7. “Just-Pull-Hard” Race Plans
Race plans to “just pull as hard as I can” are not most effective.

Suggestions for COACHES

Create Supportive Environment
Constructively criticize the behavior not the athlete. Give sincere, specific feedback and foster supportive team environment.

Focus on “Controllable” Factors
Encourage athletes to focus on factors over which they have control such as creating rhythm, intensity and following during racing (versus worrying about others and results).

Focus on Opportunities of Racing
Encourage athletes to race for pride and positive self-challenge. (versus racing out of fear of failure).

Channel Energy for Racing
Help athletes see that this is a sign of readiness and that they can learn to channel this energy, from negative to positive to enhance speed/power.

Encourage use of “Mental” Skills
Encourage athletes to have clear race plan — and learn about and practice mental skills such as imagery and constructive “self-talk”, e.g. “I want to race.”, “I can do it!”.

Give 100% and Learn
Encourage athletes to give 100% on a daily basis. Top elite rowers emphasize the importance of giving 100% focus each race and practice - and are willing to learn from the experience (which helps them develop the habit of excellence over time.)

Focus on Efficient Use of Power
Encourage athletes to pair putting-it-all-on-the-line (physically) with technically efficient rowing.
7-Points for ATHLETES to Consider When “Mentally” Preparing to Race

Points Highlighted by Rowers during Interviews

1. Importance of Enjoyment
Athletes that enjoy the challenge of training and racing perform better, more consistently — especially when under pressure to do so.

2. Just-Do-It Attitude
Racing with a “just-do-it” fearless mind-set, without worry about race results, is most strongly related to both optimizing performance and coping well in make-or-break racing situations.

3. Efficient Rowing
Athletes report that when, in practice and racing, they consistently focus on both being efficient in the boat and pulling hard that this becomes habituated/automatic for racing.

4. Out-of-Control
Feelings of being out-of-control during racing are strongly related with poor performance.

5. Present, determined Focus
Athletes that are willing to accept all potential race results - win or lose - are able to focus on rising to the challenge and doing their best.

6. Learn and Improve
The top-elite rowers are willing to learn from their experiences — they are willing to progressively get better.

7. Use of Mental Skills
The top-elite rowers use mental skills — such as visualization (of racing), goal setting, and change thoughts of doubt or worry to positive constructive thoughts.

Suggestions for ATHLETES

— Emphasize Racing for YOUR Satisfaction
Maintain the importance of racing well and choosing to do so for YOUR reasons, for YOUR sense of personal fulfillment.

— Focus on the Moment-to-Moment
To race well focus on the moment-to-moment during racing. If you start worrying about the “what-ifs”, then quickly refocus on what you are doing in that moment. Know that you matter, regardless of results.

— Develop the Habit of Excellence
Develop the habit of excellence during practice by learning how to “pull hard” and pairing these efforts with rowing as well as possible during every practice.

— Focus on Factors you CAN control
Focus on the things that you can control — such as technique, improving rhythm, following, and sticking to the race plan.

— Accept YOUR best — and GIVE it!
Remind yourself that doing the best you can is all that you or anyone can expect from you — and then give your best every practice and race.

— You can Learn and Improve — every day!
Be willing to learn from all your training and racing experiences — consistently consider how you can improve (and acknowledge what you have done well!)

— Use Mental Skills
Integrate the mental skills into your daily training program (even for just a few minutes per day).
OVERVIEW OF THE RESEARCH: METHODOLOGY AND FINDINGS

The study design used interviews to learn more about how the elite rower copes with competitive pressure. In the interviews the athletes discussed two scenarios in elite rowing, one in which they most and one in which they least effectively coped with competitive pressure. Coping strategies and responses were divided into three time periods (before, during and after) for each coping experience (most and least effective). A majority of the coping experiences were related to racing – “seat” racing for national team selection or competing at the World Championship and/or Olympic Games. From 274-pages of interviews, themes and categories of shared experiences were generated. These are listed below. The numbers in parenthesis behind each category label represent the number of rowers, out of the 25 participants, who stated examples of that category. It is important to note that effectively coping with competitive pressure was not necessarily always related to winning. Effectively coping was a function of the athlete perceiving that they handled a challenging experience to the best of their abilities.

