CYAN MOON CREW
PREPARATION FOR THE
SYDNEY TO HOBART YACHT
RACE
MARCH 2023
FEDERATION UNIVERSITY
COLLABORATIVE EVALUATION & RESEARCH GROUP

SUPPORTING INNOVATIVE RESEARCH AND EVALUATION

CYAN MOON CREW PREPARATION FOR THE SYDNEY TO HOBART YACHT RACE

PROJECT EVALUATION

APRIL 2023
ACKNOWLEDGEMENTS

The Collaborative Evaluation and Research Group (CERG) Federation University Gippsland, acknowledges Aboriginal and Torres Strait Islander people as the traditional owners and custodians of the land, sea and nations and pay our respect to elders, past, present and emerging. The CERG further acknowledges our commitment to working respectfully to honour their ongoing cultural and spiritual connections to this country.

The CERG would like to acknowledge the Latrobe Health Innovation Zone (LHIZ) for funding the development of the CERG and for its ongoing support.

The CERG would like to thank the Advanced People Systems Inc for their support and contribution to the activity of the evaluation to inform the Cyan Crew’s preparation for the Sydney to Hobart Yacht Race. The meticulous preparation and consideration of The Skipper Seaward, Skipper of the Cyan Moon, has ensured the most robust evaluation of the Crew’s preparation could be undertaken. The CERG would also like to thank the 10 Crew members of the Cyan Moon, whose enthusiasm to participate in both the evaluation and the race was inspiring to all.

ABOUT THE AUTHOR

The Collaborative Evaluation and Research Group (CERG) Federation University Gippsland is an innovative initiative that aims to build evaluation capacity and expertise within Gippsland. As a local provider the CERG understands the value of listening to the community and has the ability to deliver timely and sustainable evaluations that are tailored to the needs of a wide variety of organisations.

Professor Joanne Porter is the Director of the CERG. Joanne has led a number of successful research projects and evaluations in conjunction with local industry partners. She has guided the development of the CERG since its formation in 2018.

The team that evaluated the Cyan Moon Crew’s preparation for the Sydney to Hobart Yacht Race Project included:

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Racing in the Sydney to Hobart Yacht Race is a momentous achievement for any competitive sailor, being one of the most famous yacht races in the world. A gruelling and often deadly race, the Sydney to Hobart is fraught with dangerous weather conditions, physical and mental demands of crew and managing the boat in order to cross the finish line.

The Collaborative Evaluation and Research Group (CERG) at Federation University were commissioned to explore the racing journey and preparation of the Cyan Moon Crew, a boat participating in the Sydney to Hobart Yacht race. Built upon respect, trust and a focus on empowerment of individuals and the team, the Cyan Moon undertook the race with 10 Crew aboard. The CERG followed the journeys of the crew members as they prepared for the race, gathering quantitative and qualitative data in the form of surveys and interviews with Crew, exploring their technical, tactical, physical, psychological and safety preparation leading up to and post completion if the race.

Data collection was undertaken from October – January 2022/23. In addition, a comprehensive literature review was undertaken to inform the project. To the authors knowledge, the review was the first of its kind exploring competitive sailors’ experiences preparing for racing events. A new fifth co-active athlete preparation domain; safety was introduced, a key factor for consideration when individuals and teams are preparing for competitive events.

The Cyan Moon Crew won their Performance Based Handicap System (PHS) division, an incredible achievement made more prestigious by the fierce competition they contended with. Instrumental in their victory was the rigorous efforts of the Skipper and Crew to build a positive and respectful culture amongst the team. Preparing for the race took a several months and included training and building the crew and ensuring the boat was compliance ready. Report findings suggest that the rigorous training and preparation of the crew and the Cyan Moon assisted in them achieving a positive race outcome.

1.2 KEY FINDINGS AND IMPLICATIONS

Preparation for the Sydney to Hobart Yacht race was achieved through several key trainings, culture building exercises, personal preparation, safety and compliance on both a personal and team level.

Developing the team was the primary goal for the Cyan Moon Skipper, who had a strong focus on culture and the importance of building a respectful and resilient Crew. The Crew were guided by the “PACE” framework developed by the Skipper; Practice, Acknowledgement, Courage and Endurance. The Crew were provided with a number of papers written by the Skipper, who has had a celebrated career in team and culture building. Documents such as “High Level Overview – Cyan Moon 2022”, “High Performance”, “Race Fitness 11th – 12th”, “Safety at Sea”, “The Zone” and “When Does the Race Start?” provided the Crew with an understanding of expectations, roles, safety and preparation. Other documentation such as the Notice of Race, boat checklists and other regulatory documentation were provided to Crew to ensure adequate preparation could be achieved. Crew feedback for these documents were positive, outlining that the team and capacity building was “about creating a safe place. A respectful safe working environment”: 
“I’ve developed a lot more confidence, I believe, in my own skills and abilities because where I sit on the Crew as far as experience goes, I’m kind of a mid-range, which generally on other boats I’ve been sort of one of the least skilled persons on board, but now I’m actually gaining my confidence. And So, that’s part of being in Cyan Moon.”

Crew members gave an outline of the preparation they did prior to the race to ensure they felt ready for the technical, tactical, physical and psychological components of athlete readiness. For some, it was ensuring they went to the gym, built physical and technical capacity during the months before the race. For others, it was mentally preparing themselves for the unknown, the weather, the tactical requirement and being part of the team. The Crew discussed the importance to “immerse yourself” in the lead up to the race, being on the boat and becoming more familiar with the equipment they were going to be required to handle. Evidence of the training seemed apparent to the crew as they approached the Sydney to Hobart Yacht Race:

“It was rewarding that the training and the planning and the conversations of the 10 months sunk in and worked. People did their role. People supported each other when they were tired.”

The pre- and post-race surveys yielded evidence that suggests that the individuals Crew’s levels of resilience, stress and burnout were varied. The Cyan Crew began their race preparation with a higher level of resilience, which was maintained or improved post-race. This was a promising finding, potentially suggesting that the training, culture and team capacity for resilience was fostered throughout training and maintained during the Sydney to Hobart Yacht Race. It appears that Crew members gained resilience post the race, predicting that the experiences and knowledge gained during the event may have increased their levels of resilience. More evidence is required to understand if this increased level of resilience was maintained in the months prior to the race, or whether it was a transient increase.

Crew identified that having a mixed gender balance amongst the team was a positive experience. Female crew members voiced feeling heard and understood by their male teammates, empowered to explore advanced roles within the boat’s functions. Male crew mates identified that they grew personally within their collaboration with female crew mates, receiving feedback that they were a supportive and understanding teammate. These outcomes may encourage women to join and thrive within the male dominated sport of sailing, knowing that their contribution is validated and encouraged. Perceived stress scores were unremarkable between the represented genders, with both male and female crew members reporting a higher level of perceived stress both pre- and post-race. All five participants having either equal or increased resilience scores from the first pre-race survey to the post-race survey.

Exploration of survey responses immediately prior to the Sydney to Hobart Yacht Race assisted in gaining a sense of how the Crew were feeling heading into the competition. This “pre-competition phase” for athletes is an essential component to their preparation as ideally, they feel renewed and have minimal mental and physical fatigue, but have maximised their preparation from a technical, tactical, physical and psychological perspective. For the Cyan Crew to have indicated that there was an absence of burnout and a presence of availability and capacity to care about teammates during their preparation for the race is ideal from a personal and team perspective.

When the Crew were asked what they had learnt about themselves as an individual and as a team sportsperson, they had become aware of their own capacity. Some Crew realised they may have gone
beyond what they were technically able to perform in difficult conditions, while others were now keen to “helm in high seas” with newfound confidence and competence:

“Absolutely I am not the same person I was that started on this journey last year and I think that’s for the better. It can make it harder to live a normal life, but it can also make you appreciate things as well. I’m much more in the moment this year already than I was last year... I was part of something special and, you’re able to lean on those memories and that achievement and to help you get through any sort of love times, which is really cool.”

Crew responses to interviews demonstrated that “I am not indestructible”. Survey responses showed that although 60% of Crew members experiences a marked decrease in their perceived stress, an increase in post-race stress levels was identified in 40% of the crew. Additionally, 40% of Crew members experienced an increase in their burnout scores post-race. Two weeks pre-race, burnout was lowest and team connectedness was at its highest, suggesting that the increase in perceived stress and burnout post-race may have been affected by the intense requirements of the race. When addressing the impacts of individual and team preparation on race outcomes both personally and professionally, an absence of burnout and a presence of availability and capacity to care about teammates during preparation suggests that the “pre-competition phase” of athlete preparation was achieved and resulted in positive race outcomes.

Findings of this report demonstrate that several outcomes have been achieved both personally and professionally, within the race and beyond the finish line. Despite challenging conditions and the breaking of vital equipment on the boat, the Cyan Moon Crew were able to achieve a divisional win, demonstrating that their personal and professional preparation was of an exceptional standard.