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EXPLANATION OF CATEGORY LABELS

The following are the categories based on groupings of themes, statements or phrases that represent important shared ideas or experiences from the interviews. The lists are based on the most and least effective coping experiences of the elite rowers. The categories are presented in descending order of number of responses in each category. The numbers in brackets represent the number of rowers who reported use of each strategy.

It is important to note that effectively coping with competitive pressure was not necessarily always related to winning. Effectively coping was a function of the athlete perceiving that they handled a challenging experience to the best of their abilities.

MOST EFFECTIVE COPING SCENARIOS

Before Competition (Most Effective Coping)

1. Just-Do-It Mind Set (20) In this mind set the athletes were both internally motivated to do the best that they could for their personal internal motives and, at once, motivated to achieve external success on the race course. Prior to and during racing the athletes were not focused on the outcome of the race. They were focused in the present: they were determined and resolved to do as well as possible, regardless of the challenge. Examples include:
   ➢ "I wasn't thinking so much of 'I have to do this' or 'I'm going to'. I was just thinking I'm just gonna do what is on my plate."
   ➢ "I had convinced myself that I just had to go out there and do it."

2. Positive Perception of Pressure: Challenge/Pride (16) Of the athletes that reported experiencing pressure during their most effective coping scenario, there was a clear, shared sense of their interpreting the pressure as positive. They had a high level of expectations for themselves and were determined to take something away from the race for themselves. Examples include:
   ➢ "I felt pressure that I put on myself, of 3 years of trying to win the same race and finally we had a chance to do it."
   ➢ "(The pressure was) mostly from myself because I really wanted it to go well, I wanted to see all the work pay off ... I wanted to be able to say, yep, I told you I was going to pull that and that is what I pulled."

3. Effective Pre-Race Preparation (15) The athletes reported that mentally planning and rehearsing, thinking through and discussing race plan was present, as well as planning how to respond to various scenarios that could unfold before and throughout the race. Examples include:
   ➢ "We had practiced it a million times, and we had talked over a million times different scenarios."
   ➢ "We went over, over and over and over, and then before the race on the pre-race and that I knew that I would be hearing these things, to re-emphasize my mental set was going to be as regards to how I was going to feel at a certain point and what my focus was going to be."

4. Positive Social Support (15) Many of the athletes reported receiving positive social support. The support was generally in the form of either receiving encouragement from team mates,
positive feedback from coaches or simply having friends and family present during competition. Examples include:

> "It became more of a collective movement toward what we wanted to do."
> "I definitely remember around 1250 (meter mark) some of my friends ... cheering for me and I definitely used it, that was a really good time to hear it."

5. **Effective Use of Mental Skills (12)** The athletes reported using imagery to prepare for racing. Some used imagery consistently throughout the training year whereas others used visualization with less consistency and forethought. Goal setting, deep breathing, writing in journals, and meditation were other mental skills also reported. Examples include:

> "What I like to do before a race is to see every single stroke and every single aspect. And I usually get to 500 meters, maybe 750 meters, and a distraction comes and I go away. And then I have to come back and start all over again. And that takes a good 15 minutes, half hour, to be able to do a whole race straight through, I end up doing it twice."
> "Visualization ... going over in my mind, over and over again, how the race was going to go down was going to be pretty helpful for me."

6. **Belief in Abilities (10)** Many of the athletes reported high levels of confidence regarding their ability to perform (high self-efficacy) prior to performance. The reasons for their heightened sense of belief was primarily attributed to faith in their preparation of racing and/or having a history of performing well during important competition. Examples include:

> "We were ready to jump out of our skin but we were smiling, we were so confident about how we had prepared for it."
> "I just expect myself to win and I don’t put pressure on myself to win it in the 1st ten strokes or when a boat gets down, that doesn’t affect my thinking ... I just figure we will win by the time it is over."