1.3 KEY RECOMMENDATIONS

1. Adequate preparation of compliance documentation is essential for positive race outcomes.
   a. Strict adherence to compliance documentation by all Crew ensures that each member understands their personal and professional race requirements.
   b. Timely submission of compliance documentation to governing bodies reduces barriers in effective training schedules and ability to compete in the Sydney to Hobart Yacht Race.

2. A focus on wholistic safety is required to ensure all Crew cross the finish line maintaining their personal and professional wellbeing.
   a. Monitoring of a physical safety such as injury management, ultraviolet exposure and adherence to first aid training ensures Crew remain well and thriving during race preparation and competition.
   b. Maintenance of safety protocols regarding equipment, role, disaster, and weather management is essential to ensure all Crew are able to respond appropriately in adverse events.

3. Holistic tactical and technical skill building is required to ensure all Crew know their role within the team
   a. Providing training programs periodically throughout the Crews’ race preparation specific to their role manages expectations of self and others.
   b. Skill acquisition and understanding of Crew mates’ roles provides additional support amongst the team in problem solving or disaster scenarios.
4. Defining and fostering a positive Crew culture of teamwork, safety and empowerment ensures Crew members can thrive personally and professionally.
   a. Creating a safe and positive environment for Crew to voice concerns and suggestions ensures psychological wellbeing is maintained.
   b. Providing a supportive culture ensures Crew are empowered to step outside of their comfort zone within appropriate environments and gain additional professional skills.

5. Additional research is required to gain a more robust understanding of sailing crews’ preparation for competitive events
   a. Further exploration of the impacts of mixed gendered crews is required to understand the personal and team resilience, stress and burnout levels, and how these influence race outcomes.
   b. Achieving a larger sample size may provide more reliable and replicable research outcomes able to be utilised by crews looking to compete in competitive sailing events.
   c. Following the Cyan Moon crew in a second Sydney to Hobart Yacht Race may allow for validation of initial results.
Building the most resilient and capable Crew was the number one priority for the Skipper, ensuring that each member felt valued, understood and had the technical skills to sail the Cyan Moon to her full capacity. The Skipper developed a number of training documentation & built capacity of the Crew through positive culture. Survey results indicate increased resilience, decreased stress, decreased burnout of the crew before and after the race.

“I’ve developed a lot more confidence, I believe, in my own skills and abilities... that’s part of being in Cyan Moon”

“I’m not particularly driven by the podium result but results to me are all about, did we do safety, did we sail the boat as well as we could and is everybody’s happy and safe.”

“I am not the same person I was that started on this journey last year and I think that’s for the better... I was part of something special and, you’re able to lean on those memories and that achievement and to help you get through any sort of low times, which is really cool.”

“Apart from sailing, it was just an unbelievable experience to see that with the dolphins, and then also the boom breaking, seeing how the team went through the process of analysing the situation and fixing it and going on. Those two things were just, yeah, pretty standout.”

“It was rewarding that the training and the planning and the conversations of the 10 months sunk in and worked. People did their role. People supported each other when they were tired.”
2. INTRODUCTION: CYAN MOON IN THE SYDNEY TO HOBART YACHT RACE

2.1 INTRODUCTION

Racing in the Sydney to Hobart Yacht Race is a momentous achievement for any competitive sailor, being one of the most famous yacht races in the world. A gruelling and often deadly race, the Sydney to Hobart is fraught with dangerous weather conditions, physical and mental demands of crew and managing the boat in order to cross the finish line.

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2.2 THE SYDNEY TO HOBART YACHT RACE

Commencing each year on the 26th of December at the firing of a canon, the Sydney to Hobart Yacht Race is an iconic sporting moment for Australia. Hosted by the Cruising Yacht Club of Australia in conjunction with the Royal Yacht Club of Tasmania, the race was first undertaken in 1945 and is of international significance. Sailing boats from all around the globe attend the 628 nautical mile race from Sydney’s Botany Bay to Hobart’s Constitution Dock.

Open ocean racing is a dangerous sport, with extreme weather events, waves from 6 to 40 foot tall and winds from 15 to 50 knots. One of the most gruelling elements of the race is crossing Bass Strait between Victoria and Tasmania. When shallow seas, opposing currents and southerly winds meet in the Strait, there is possibility for extreme conditions which historically have resulted in sailor deaths. The 1998 Sydney to Hobart Yacht Race saw six sailors die during an extreme weather event, with many others retiring from the race or requiring rescue.

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In today’s race, boats sail for an average of between 2 to 5 days, dependant on weather and the boats’ capacity and size. Although often won by the super-maxi 100ft yachts, smaller boats are able to race to their full capacity under various divisions, incorporating size, speed and performance. For the 2022 race, there was a number of Australian local crews, as well as international crews from China, Germany and New Caledonia. A total of 109 boats entered the race, with 100 crossing the finish line, some unable to finish the race due to damage.

![Figure 1: Cyan Moon racing line in the Sydney to Hobart Yacht](image)

### 2.3 THE CYAN MOON

The Cyan Moon is a Beneteau Oceanis 473, reaching 47ft in length. First developed in the early 2000s, the boat is renowned for its speed and agility in the water. The comfort of the boat was a highlight for owners and sailing Crew alike, with ample space above and below deck.

With blue sails and a blue hull, the Cyan Moon got its “Cyan” name from its physical appearance. Discussions continued amongst the owning family about naming the boat, who had a strong vision and mission within their sailing and professional lives, encouraging equity and empowering others to contribute. An American Indian proverb had guided the family in their professional careers, a story that highlighted living in harmony with other people and nature, making room for others and creating a space were all voices are heard. The story of the wolf encourages people to pause and reflect; “Who speaks for wolf?"
2.4 TRAINING AND PREPARATION OF THE CREW

Building the most resilient and capable Crew was the number one priority for the Skipper, ensuring that each member felt valued, understood and had the technical skills to sail the Cyan Moon to her full capacity. Training began in early 2022, with a number of Crew participating in training races in Northern Queensland, trailing and testing their technical, tactical, physical and psychological preparation. The Skipper was transparent with the training Crew, informing them that open communication about strengths and weaknesses would take place to get the best out of the boat, Crew and race training. The Skipper developed a number of training documentation, built capacity of the Crew through positive culture all whilst preparing the boat for the Sydney to Hobart yacht race. To ensure crew were equipped with the information they needed to understand the inner workings of the boat, the Crew were provided with documentation created by the Skipper such as “High Level Overview – Cyan Moon 2022”, “High Performance”, “Race Fitness 11th – 12th”, “Safety at Sea”, “The Zone” and “When Does the Race Start?”. These documents discussed mindset, values and how to protect oneself and the team whilst at sea. Other documentation such as the Notice of Race, boat checklists and other regulatory documentation developed by the Australian Government and organisers of the Sydney to Hobart outlining rules and regulations were provided to Crew to ensure adequate preparation could be achieved.

During the last months of training leading into December, the final 10 Crew were selected. This Crew were a mix of both men and women, a vital factor for the Skipper when forming the team. They were adamant that having a mixed gendered Crew would encourage and empower individuals within their personal and professional sailing careers, whilst creating a harmonious relationship built on trust and respect whilst sailing as a team.
Unforeseen challenges arose in the final week’s pre-race, with the requirement of filling a team position needing to be undertaken on short notice. Although this meant that the new Crew member did not have a deep understanding of the culture and expectations built within the last 10 months of training, they were skilled and ready to step up to the position. The final 10 Crew members were of various experience levels, some had raced a Sydney to Hobart Yacht Race before, whilst others had never raced on the open ocean. The opportunity to build personal capacity and professional sailing careers was highlighted as important for the Crew, with desires to not only finish the race but to be able to learn and grow as a team in challenging circumstances.

2.5 COMPLIANCE READY

The Skipper paid close attention to the policy and specific safety requirements, having to qualify the boat in order to race in the Sydney to Hobart Yacht Race.

Figure 3: Cyan Moon compliance and qualification process model
The Cyan Moon racing in the 2022 Sydney to Hobart Yacht Race
3 THE EVALUATION

3.1 AIM OF THE EVALUATION

The aim of the evaluation was to investigate and analyse the preparation of the Cyan Moon sailing Crew. Findings from this evaluation may assist in the preparation of future Crew’s wanting to participate in the Sydney to Hobart Yacht Race.

3.2 EVALUATION RESEARCH QUESTIONS

The evaluation of the Cyan Moon Crew’s preparation for the Sydney to Hobart Yacht Race addressed the following research questions:

1. What is involved in the individual and team preparation of the Cyan Moon Crew as they prepared for the Sydney to Hobart Yacht Race?
2. What impact does individual and team preparation have on the outcomes of the race both personally and professionally?

3.3 DATA COLLECTION / TOOLS USED

The evaluation of the project utilised a variety of data collection tools in a mixed methods approach which provided information about process, outcomes, and impact. Quantitative and qualitative data was collected via pre and post-race surveys of Crew members and interviews with each Crew members individually pre and post-race.

See Section 8 for Evaluation Methodology
4. EVALUATION FINDINGS

4.1 CREW PRE- AND POST-RACE SURVEY

Each member of the Cyan Moon Crew was asked to complete one survey each month leading up to the Sydney to Hobart Yacht Race to gain an understanding of their psychological capacity and wellbeing at each stage of their race preparation. The survey questions utilised three psychological wellbeing scales: the Brief Resilience Scale (BRS), The Perceived Stress Scale (PSS) and the Shirom-Melamed Burnout Questionnaire (SMBQ).

Post-race, the Crew were asked to complete the same survey again to gain an understanding on how they were feeling since finishing the race and arriving home to their lives and workplaces.

**Results**

The pre-race questionnaire was completed a total of three times leading up to the race, in October, November and December 2022. Of the 10 Crew who were asked to complete the surveys, not all were able to complete them each month of their preparation. During the 10 months of preparation, a number of Crew left the team through a variety of reasons, including personal, self-selection and Skipper selection of inability to continue in the race training.

The post-race questionnaire was completed just once, with Crew completing the survey within January 2023. Eight Crew members completed the survey post-race.

A total of five Crew completed all the supplied surveys, which was a 50% response rate over the four surveys distributed. The greatest compliance was with the 2nd survey administered in November. An individual analysis of the five crew members that completed each of the surveys was undertaken.

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Table 1: Compliance with survey completion
Demographics

Crew members who completed the surveys were aged between 31 – 70+ years of age, with a mix of both male and female Crew members. A total of five participants completed all surveys, with three males and two females represented from the Crew. There were no notable differences in scores for each of the psychological testing scales identified between the male and female Crew members.

Pre-Race

Crew concerns pre-race

The Cyan Crew were asked what their biggest concerns were at the time of completing each survey both pre- and post-race. Pre-race, the Crews’ biggest concerns were surrounding the weather, particularly “heavy weather” and “La Nina” weather events. The next greatest concerns were around being “prepared” and various training that was associated with the preparedness. Crew had external concerns that may have impacted their feelings towards their race preparation, including “family” wellbeing and external “work” that the Crew was still engaged in as they trained for the Sydney to Hobart Yacht Race.

Figure 5: Cyan Crew concerns pre-race
**Crew excitement pre-race**

When the Crew were asked about what they were most excited about pre-race, many were excited by both the “start line” and “finish line”. Simply being a part of the prestigious race and enjoying the race “atmosphere” was something Crew were keen to experience. Many were excited to compete with the Crew that had been selected, and to take part in training races leading up to the Sydney to Hobart.

![Figure 6: Cyan Crew excitement pre-race](image)

**Crew concerns post-race**

The Crew were asked again what their concerns were post-finishing the Sydney to Hobart Yacht Race, and words most frequently used were “none”, “nothing” and “no concerns”, along with concerns around family and friends’ health and wellbeing. “Excitement” and “momentum” were also expressed from the Cyan Moon Crew, hoping to keep the sailing energy high both personally and within the team.
Crew excitements post-race

When asked post-race about their excitements, the crew had varied responses. The Crew mentioned “winning” their “division”, “sailing” again and spending time with family and friends. Many were looking towards the “future” of their sailing careers and love for the sport, while others were grateful for being part of an “adventure” of a lifetime.

Brief Resilience Scale (BRS)

Within the pre- and post-race surveys, the Cyan Crew were asked a series of questions relating to their levels of resilience, or the ability to bounce back or recover from stress. Resilience was measured using The Brief Resilience Scale\(^2\), which is a five-point Likert Scale designed to assess the perceived ability to recover from stress. To interpret scores, 1.00-2.99 = Low resilience; 3.00-4.30 = Normal resilience; 4.31-5.00 = High resilience.

![Brief Resilience Scale Graph]

Table 2: Cyan Crew BRS scores

All Crew members entered their training already within a “normal” resilience level, scoring greater than 3.50. Participant 1 began training with a markedly higher level of resilience compared to the other Crew mates, scoring >5.00 from training outset. Participant 5 had a marked increase from “normal” to “high” resilience from the beginning of training to post-race, with all five participants having either equal or increased resilience scores from the first pre-race survey to the post-race survey (P1=5.17 to 5.33, P2=4.17 to 4.83, P3=4.00 to 4.00, P4=3.80 to 5.00, P5=3.67 to 5.00). Participant 4 appeared to have a marked increase in resilience scores from “normal” to “high” as training and race preparation persisted, with the resilience score remaining “high” post-race. Gender did not appear to impact resilience scores amongst the Crew.

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**The Perceived Stress Scale (PSS)**

A secondary psychological measurement included in the Crew survey was The Perceived Stress Scale\(^3\): A five-point Likert Scale that measures levels of personal stress. The questions within this scale are concerned with feelings and thoughts during the past month. A score of 0-13 would be considered “low perceived stress”, a score of 14-26 would be considered “moderate perceived stress” and a scores ranging from 27-40 would be “high perceived stress”.

![Perceived Stress Scale](image)

**Table 3: Cyan Crew PSS scores**

When exploring the Crew members stress, survey data suggested that participants 2, 4 and 5 perceived to have low stress across all surveys. Perceived stress was marginally higher pre-race (\(P2=8, P4=4, P5=6\)), with scores falling to their lowest value post-race for these three participants (\(P2=1, P4=1, P5=0\)). Perceived stress scores were unremarkable between the represented genders, with both male (participant 3) and female (participant 1) crew members reporting a higher level of perceived stress both pre- and post-race. Both participant 1 and 3 commenced training with “moderate perceived stress” (\(P1=16, P3=15\)), which decreased during pre-race survey two and three, increasing again post-race (\(P1=16, P3=16\)).

All Crew members commenced and completed their training within a “low” to “moderate” perceived stress level. No Crew members reported “high perceived stress” during any phase of preparation or post-race.

**Shirom-Melamed Burnout Questionnaire (SMBQ)**

The Shirom-Melamed Burnout Questionnaire (SMBQ)\(^4\) is a 14 item 7-point Likert Scale measure that attempts to capture the respondents’ perceptions of their physical fatigue (tiredness and low energy),

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emotional exhaustion (lack of energy to display empathy) and cognitive weariness (reduced mental agility). Questions elicit responses from “never or almost never” to “always or almost always”, with a higher score indicating a greater degree of burnout.

Table 4: Cyan Crew SMBQ scores

Responses from the October surveys (pre-race 1) suggested that all Cyan crew members experienced a “low” to “moderate” degree of burnout at the commencement of pre-race surveys. From the October to November survey, participant 4 displayed an increase of 129% in their perceived burnout (n=17 to 39). This was the greatest increase in perceived burnout across all surveys. This score decreased significantly post-race (n=16). There was an observed increase in the perceived burnout in participants 1 and 3 from the December (pre-race 3) to the post-race survey (P1= 42% increase, P3 45% increase. This corresponds to the increase in perceived stress amongst participants 1 and 3 at the same time points.

Discussion

From the pre- and post-race surveys, evidence suggests that the individuals Crew’s levels of resilience, stress and burnout were varied. The Cyan Crew began their race preparation with a higher level of resilience, which was maintained or improved post-race. This is a promising finding, potentially suggesting that the training, culture, and team capacity for resilience was fostered throughout training and maintained during the Sydney to Hobart Yacht Race. It appears that Crew members gained resilience post the race, predicting that the experiences and knowledge gained during the event may have increased their levels of resilience. More evidence is required to understand if this increased level of resilience was maintained in the months prior to the race, or whether it was a transient increase.

An interesting outcome of Crew perceived stress was gained in survey responses, with 40% of Crew that completed all four surveys experiencing an increase in their stress levels post-race. A total of 60% of the Crew had a marked decrease in their perceived stress post-race, which was reflected in the extended response answers to post-race concerns, with 40% stating that they had no concerns. Crew
scores in the SMBQ survey appear to mirror the outcomes of the PSS, with 40% of Crew experiencing an increase in burnout post-race. Without additional questioning as to the reasons for the increased stress and burnout post-race, it is not possible to ascertain the causes for the increase in scores. Potential causes may have been personal and professional concerns unrelated to the Sydney to Hobart Yacht Race.

Exploration of survey responses immediately prior to the Sydney to Hobart Yacht Race assisted in gaining a sense of how the Crew were feeling heading into the competition. This “pre-competition phase” for athletes is an essential component to their preparation as ideally, they feel renewed and have minimal mental and physical fatigue, but have maximised their preparation from a technical, tactical, physical, and psychological perspective. For the Cyan Crew to have indicated that there was an absence of burnout and a presence of availability and capacity to care about teammates during their preparation for the race is ideal from a personal and team perspective.