7. **Planning Technical-Physical Efficiency (8)** Athletes reported the importance of planning to be relaxed, consistent and efficient during their upcoming races. Many of the athletes noted that only focusing on pulling harder to enhance boat speed is ineffective. There was agreement that the application of full pressure (effort) must be habituated and perceived as automatic in competition. A few of the athletes noted the importance of focusing on their own technical flaws/areas to work on during competition. Examples include:

> "I just conserve as much energy as possible, stay totally relaxed, don’t change your technique or anything like that. Stay consistent. Just attack, that is it."
> "You want to make it as painless as possible, as long as possible. Everything happens the last 500 meters. So you want to get to the point of the 1500 pretty much with all your faculties still going, and really coherent. It is almost like a rhythm game going out."

8. **Effectively Re-Channel/Use Doubt (6)** About 25% of the participants noted that self-doubt occurred prior to the scenario related to most effectively coping with competitive pressure. The athletes were able to consciously re-channel their doubt into a constructive perspective prior to racing. An example:

> "I just try to collect my thoughts the night before and remind myself why I am doing it, remind myself that it is a tense situation but it is what I have chosen to do. There is a fight or flight kind of thing. And to me it comes in the sense of, ‘Am I ready for this? Did I do all of
the training?" That is kind of my flight. Maybe I need another day.....I try to calm all of those thoughts that start to creep in unconsciously. And I remind myself that I have done everything that I should so there is nothing to worry about.

9. Individual Optimal Arousal (N/A) The arousal (excitement/intensity) level related to optimally coping with competitive pressure greatly varied (from high to low). Nine of the athletes reported feeling either relaxed or relatively more relaxed than usual, and in contrast, four of the participants noted being anxious or having feelings of dread. Examples include:

- "I think I felt nervous, I felt jumpy."
- "I had no emotion, I can honestly say, before the events I won."

During Competition (Most Effective Coping)

1. Technical-Physical Efficiency (23) The athletes consistently reported the need to focus on efficiency during performance, they used terms such as “conserving energy”, “staying relaxed”, “finding good rhythm”, and “focusing on technique” to describe their efforts to row with technical and physical efficiency. Examples include:

- "I just conserve as much energy as possible, stay totally relaxed, don’t change your technique or anything like that. Stay consistent. Just attack, that is it."
- "I try and blind my focus, submerge myself into the technical side of things. Keeping my body as relaxed as possible on the recovery and preparation and blade work and stuff like that and let the pulling hard just sort of happen by itself."

2. Focus on Process (20) The athletes reported directing their attention toward efforts over which they have control, which was primarily an internal focus. They emphasized a process (non-product) oriented focus, meaning they were focusing on rowing well versus constantly worrying/thinking about the outcome of the race. Examples include:

- "It’s like I put a bubble around me while I am sitting there and all I can think is like the map I had written out the day before. I just follow the map, stay on the map."
- "I went stroke for stroke, just trying to just better each stroke."

3. Auto-Pilot (14) The athletes reported being concurrently extremely focused and mindless. Many in this category reported feeling literally machine-like or robotic when performing. Examples include:

- "It was so pre-programmed that during the actual test I wasn’t really thinking about it at all ... I didn’t think about it I just kind of went through it."
- "I just went out and kind of raced it like a machine. There wasn’t anything. Obviously I had to push myself but there wasn’t any unexpected things that I had to think of during the race."

4. Executed Race Plan – Internal (10) Following the race plan was reported as important, which required a consistent, internal focus with minimal focus on competitors. Examples include:

- "This is what I'm supposed to be doing. I'm doing it."
- "I felt very confident at that point, that I had him, that I could hold him off and then I did exactly what I had planned to do."
5. Rise to the Challenge (10) This category was represented by experiences in which the athletes came from behind or were faced with a particularly challenging race. They reported being very determined to optimize their performance. Examples include:
  ➢ "I was just determined not to give up my position."
  ➢ "It really wasn't holding on to it, but going after it!"