Findings from this survey suggest that additional research is required to gain a deeper understanding of the individual and team perspectives of resilience, stress and burnout during training and post competitive events. More evidence is required to understand if gender plays a significant role in the resilience, stress, and burnout levels of competitive athletes prior to and post-competition, with survey results demonstrating no notable differences.
4.2 THEMATIC ANALYSIS OF INTERVIEWS WITH CREW MEMBERS – PRE-RACE

INTRODUCTION

A thematic analysis was conducted of interviews of 10 Crew members of the Cyan Moon. The interviews were transcribed verbatim and analysed using Braun and Clarke’s 6-step thematic analysis technique. Two major themes were extracted from the data, described within eight minor themes as shown in Figure 7. Quotes from participants have been provided to support the themes. All quotes have been de-identified to maintain the confidentiality of interviewees.

Figure 7: Thematic Analysis Themes – Pre-race

Theme 1: The Right Stuff

The Cyan Moon Crew described a number of key elements to their pre-race preparation that they believed put them in good stead leading into the iconic Sydney to Hobart Yacht Race. When discussing their personal and team preparation for the race, the Crew spoke of their personal motivations, praise of the gender balance, their improvements in competence and subsequent confidence, teamwork, and the building of a positive Crew culture as components to their success.

Subtheme 1.1: Personal motivations

When asked about their reason for wanting to participate in the Sydney to Hobart Yacht Race as an extreme sportsperson, Crew members weren’t concerned with the result of the race, but rather the journey to getting there:

“*I’m not particularly driven by the podium result but results to me are all about, did we do safety, did we sail the boat as well as we could and is everybody’s happy and safe.*”

- Personal Motivations
- Gender Balance
- Gaining Competence and Confidence
- Importance of Teamwork
- Creating a Positive Crew Culture

FOCUS ON SAFETY

- Individual Preparation
- Managing Stress & Fatigue
- Preparing For The Unexpected
Despite the risks associated with the sport of injury, drowning and mental and physical fatigue, it was often this adrenaline rush that motivated the Crew to take part:

“It’s interesting. I think it makes it the Everest of sailing. In Everest, a lot of people die, so people want to do it. The Sydney to Hobart is the same.”

To discover more about oneself, to “be challenged a little and pushed out of boundaries and discover new limits” was a key draw card to participate in the race. For some Crew, this was their first-time racing in the Sydney to Hobart, while for others, yacht racing and sailing was their main employment. Regardless of experience level, the Crew acknowledged the impact of sailing in this great race:

“You don’t come back to real life. You are just changed forever. And you’d have new aspiration. I think you’ve pushed yourself because it’s something where you push yourself a lot, you discover a lot about yourself.”

Subtheme 1.2: Gender balance

The Cyan Moon Crew spoke about their current and past experiences with gender balance within the sport of sailing. Many acknowledged the often-toxic nature of the male dominated sport, reflecting on previous Crews they had been involved with:

“I wasn’t allowed to touch anything, do anything, just stay behind and observe. And that’s really degrading. And I know for a fact if I was a man and go for the first time to sail on that yacht, I would have been given a job.”

Several Crew members spoke on reasons why the sport was dominated mainly by men, citing strength and “bad experiences” (P9) as deterrents for women in the sport. The Cyan Moon Crew also acknowledged that their past experiences on female only boats had their challenges, with their Skipper The Skipper’s approach of 50/50 male and female Crew as “very complimentary”.

“I’ve always supported ladies being on boat. And I found that by having ladies on a boat, they respect the role that they’ve been given more than the men who just think they should have it.”

Subtheme 1.3: Gaining competence and confidence

Being a part of the Cyan Moon Crew gave the sailors the agency to learn technical and tactical skills with experienced teammates leading in the Sydney to Hobart Yacht Race. Although challenging, the opportunity for team training gave Crew members the opportunity to hone skills pre-race:

“I’ve developed a lot more confidence, I believe, in my own skills and abilities because where I sit on the Crew as far as experience goes, I’m kind of a mid-range, which generally on other boats I’ve been sort of one of the least skilled persons on board, but now I’m actually gaining my confidence. And So, that’s part of being in Cyan Moon.”

Experiences Crew members were able to provide a “training program” that helped with identifying “leakages” in personal and team performance. This training helped less experiences Crew gain confidence in their skills within a controlled environment:
“It’s a big, steep learning curve. I’m on the learning curve, I’m just like a sponge absorbing all this stuff that’s going on. And the chatter between the Crew in terms of, “Oh could we do that? How did we do that?” That sort of stuff, having the conversations to see how we could do things better, or safer or quicker, is the things that I really enjoy.”

For some Crew, seeing their teammates “grow” personally and professionally during training pre-race was “particularly satisfying”, considering that these skills may help them cross the finish line together.

**Subtheme 1.4: Importance of teamwork**

The Cyan Moon Crew reflected pre-race on what teamwork meant to them and how they viewed their responsibilities as part of a larger group:

“Teamwork is doing your role for an aim of something where you all contribute to doing that purpose, whether it’s work or sailing or anything else. It’s tackling problems on personalities and things like that, or the difficulties of the task and working it out together.”

Being able to “step in and help” and “supporting other people” was key for the Crew when developing trust amongst one another. The race being a “shared endeavor” motivated the Crew to be competitive, while still enjoying all facets of the race and their roles:

“It doesn’t matter what role, whether it be a navigator or up on the foredeck you need to trust the other person because you’re only a part of a machine, in essence. You’re doing a part, but usually you’re not doing it alone”.

Through this teamwork and collaborative nature of the ten Crew members, the foundations for a positive Crew culture were fostered. Each Crew member could see their individual role, whilst also being aware of how they came together as a team to complete the race.

**Subtheme 1.5: Creating a positive Crew culture**

An extremely important element to the development of the Cyan Moon Crew was the development of a positive Crew culture. Crew spoke of the work of The Skipper and how they “loved his vision of the project and the culture he was trying to bring and commit to actually do the whole Sydney to Hobart.”.

Selecting the right Crew members who were both fit to perform their role but also be collaborative and supportive in their approach was essential to the Skipper. Crew reflected on this recruitment process, which the Skipper was transparent about from the beginning of training:

“We go through quite a few people to make sure that it’s harmonious Crew and that, when you step off the boat, you are brotherhood or sisterhood. You’re not just Crew. So, we always sail as we’re a family and we’re successful in that regard because we actually do quite well up against similar boats and professional Crews...”

A number of documents were created by the Skipper to help guide the Crew in this process of “building the energy, building the culture [and] building the passion for the race”. This capacity and team building was “about creating a safe place. A respectful safe working environment.”. Through building this safe and positive culture, the team collectively become stronger.
“The Crew camaraderie, the sense of family, things like that are not things that I’ve ever experienced before. It was really magical.”

With good leadership came positive results for all involved in the race preparation. There was a great deal of respect from the Crew for the work that The Skipper had put in to developing the team personally and professionally:

“[the Skipper] has a very long history in building high-performing teams and coaching people at a high level, so it was like being facilitated by a professional in the field. So quite easy to build the team with that kind of instruction.”

By beginning the race preparation with an emphasis on culture, teamwork and confidence in oneself personally and professionally, the Crew could then focus their attentions on the technical and tactical components of their preparation, with a focus on safety at the forefront.

Theme 2: Focus on Safety

As the Sydney to Hobart Yacht Race approached, the Cyan Moon Crew discussed their experiences towards their own individual and team preparation for the event. It was clear that personal and team safety was paramount for all Crew members, who knew in times of stress, fatigue and extreme weather, they would be required to dig deep and deliver safe and appropriate skills for their team to cross the finish line.

Subtheme 2.1: Individual preparation

While the Crew were building teamwork and a positive culture collaboratively, they were also preparing themselves physically and mentally for the upcoming race. This preparation included going to the gym and managing fears:

“I physically, I go to the gym three times a week and make sure I left plenty of weight so. Yeah. that’s definitely part of it for endurance.”

“So, to prepare for it is just mentally just get your head around. There is a certain amount of fear, but I’m not a fearful of it.”

For some Crew members, this was their first Sydney to Hobart Yacht Race. The element of the unknown was present, not sure what to expect from themselves and from the natural elements while out at sea. For others that had done the race before, they could provide some reassurance and experience on what to expect during the race:

“I guess the biggest challenge I found and what I should have shared with people who haven’t done it, but there are a few people who haven’t done this Sydney to Hobart is you’ve got to manage yourself, you’ve got to manage your body and There are, you know, like seasickness is a real thing and it can basically take people out.”

When preparing for the technical aspects of the race, Crew members were keen to familiarise themselves as much as possible with the Cyan Moon. Getting the “gear prepared” along with themselves was key to success:
“I’ll get on the boat a day or two before just live on the boat for a couple of days, immerse yourself and get it ready.”

Subtheme 2.2: Managing stress & fatigue

The Crew had a strong focus on individual and team safety as they prepared for the race. Those who had done the race before knew the conditions they may face, and what they needed to prepare for:

“If you’re out there and it’s bucketing down with rain and it’s blowing a gale you get cold, you’re wet, you can’t be out there for very long. And fatigue management is actually one of the most important things on a yacht. The yacht will take care of itself, most of the time. It’s actually about managing fatigue, which is the most important thing for safety.”