6. In-Control (8) A majority of the athletes that did not experience Auto-Pilot during competition reported feeling In-Control of their race. Examples include:
  ➢ "It totally felt great and I felt like I was in control. I was sitting up and letting it go."
  ➢ "I had that kind of control during the race which was an excellent way to focus throughout the race. We weren't worrying about racing, we were just worried about, ok, let's just maintain our speed. Nobody else can go this fast."

"Lessons-Learned" after Competition (Most Effective Coping)

1. Internal Positive Focus (5) The most commonly reported lessons learned from the effective coping scenario were maintaining an internal positive focus during both training and competition. The athletes learned to focus on factors over which they had control and to do so constructively, while necessarily minimizing the focus of self-comparison to competitors. Examples include:
  ➢ "Just having had the experience of seeing a lot of different rowers and knowing that it just pretty much comes down to what I do in a boat."
  ➢ "I think that you have to enjoy doing it ... when I did my best I enjoyed everything about it. I enjoyed the training, I enjoyed the racing. I always thought that I wanted to keep doing it forever."

2. Value of Experience (4) Though only a few athletes specifically addressed the contribution of experience to their ability to perform, the interview data is replete with examples of the value of experience. Over time the athletes reported becoming more adept at handling unexpected challenges and pressure of competition. In all but one of the interviews the least effective coping experience occurred early in each athlete's elite rowing career.

3. Consistently Give 100%/ Relentlessness (2) Two athletes acknowledged the necessity of giving full attention and effort in their daily training in the effort to ultimately optimize performance. An example:
  ➢ "I don't want to leave any margin for a thought of what if. So you just cover all of your bases all of the time, and you do that little extra to ensure that you are not thinking, you know, on that day when we had 2 minute pieces and I didn't really go for it on my last one, what if I had? Would I have had it? It influences my training and my mental focus, the grip with which I hold onto the goal of going again."

4. Smart Rowing (2) This lesson learned is related to rowing technically, mentally and physically efficiently. The athletes that did specifically address this concept used the words "mindless" and "smartly". An example includes:
  ➢ "You learn best by mimicking people. You go find the best people in the world, "X" and "Y", you row like them and you are going to win."
LEAST EFFECTIVE COPING SCENARIOS

All athletes were able to recall and discuss an experience that they could categorize as a least effective coping experience in their elite rowing career. A majority of these experiences occurred in the beginning of each athlete's elite rowing career. All scenarios were reported as poor or sub-optimal performances.

Before Competition (Least Effective Coping)

1. High Expectations: Excessive Outcome Focus (20) The athletes reported an extreme number of instances which included focus on hoping, worrying about or fearing what the outcome would be in an upcoming competition. Examples include:
   ➢ "It was a tough one because I was expecting to do very well. And I had been told by the coaches that they were planning on me doing very well and this was just a formality."
   ➢ "I was expecting a lot. I was really thinking that based on our performance earlier and how our rows had felt I was expecting to win, unequivocally. I was thinking that we were going to win."

2. Ineffective Preparation (16) Most of the athletes acknowledged that some aspect of their preparation for racing or performance was inadequate. The areas included: lack of mental/emotional preparation, lack of experience, having no or a poor race plan, and not being physically prepared, including under- and over-training. Examples include:
   ➢ "On race day we are just going to go crazy down the course and win and we didn’t."
   ➢ "We didn’t think about how to prepare or how to channel all these nervous feelings."

3. Negative Thoughts (13) Negative intra-personal (within the individual) thoughts and statements were evenly distributed between dreading actually racing and/or competing, feeling lack of control over the subsequent outcome, and in a negative light the athletes comparing themselves to others or past performances. Examples include:
   ➢ "What if I didn’t make it, were the thoughts that kept going through my head. And those are the thoughts that I dwelled on."
   ➢ "This isn’t what is supposed to happen, this isn’t how I pictured it, I don’t know what to do!"
   ➢ "This feels like it is part of a night mare that is starting to roll."

4. Negative Social Feedback (11) Predominately this category included team mates that were either not supportive or verbally fighting with one another. There were a few examples of the presence of family at competition as problematic as well as receiving negative feedback from coaches.
   ➢ "We didn’t get along ... we were screaming at each other."
   ➢ "A lot of nobody gives a shit (referring to teammates and coaches)."

5. Detrimental Anxiety (11) When experiencing the detrimental anxiety the participants reported excessive idiosyncratic levels of anxiety. Many athletes stated that they felt unusually anxious. Examples include:
   ➢ "I felt like this impending sense of doom."
   ➢ "Every race was just a dread and fear exercise... we went out in the heat and I was very nervous."
   ➢ "I remember at the start just really being ready to jump out of my skin."
6. Drive to Make-up for Past Performance (7) Excessive pressure to win was reported by the athletes. Specifically there was an excessive focus on outcome because the athlete believed that if they were successful they could redeem themselves from prior disappointing performances. Examples include:
- "I was trying to redeem myself ... for my performance over the last couple of summers."
- "I wanted to make up for what had happened."
- "I got to do it right!... I couldn't do it right because I was so freaked out."

7. Low confidence (6) Six of the twenty five participants specifically acknowledged experiencing low levels of confidence. Examples include:
- "I went into it intimidated and without confidence."
- "I don't think I was confident that I would be able to finish the piece, 100%."

During Competition (Least Effective Coping)

1. Lack of Control (23) Lack of control was overwhelmingly the most common experience during the least effective coping scenario. The athletes reported feeling powerless over their ability to make changes in how they were rowing and thereby the power and/or speed generated. Examples include:
- "I was in the middle of a piece and every little thing was getting worse and I started panicking ... I felt totally out of control and couldn't get that back."
- "Something was unfolding that I didn't have control over and I didn't really know how to change it. And I just felt really powerless to change what was happening and it was a super ultra frustrating feeling."

2. Resignation (13) Over half of the participants acknowledged that at some point during racing that resignation occurred. Though continuing to physically race, they acknowledged mentally giving up or acceding the race to their competitors. Examples include:
- "I was thinking it is over for me now and I can just go home and not have to worry about this anymore rather than trying to fight through it to the end."
- "Once we were down it was just kind of like, we are done, whatever."

3. Technical-Physical Inefficiency (10) The athletes reported trying to force the rhythm or rate rather than allowing themselves to relax into their habituated rowing pattern. Others unsuccessfully just tried to pull harder to redeem their poor performance. Examples include:
- "I'd finish out the stroke and I'd really try to hurry to get back up to the catch for the second one because I knew I had to be at a high rating."
- "The only thing that we knew to do was go reckless abandon down the course. And that didn't really work."

4. Negative Thoughts: Doubt (8) The negative thoughts and doubt were consistently related to the athletes feeling unable to meet their performance expectations. Examples include:
- "No, this can't be happening. We have to get ahead!"
- "Once we went down the first time and I saw how close it was I started to get very nervous and probably doubt what was happening - or doubt that I could do it."
5. Comparing Self to Competitors (5) Underlying much of the ineffective coping experience was an external focus on factors the athletes were at once very concerned and over which they had no control. Some specific examples include looking outside the boat at inappropriate times during racing and being excessively concerned about the race outcome.

- "I felt scattered and my head was outside of the boat too much, thinking about where we were on the course instead of just being in there and doing what we needed to do."
- "I was just so concerned about the other boat that I wasn’t thinking about how to effectively move our boat. I started to get panicked."