When approaching the race, the Crew highlighted how important it was that they looked out for each other during difficult moments. When approaching this as a team “[the Crew] are trusting you and you’re trusting them to look after their safety and mental health”. Being able to act quickly under pressure was important to protect self and others:

“Whenever there is a stressful situation, you need to act quickly and being able to make sure people understand correctly what needs to be happening.”

Looking out for one another during the positive times and during the difficult moments was shared amongst Crew members, not putting oneself or others at risk during critical moments of the race was key to ensuring a safe race and improving chances of crossing the finish line:

“I think it’s just human intuition. Knowing people get really cold or they get sick, then their brain isn’t functioning, they can’t make rational decisions. You know when someone’s not quite right and they’ve got to recognise that themselves and do the right thing instead of trying to be a hero.”

The strong teammate culture was evident in the shared understanding that the Crew were in this race together. By maintaining this shared understanding of protecting one another, the Crew were able to prepare for the unexpected.

Subtheme 2.3 Preparing for the unexpected

When exploring their thoughts, feelings, and attitudes for the upcoming Sydney to Hobart Yacht Race, the Crew shared various hypothetical and lived experience scenarios that they were preparing for. Crew voiced that they had a safe space to discuss these as a team pre-race:

“We had these briefing sessions where we were also discussing what’s going to happen. Who’s going to do what. There was that time open for people who wanted to ask questions, which is really good.”

Physical distance between the Crew and the location of the Cyan Moon at times made it difficult for Crew to feel adequately prepared for the upcoming race, with some Crew wishing they had more pre-race sailing time:
“Challenging, I guess it’s the lack of regular time on the boat, so other boats they’ll probably be sailing every week together and because of the distance that we’re the Crew is all apart. We don’t get that regular interaction and the constant sort of getting to know the boat and being sort of up to date on how the boat handles and. And sort of, yeah, how the boat works really. Yeah. So that’s the challenge at the moment.”

Preparing for weather events, potential for damaged equipment and using navigation equipment most effectively was important for the Crew as they understood what could happen when they were out at sea.

“We’re dealing with nature, and it can throw all sorts of things at us, and boats break just because they do. The salt and water environment is a harsh environment and things tend to break. And then you’re also racing, so then you’re putting the equipment under stress, and that creates risks. So, all of those things combined mean there are risks associated with sailing and ocean racing in particular.”

When dealing with nature, the shared understanding of staying “in sync” was vital in protecting others from serious injury or even death. “Communicating” and knowing one’s role within the team was essential when preparing for the unexpected:

“[The Crew are] not putting us to risk downstairs because if they turned totally upside down and they can do that, the risk to the people downstairs is huge. They’re not going to get out. So again, it’s training and developing and putting procedures in place and talking about what if something happens.”

Some Crew voiced that for them, if other team members didn’t feel safe and valued during the race “that would be a fail”, with teamwork and collaboration shining through even in discussion of potential disastrous moments. By ensuring that each Crew member felt valued, understood and a part of the team allowed the Crew to prepare for the Sydney to Hobart race as best they possible could.
The Cyan Moon boat
4.3: THEMATIC ANALYSIS OF INTERVIEWS WITH CREW MEMBERS – POST-RACE

On completion of the Sydney to Hobart Yacht Race, a thematic analysis was conducted of interviews of 9 Crew members of the Cyan Moon. One Crew member declined the post-race interview. The interviews were transcribed verbatim and analysed using Braun and Clarke’s 6-step thematic analysis technique. Three major themes were extracted from the data, described within ten minor themes as shown in Figure 8. Quotes from participants have been provided to support the themes. All quotes have been de-identified to maintain the confidentiality of interviewees.

Figure 8: Thematic Analysis Themes – Post-race

**Theme 1: Setting Sail**

When the race began, it became clear to the Crew that they had the right mix of people included on the team. The Crew described what it was like leaving Botany Bay in Sydney, settling into their roles within the team and what it was like to see that teamwork in action.

**Subtheme 1.1: The Right Mix**

On reflection of the race, the Crew realised that the combination of Crew skill and personalities was a key component to their success in crossing the finish line and winning their division within the race:

“[The Skipper] had put together a team of people who had various skill sets that in combination, we had an amazing team with a real depth and breadth of experience and also depth and breadth of personalities so that we could deal with whatever came up.”

Crew were keen to share that the various skills and strengths of each Crew member made adapting to change and problem solving throughout the race possible. Discussed pre-race by the Crew, the 50/50 gender combination of males and females was highlighted as a component for success:
“I really prefer having a sort of gender equality on the boat and to have them say I’m a really supportive presence on the boat makes me feel really happy. So I guess that’s something I’ve learnt. It’s something I’m going to make sure that I’m aware of and continue to do that sort of thing, because it’s just about making sure everybody is empowered and everybody’s trusted and feels useful.”

It was this combination of skills, personalities and gender mix that encouraged the Cyan Moon Crew to the starting line, ready to take on the Sydney to Hobart as a team.

**Subtheme 1.2: Ready, Set, Go!**

Leading up to the race during the Australian Summer and festive holiday season, many felt the urge to head home early from events, “to get home and focus and go to bed early and start to prepare yourself... It’s time. It’s time to focus on the race”.

For some Crew members, they were “feeling a bit of anxiety” while others were surprised by how calm they were:

“It wasn’t as momentous as I thought when we were doing the start, I thought it would be chaos and everything. I thought I’d be nervous, but I was so relaxed. And just going through the moment I really thought it’d be something very different and it was a lot calmer than I thought it would be.”

Getting to the starting line was “electric. Absolutely electric. It’s a bit chaotic, but its also pretty exciting.” The feelings of being adequately prepared and high levels of relaxation were unnerving for some, who felt there should have been more heightened awareness as the race was commencing:

“I’m happy with people being relaxed, but I think we needed to be a bit more prepared and leaving the dock early would have made me feel more prepared for the race.”

All of the training had led the team to this point, and it was evident that they were ready to tackle this momentous race.

“It was rewarding that the training and the planning and the conversations of the 10 months sunk in and worked. People did their role. People supported each other when they were tired.”

As the Crew navigated their way out of Sydney, with “champagne sailing down the coast” that the Crew described as cool, calm and collected for the first part of the trip, it was time to make the decision as to whether they were ready for the challenge in the ocean ahead:

“The next day it was still quite hot. Lovely downwind sail, we passed ‘the point of no return’, which everybody has to agree... they want to continue.”

**Subtheme 1.3: Settling In**

As they Crew found they feet personally and as a team, they fit into their designated roles as assigned in their training, to “find our ground together as a team and on the boat”. As they navigated their roles and being amongst new teammates “[The Crew] knew what they had to do and there was no overlapping and no, not too much ego getting into it.”

Finding their feet was not without its challenges, Crew changes were made late into preparation due to unforeseen circumstances, with some Crew not having a great deal of time to train together before the big race. This process was refined in the early days of the race, as everyone found their groove:
“There was a bit of grumpiness I guess, everyone sort of just getting used to each other on the second day. But you know that teams are being built that way and communication styles and sort of how they communication is being sorted out. So that was cool to see.”

Despite challenging conditions typical of ocean sailing, the Crew felt comfortable as they navigated their new roles and new Crew mates:

“During the day when it was a whole lot of people, we were just in sync and positive. Even though I say that the seas were huge, it was blowing a gale and it was just going through the motion of our positions and everything and doing the work and yeah, that’s just what I left like, I didn’t feel like, it wasn’t stressed at all.”

For those that had never sailed an ocean race before, careful fatigue management was undertaken by Crew mates to ensure everyone was safe, comfortable and fulfilling their roles to the best of their abilities:

“For me, it was monitoring the Crew to make sure they weren’t exhausted. There were three Crew who had never done a Sydney to Hobart of an ocean race before. And so, I was monitoring them for their fatigue or their fear.”

It was within this respectful leadership and monitoring of Crew safety and ability that empowerment of Crew members was able to take place during the early stages of the race.

**Subtheme 1.4: Respectful Leadership**

Effective and respectful leadership from those who had great experience with sailing and ocean racing was key to bringing the Crew together in difficult moments. Having a level head in times of stress was important to remind Crew of how far they had come and what they still had to do:

“*We knew that we had to have a clear strategy that wasn’t the same as [the other Crews]. They had to race their boats and I could remember throughout the race saying to the Crew, ‘this is where we’re supposed to be, keep racing our race, don’t worry about them’*."

The senior leadership amongst the Crew were able to “empower people to do the work and then observe them achieve what our plan was”. In order to do this, “keeping those lines of communication open and making sure that I was able to give and receive feedback really honestly” was extremely important in achieving success.