“Lessons-Learned” after Competition (Least Effective Coping)

1. Focus on Process (5) The importance of focusing on the process, being mentally present and focusing on factors which were within their control while competing, was the most frequently identified lesson learned. An example includes:

- "Doing it again for the same reasons I started rowing, is that I really enjoyed it and loved it ... like weight-lifting, instead of just thinking of I have 12 reps to do, just do each rep by rep and get the most out of each."

2. Experience & Belief in Abilities (5) A few athletes emphasized that time and hard practice allowed them to become more confident in their racing abilities. Other athletes noted that with experience they have learned how to fearlessly embrace the challenge of national team selection and racing. An example includes:

- “In order to do well that you have to practice. You have to put time in. You can’t just expect to do well. Put the time, put the miles in – for rowing – You just have to put yourself in different race situations so that you can feel confident that it is not just a glimmer of hope that you can pull it off. “

3. Taking Responsibility (4) Athletes emphasized learning the lesson to take responsibility for themselves, and not to rely on the coach or others. Often this was related to the athlete being initially overly dependent on the coaching staff or teammates for success.

- "You can’t blame it on anyone else except yourself."
- "We became extremely autonomous and independent."

4. Fearless Racing (4) Some of the athletes noted that they learned the importance of racing fearlessly. They learned this from being overly anxious or doubting their abilities prior to and during the least effective coping scenario. They reported adopting a more aggressive, more resolved attitude toward competing. An example includes:

- “So it just reminded me that you can do a heck of a lot in the last quarter and, you know, don’t be afraid to go out and just gut it.”

CONCLUSION

There were some similarities between the most effective ("good") and least effective ("bad") coping experiences. In both types of scenarios athletes tended to have high levels of arousal (excitement or nervousness/anxiety) prior to competition. All athletes also shared a high level of motivation to achieve success. However how the athletes mentally prepared for and approached racing greatly varied which was demonstrated in their emotions, thoughts and
behaviors. It is noteworthy that a majority of the least effective coping experiences occurred within the first year of elite level training.

Prior to competing the most significant difference in the athletes’ experiences showed up in their mind-set and thought patterns. Before the bad races the athletes were excessively worried about how they would compare to their competitors and about the race outcome. In essence many actually dreaded having to race. They also had a low levels of perceived control over their ability to perform. In addition having no or negative feedback from team mates or coaches was reported. In contrast, the good races were characterized by a constructive mind-set in which the athletes believed in their abilities and focused on factors over which they had control. Prior to these races the athletes were determined and resolved to be successful. If they perceived pressure to perform, it was interpreted as a motivator - a challenge that they were determined to meet. Athletes reported careful race planning and rehearsal, receiving social support from team mates, coaches and family and using mental skills, such as imagery and goal setting.

During the bad performances almost all participants talked about feeling a lack of control over their ability to perform well and when performance began to rapidly and unexpectedly decline, both technically and physically, there was a perceived inability to do anything about it. Many athletes noted at some point in the competition that they resigned themselves — mentally gave up. In this time period the athletes reported having many negative self-thoughts. In comparison, during the good performances the athletes reported a high level of internal focus. They were exclusively thinking about how to row efficiently, relaxed and with good rhythm. They noted that being aggressive and pulling hard was necessary but not effective as a singular strategy. Pulling-hard was most effective when it was a previously habituated response.

The lessons learned after, from both good and bad, indicated the importance of three factors in the effort to learn to effectively cope with competitive pressure. First, athletes had to be highly motivated - to achieve objectively measured success - and to optimize speed in the boat. Second, it was critical to build habits of excellence over time such as intensity and quality of daily practice. And third, it was key to maintain a high value for personal “enjoyment” and balance, as represented by training and competing because it was personally satisfying. Those with higher levels of personal “enjoyment” and balance (intrinsic motivation) were able to more consistently maintain attention on factors over which they could control, which allowed them to ultimately more frequently optimize performance when coping with high levels of competitive pressure.

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