Decision making under pressure was a key feature of this race, decisions that may impact race outcomes but my also impact the safety and wellbeing of Crew. Crew acknowledged that making these high-level decisions is never an easy process:

“*Sometimes the decisions you make turn out to be wrong, just as a result of uncertainty in the information coming out, but it’s got to be a logical process and this is where it gets interesting, because everybody’s got ideas.*”

When dealing with conflicting opinions amongst Crew members, Crew leaders highlighted that it was important that they stood up for their roles and their decisions:

“*You are very skilled, you could have my role, but I have the role and it’s my call. So you know you got to give me space.’ The most challenging part for me was dealing with these characters and [the] psychological aspect.”*
In the final stages of preparation for the Sydney to Hobart Yacht Race, changes to Crew members were required due to personal and family circumstances beyond the control of the Crew. With this late change, Crew were unable to work closely with new Crew members and create the shared culture they had already developed:

“[We] had to replace [a Crew member] very quickly with a person who only arrived on the boat two days before the Sydney to Hobart... [the new Crew member’s] approach and culture towards sailing was totally different to ours and three of the Crew plus me had to counsel [them] to calm down and to understand our boat and our culture and our values.”

Despite these challenges, the Crew were empowered to make decisions, upskill in roles they may have never attempted before, having “autonomy” and “authority” in their decision making and their race experience.

Subtheme 1.5: Teamwork in Action

“I came down with, I don’t know, it was a slight case of hypothermia, but I was not feeling that well the next shift and sort of couldn’t warm up. I sort of wrapped [myself] up in a doona down below and I slept almost right through the next shift. When I woke up, I felt a lot better, and there was a hot water bottle jammed against my back against a leak cloth, which basically made me, I think it, basically didn’t save my life or anything, but it sort of saved me as far as being able to contribute and I pulled that out and thought my God, that’s fantastic, that someone has done that for me.”

The Crew were keen to share their experiences of empowerment on the Cyan Moon, “being encouraged” to experience new roles and “being acknowledged for my skills, that was really rewarding”. Crew described being part of the Cyan Moon team as “empowering”:

“It was just an amazing feeling, to be in a team, that camaraderie that you get in a really tight knit team is something I never experienced before. That’s only deepened after the Sydney to Hobart.”

Post-race, the Crew were asked to reflect again on what teamwork mean to them. With the hindsight of the race still clear in their minds, despite the challenges and triumphs of the race, teamwork was still the number one priority for the Crew:

“It’s supporting each other and doing your best or asking for help and coping with whatever the ocean throw at you or the boat. It’s personalities, caring for someone, if they spit the dummy or someone has had enough of helming or decision making and stuff, that’s part for the course and just going on and being supportive and doing your position properly. If you see someone else struggling, jump across and quietly help them.”

“I think it’s the friendships too... It’s being part of a team and it’s really working together, if there’s an issue, one person can’t solve it, other people have to come in and help with the process and do everything. I really do enjoy that.
It was clear that teamwork and camaraderie were key elements to the success of the Cyan Moon Crew. This teamwork became essential as the race progressed, with weather, personal and group challenges arising as the Crew rode the waves of the race.

**Theme 2: Riding the Waves**

As the Cyan Moon Crew had settled into their first few days of sailing, managing the expectation of themselves and of their Crewmates became apparent. The Crew had to overcome challenges together, and described experiencing incredible moments when they took stock of the race so far.

**Subtheme 2.1: Overcoming Challenges**

The Crew were aware of how challenging a Sydney to Hobart Yacht Race could be. Contending with extreme weather, fatigue and tactical skills that require immense concentration and practice was a recipe for difficult moments:

> “The breeze went from 15 to 25 knots, or nautical miles an hour, to 40, into 50 gusting to 60, which is about 120 kilometres per hour. And the waves went from being maybe one and a half metres to up to 7 metres high, so the waves and the wind in our face were quite aggressive.”

When reflecting on the experience, the Crew recount diving over waves in the Cyan Moon that caused the boat to crash down into the ocean, “we never put the storm sails up, we kept racing.”

During these intense moments, margin for error was slim:

> “One momentary lapse of concentration and the boat got thrown into a crash dive which was pretty wild on the boom and that got thrown back gain, so I was a bit worried about that.”

It was during the wild weather and the intense degree of difficulty in helming a boat in those conditions that the worst was realised for the Crew. Immediately, they got to problem solving the issue:

> “On the morning of the third day, when we got up on watch, we were informed that the goose neck which holds the boom to the mast has broken overnight because they had quite a few accidental jibes. They had started to work on it when we got up on deck and then we just watched a few of the fore deck Crew strap the boom to the mast and use whatever they had to hold it fast so that we could continue racing.”

During these tense moments, the Crew had to decide whether to fix the boat and continue or retire from the race. Similar concerns had been realised by Crew in other boats, who had subsequently pulled out. The Crew of Cyan Moon recall the Skipper saying, “we’re finishing this no matter what, even if we finish with just one sail, we’re finishing the race”, which “empowered” the Crew to dig deep, make repairs and “we’re gonna keep racing.”

**Subtheme 2.2: Managing Expectations of Self & Others**

As they Crew got further into the race, fatigue, self-doubt and exhaustion began to surface. Tensions rose between Crew and internally within individual Crew members as they described “battling my own demons”:

> “It was a gruelling four and a bit days. For some of the Crew it was absolutely exhausting. For a few of the Crew, I could see they were sitting, staring out into space as if they were exhausted. Their focus was away from their rail, so I had to watch them to make sure they weren’t totally exhausted.”
Hunger set in, with the Crew “burning through all the candy and chocolate”. Crew were quick to support one another, offering coffees to boost morale and energy amongst the team. On reflection, Crew took stock of who their teammates were on the journey, and who stepped up in challenging times:

“There is always some Crew don’t perform as well as you thought the might and there is aways some Crew that perform above what you thought they might have.”

When looking at the race and their own individual performance, some Crew came to terms with their own capacity, such as not taking as many risks in future races. For other Crew, they realised that they may have been able to support their Crew mates more in difficult moments:

“[A Crew member] had a hiccup but that could have happened to anyone, and that really affected [them] throughout the race and I didn’t realise how much it had affected [them] and I should have been more reassuring and saying yeah, good job and everything.”

Being “proud” of their achievements and not dwelling on the difficult times encouraged Crew “to forget what happened and move on with my job”. By moving on from mistakes, the Crew were able to take more moments to pause and reflect on their adventure.

**Subtheme 2.3: Being in the Moment**

During the race, Crew members were able to have experiences that many others would not have in their lifetimes. Crew described pausing and taking in the beauty of the ocean around them during the calm moments:

“For the sunset I decided to put hydrolyte in a little wine glass so I could sit there and feel like it was cocktail hour. Sunset cruise. It was beautiful. Absolutely beautiful... The sunset in the background and everybody working together it was fantastic.”

When the Crew took stock of their experiences overall as they prepared for the last leg of their voyage into Hobart, experiences of bioluminescent dolphins and seeing the team come together as one were highlights:

“Apart from sailing, it was just an unbelievable experience to see that with the dolphins, and then also the boom breaking, seeing how the team went through the process of analysing the situation and fixing it and going on. Those two things were just, yeah, pretty standout.”

It was within these moments that the Crew could pause and experience the beauty of their surroundings, before they tackled the last leg of their voyage.

“We’ve done a few sail changes and it’s about 2am I think, we’re all just sitting on the deck catching out breath, and the glow in the dark dolphins come back. They’re huge, and because of how calm the sea is, you get the full experience of the whole dolphin glowing like a mermaid tail and the bioluminescence following the wash behind them. Everyone got to experience it, and the coolest part is when you can see them lit up as they go through the water, but then they disappear and you can hear them, like you hear them breathe... I’m just so glad that everyone got to see that.”
Theme 3: Coming into Port

Arriving into Hobart was a special moment for all Crew members, who reflected on their entire experience open ocean racing in the Sydney to Hobart. The Crew described what it was like to cross the finish line, and what they had learnt about themselves along the voyage. For many, it was not about the destination, but rather the journey they had been on collectively and individually.

Subtheme 3.1: Crossing the Finish Line

During the final stages of the race, due to lack of phone signal and communication, there was Crew confusion around what position they were in the overall race standings. When the Crew were informed of their good work and their subsequent race position, spirits were lifted:

“Even though you may not think you’re doing a good job, I know you’re doing a good job and the evidence is we’re now third’ and [they] sort of sat back and said, ‘what?’ I said ‘we’re third’. And [they] jumped out of [their] bed, over the kitchen sink and ran up onto the deck, even though it wasn’t [their] watch yet.”

That moment of realisation that they were going to win their division was overwhelming for Crew mates, “the underdog has bought it home and then it’s just absolutely chaos when you get in.”. Some Crew experienced unforgettable moments as they crossed the finish line:

“[The Skipper] says, ‘right, up you go and then you get to call us across the line’. So I was able to be up the front there and call us out ‘3, 2, 1’ as we were coming across the line and its, it’ll never, never get old. It’s quite an emotional feeling. So that was, yeah, that was amazing.”

When describing crossing the finish line, there was pure elation. Joy “to see that we’re all safe, no one got hurt”, “so unbelievably delighted” to know they had the win, and “actually getting into Hobart, because it’s never a guarantee:

“Oh such elation. I couldn’t I cant really articulate it, it’s, it was an extraordinary feeling of joy and elation and happiness and you now, being proud of everyone and just getting there. It’s just amazing, indescribable. I hadn’t really experienced that before with sport.”

The Crew shared their joy in seeing the Skipper when they crossed the finish line. To see the Skipper’s joy, their family support and the momentous result they had achieved was pure joy:

“Seeing [The Skipper], seeing him achieve what he worked so hard for, and him being blown away by that.”

Subtheme 3.2: What I Learnt About Myself

There were a number of take-home messages the Crew shared on reflection of their Sydney to Hobart journey. For some, it was learning that they could “provides others with comfort as a sounding board” or learning that “I am not indestructible”. For some, it was knowing that they had committed to and completed this momentous race:

“That I can do a Sydney to Hobart... That was probably the main thing was I just didn’t know if I could do it and not get seasick or not get scared. And I wasn’t any of those. So that was a lot for me personally.”
Some Crew discovered that they could manage the boat in difficult conditions, while others were now keen to “helm in high seas”. Overall, the Crew described a deep change in who they were when they started the training and who they were when they crossed the finish line:

“Absolutely I am not the same person I was that started on this journey last year and I think that’s for the better. It can make it harder to live a normal life, but it can also make you appreciate things as well. I’m much more in the moment this year already than I was last year... I was part of something special and, you’re able to lean on those memories and that achievement and to help you get through any sort of love times, which is really cool.”

Many of the Crew were already engaged in other races or had upcoming races in their calendars to look forward to. When asked if they would do the Sydney to Hobart again, it was a resounding “absolutely”. Overall, they Cyan Crew had built a bond during their experience that may never be lost:

“Just wonderful relationships right across the board, to be perfectly honest. They’re all friends for life as far as I’m concerned, the people on Cyan.”
5. LITERATURE REVIEW SUMMARY

SAILORS’ PREPARATION FOR COMPETITIVE YACHT RACING EVENTS: A SCOPING REVIEW

The aim of this review was to investigate what is currently known about the technical, tactical, physical and psychological preparation of competitive sailors globally, and how this preparation impacts the sailors lived experiences (feelings, attitudes and perceptions) within the sport. This review followed a scoping design, using Covidence and Connected papers software to ensure a robust and rigorous review of the literature was undertaken. To the authors knowledge, this is the first review of its kind to explore the domains of athlete preparation in the sport of competitive sailing.

Key findings
A total of 34 papers were included in the final review. The studies were undertaken in 14 different countries, with representation across three continents, including Europe, Asia and Oceania. Although papers were widely distributed across the 14 countries, the most common study origin was France. Two studies were of mixed origin, while many studies outlined their participants were of varied ethnicities. The papers were divided into the four domains of athlete preparation (technical, tactical, physical and psychological), with the emergence of a fifth domain being safety. This review introduces the fifth domain as an essential component of athlete preparation in the sport of sailing, with transferability to other competitive sports. Of the 34 papers reviewed, majority fit within the physical domain (n=17), followed by psychological (n=8), technical (n=4), safety (n=3), tactical (n=1) and a combination of domains (n=1).

Discussion
Physical preparation of competitive sailors is vital to their personal and team success, with studies included exploring the nutritional status and injury prevention of sailors (Bernardi et al., 2007; Crunkhorn et al., 2022; Fearnley et al., 2012). Psychological preparation of sailors included focus on sleep, stress management and visualisation (Budnik-Przybylska et al., 2021; Hagin et al., 2012; Nieuwenhuys et al., 2008), while technical preparation focussed on muscular condition for grinding and hiking positions (Bourgois et al., 2016; Pearson et al., 2009). The tactical component of preparation explored visual search and movement behaviours whilst sailing (Pluijms et al., 2015). Lastly, a key preparation component not currently available in the four co-active model of athlete preparation was safety. This new domain explored sun exposure, temperature exposure and first aid training as key factors to consider for competitive sailors (Forbes, 2020; Gutierrez-Manzanedo et al.; Neville et al., 2010).

Conclusion
Adequate preparation of competitive sailors is imperative to ensure skilled and safe performance of their roles whilst racing at sea. By reviewing the four domains of athlete preparation and the introduction of a fifth domain of safety in the sport of competitive sailing, it may provide a structure for current and future Crew’s training and development.
References


*Note that an extended literature review has been drafted and will be submitted for publication to a research journal.*

The Cyan Moon Yacht Crew leaving Sydney Harbour on Monday
26th December 2022
6. DISCUSSION AND RECOMMENDATIONS

The discussion will focus on the two research questions that were addressed in this significant body of work to explore the Cyan Moon Crew’s preparation for the Sydney to Hobart Yacht Race.

Research Question 1:

1. What is involved in the individual and team preparation of the Cyan Moon Crew as they prepared for the Sydney to Hobart Yacht Race?

Preparation for the Sydney to Hobart Yacht race was achieved through several key trainings, culture building exercises, personal preparation, safety and compliance on both a personal and team level.

On an individual level, Crew members gave an outline of the preparation they did prior to the race to ensure they felt ready for the technical, tactical, physical and psychological components of athlete readiness. For some, it was ensuring they went to the gym, built physical and technical capacity during the months before the race. For others, it was mentally preparing themselves for the unknown, the weather, the tactical requirement and being part of the team. The Crew discussed the importance to "immerse yourself" in the lead up to the race, being on the boat and becoming more familiar with the equipment they were going to be required to handle. Evidence of the training seemed apparent to the crew as they approached the Sydney to Hobart Yacht Race:

“It was rewarding that the training and the planning and the conversations of the 10 months sunk in and worked. People did their role. People supported each other when they were tired.”

The technical and tactical preparation of Crew was achieved through their training schedule, with training races Brisbane to Hamilton Island Race and The Airlie Beach Regatta proving the opportunity for the Crew to practice, build confidence and competence:

“I’ve developed a lot more confidence, I believe, in my own skills and abilities because where I sit on the Crew as far as experience goes, I’m kind of a mid-range, which generally on other boats I’ve been sort of one of the least skilled persons on board, but now I’m actually gaining my confidence. And that’s part of being in Cyan Moon.”

Evidence from a comprehensive literature review performed suggests that safety is an additional component of athlete readiness. Although not currently recognised in the four co-active domains of athlete preparation (technical, tactical, physical and psychological), safety was a key component to the success of an athlete individually and as a team. Forbes (2020) identified that competitive sailors were lacking in first aid skills, despite the dangerous and often fatal nature of competitive sailing. Exposure to environmental dangers such as intense heat and ultraviolet rays were also identified as elements of athlete preparation to consider in competitive sailing (Gutierrez-Manzanedo et al.; Neville et al., 2010).

The Cyan Crew discussed their focus on safety in pre-race interviews, outlining that understanding the natural elements, personal and team fatigue and stress and watching out for one another as essential to them crossing the finish line safely:

“We had these briefing sessions where we were also discussing what’s going to happen. Who’s going to do what. There was that time open for people who wanted to ask questions, which is really good.”
Developing the team was the primary goal for the Cyan Moon Skipper, who had a strong focus on culture and the importance of building a respectful and resilient Crew. The Crew were guided by the “PACE” framework developed by the Skipper; Practice, Acknowledgement, Courage and Endurance. The Crew were provided with a number of papers written by the Skipper, who has had a celebrated career in team and culture building. Documents such as “High Level Overview – Cyan Moon 2022”, “High Performance”, “Race Fitness 11th – 12th”, “Safety at Sea”, “The Zone” and “When Does the Race Start?” provided the Crew with an understanding of expectations, roles, safety and preparation. Other documentation such as the Notice of Race, boat checklists and other regulatory documentation were provided to Crew to ensure adequate preparation could be achieved. Crew feedback for these documents were positive, outlining that the team and capacity building was “about creating a safe place. A respectful safe working environment”.

Perceptions of role and teamwork in building the Cyan Moon Crew were reflected pre-race when Crew outlined what teamwork meant to them and how they viewed their responsibilities as part of a larger group:

“Teamwork is doing your role for an aim of something where you all contribute to doing that purpose, whether it's work or sailing or anything else. It’s tackling problems on personalities and things like that, or the difficulties of the task and working it out together.”

When preparing for the Sydney to Hobart Yacht Race, evidence of individual and team preparation was identified in the Crew’s positive response to training, team building and compliance with all aspects of race regulation. The Crew addressed all domains of athlete preparation, which ultimately resulted in a positive race experience alongside a divisional win in the race.

Research Question 2:

2. What impact does individual and team preparation have on the outcomes of the race both personally and professionally?

Findings of this report demonstrate that several outcomes have been achieved both personally and professionally, within the race and beyond the finish line. Despite challenging conditions and the breaking of vital equipment on the boat, the Cyan Moon Crew were able to achieve a divisional win, demonstrating that their personal and professional preparation was of an exceptional standard.

When the Crew were asked what they had learnt about themselves as an individual and as a team sportsperson, they had become aware of their own capacity. Some Crew realised they may have gone beyond what they were technically able to perform in difficult conditions, while others were now keen to “helm in high seas” with newfound confidence and competence:

“Absolutely I am not the same person I was that started on this journey last year and I think that’s for the better. It can make it harder to live a normal life, but it can also make you appreciate things as well. I’m much more in the moment this year already than I was last year… I was part of something special and, you’re able to lean on those memories and that achievement and to help you get through any sort of love times, which is really cool.”

On reflection of personal and team performance, it was identified that the addition of a Crew member on short notice due to unforeseen circumstances may have impacted the performance of the crew personally and as a team. The Crew were candid in their discussion that when a team
member is added to the Crew at short notice, they did not have an adequate understanding of the Cyan Moon’s vision and mission. This further solidified that the team and culture building that had taken place in the 10 months of training prior to the race were beneficial in achieving the win:

“There is always some Crew don’t perform as well as you thought they might, and there is always some Crew that perform above what you thought they might have.”

Crew identified that having a mixed gender balance amongst the team was a positive experience. Female crew members voiced feeling heard and understood by their male teammates, empowered to explore advanced roles within the boat’s functions. Male crew mates identified that they grew personally within their collaboration with female crew mates, receiving feedback that they were a supportive and understanding teammate. These outcomes may encourage women to join and thrive within the male dominated sport of sailing, knowing that their contribution is validated and encouraged.

The personal and professional achievement of gaining a divisional win in the Sydney to Hobart Yacht Race was identified in the Crew’s responses within interview sessions. The Crew were elated to have crossed the finish line with no one sustaining any injuries, and all Crew members still engaged in their designated roles. For some Crew, the achievement of just being able to complete a Sydney to Hobart Yacht Race was evidence of their personal and team preparation:

“That I can do a Sydney to Hobart... That was probably the main thing was I just didn’t know if I could do it and not get seasick or not get scared. And I wasn’t any of those. So that was a lot for me personally.”

Crew responses to interviews demonstrated that “I am not indestructible”. Survey responses showed that although 60% of Crew members experiences a marked decrease in their perceived stress, an increase in post-race stress levels was identified in 40% of the crew. Additionally, 40% of Crew members experienced an increase in their burnout scores post-race. Two weeks pre-race, burnout was lowest and team connectedness was at its highest, suggesting that the increase in perceived stress and burnout post-race may have been affected by the intense requirements of the race. When addressing the impacts of individual and team preparation on race outcomes both personally and professionally, an absence of burnout and a presence of availability and capacity to care about teammates during preparation suggests that the “pre-competition phase” of athlete preparation was achieved and resulted in positive race outcomes.

6.1 RECOMMENDATIONS

6. Adequate preparation of compliance documentation is essential for positive race outcomes.
   c. Strict adherence to compliance documentation by all Crew ensures that each member understands their personal and professional race requirements.
   d. Timely submission of compliance documentation to governing bodies reduces barriers in effective training schedules and ability to compete in the Sydney to Hobart Yacht Race.

7. A focus on wholistic safety is required to ensure all Crew cross the finish line maintaining their personal and professional wellbeing.
   c. Monitoring of a physical safety such as injury management, ultraviolet exposure and adherence to first aid training ensures Crew remain well and thriving during race preparation and competition.
d. Maintenance of safety protocols regarding equipment, role, disaster, and weather management is essential to ensure all Crew are able to respond appropriately in adverse events.

8. Holistic tactical and technical skill building is required to ensure all Crew know their role within the team
   c. Providing training programs periodically throughout the Crews’ race preparation specific to their role manages expectations of self and others.
   d. Skill acquisition and understanding of Crew mates’ roles provides additional support amongst the team in problem solving or disaster scenarios

9. Defining and fostering a positive Crew culture of teamwork, safety and empowerment ensures Crew members can thrive personally and professionally.
   c. Creating a safe and positive environment for Crew to voice concerns and suggestions ensures psychological wellbeing is maintained.
   d. Providing a supportive culture ensures Crew are empowered to step outside of their comfort zone within appropriate environments and gain additional professional skills.

10. Additional research is required to gain a more robust understanding of sailing crews’ preparation for competitive events
   d. Further exploration of the impacts of mixed gendered crews is required to understand the personal and team resilience, stress and burnout levels, and how these influence race outcomes.
   e. Achieving a larger sample size may provide more reliable and replicable research outcomes able to be utilised by crews looking to compete in competitive sailing events.
   f. Following the Cyan Moon crew in a second Sydney to Hobart Yacht Race may allow for validation of initial results.

7. LIMITATIONS

There were limitations related to this evaluation that must be considered. These include:

1. Crew participation in research during preparation: there were several factors that may have impeded the Crews’ ability to engage with and maintain adherence to completion of surveys and interviews with the research team. The Crew were involved in a number of training events across the east coast of Australia at various times of the year, making contact difficult when out at sea. Further, the Crew maintained their employment and additional activities beyond the racing and training calendar, untimely reducing their potential time to engage with research activities.

2. Following up with Crew post-race: as the race concluded in Hobart during the peak of the Australian festive season and close of business, it was not possible for the research team to attend. Ideally, Crew would have been interviewed immediately after or as soon as feasible post the completion of the Sydney to Hobart Yacht Race to ensure accurate and timely reporting of experiences.

Despite these limitations, the evaluation is considered to present a credible assessment of the project.
8. METHODOLOGY

8.1 CONCEPTUAL FRAMEWORK

The approach of the CERG to this evaluation was informed by a Participatory Evaluation and Co-Design Framework.

PARTICIPATORY EVALUATION

A participatory evaluation framework puts people from the community and those delivering the programs, projects and services at the centre of the evaluation. Participatory evaluation is a distinctive approach based on the following principals:

- That evaluation should be a co-designed, collaborative partnership through 360° stakeholder input including project participants and project funders;
- That integral to evaluation is an evaluation capacity-building focus within and across projects;
- That evaluation is a cyclical and iterative process embedded in projects from project design to program assessment;
- That evaluation adopts a learning, improvement and strengths-based approach;
- That evaluation supports innovation, accepting that projects will learn and evolve’
- That evaluation contributes to the creation of a culture of evaluation and evaluative thinking;
- That there is no one or preferred data collection method rather the most appropriate qualitative and quantitative methods will be tailored to the information needs of each project.

CO-DESIGN

Co-design is a process and approach that is about working with people to create ‘interventions, services and programs which will work in the context of their lives and will reflect their own values and goals’5. Co-design can be done in many ways but is about collaborative engagement that is bottom-up, creative, and enables a wide range of people to participate and importantly to steer decisions and outcomes. Co-design is not a consultation process but a partnership approach where ‘end-users’ actively define and shape strategies and outcomes. The role of the ‘expert’ is to facilitate this process.

8.2 EVALUATION METHODOLOGY

The evaluation of the project utilised a variety of data collection tools in a mixed methods approach providing information about process, outcomes, impact and capacity building. Qualitative and quantitative data was collected and analysed as described below.

QUANTITATIVE DATA

Crew pre and post-race survey

The Cyan Crew pre and post-race survey was designed to capture participant experiences as they prepared for the Sydney to Hobart Yacht Race, and reflections of the event post-race. The survey design:

- Allowed for the collection of information from a defined group of stakeholders

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- Enabled a large amount of data to be collected quickly.

The survey was distributed by the CERG to Crew email addresses and featured a web link and QR code to access. The survey had a combination of multiple choice, Likert scale and open-ended questions.

**QUALITATIVE DATA**

Semi-structured interviews were held with 10 Crew members who indicated their interest in taking part in individual interviews. Semi-structured interview questions were designed to guide the researcher to capture all desired information while providing flexibility for the participant to elaborate on their experience (see Appendix 1).

**Data Analysis**

A thematic analysis technique was used for the qualitative data with findings presented under theme headings together with participant quotes. The thematic analysis utilised Braun and Clarke’s six step process which included familiarisation with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes and producing the report (Figure 25)⁶.

![Thematic Analysis Six Step Process](image)

**Step 1**
- Transcribing data (if necessary), reading and re-reading the data, noting down identical ideas

**Step 2**
- Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code

**Step 3**
- Collating codes into potential themes, gathering all relevant data to each potential theme

**Step 4**
- Checking in the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic ‘map’ of the analysis

**Step 5**
- Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells; generating clear definitions and names for each theme

**Step 6**
- The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis

Figure 9: Six Step Thematic Analysis

As qualitative analysis is an inductive process, some interpretation of the data was required to create the thematic map. It was actively acknowledged that the researcher’s interpretations would inform the results of this study, hence, any prior conceptions of the topic were reflexively bracketed to the best of the researcher’s abilities⁷.

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9. ETHICAL APPROVAL AND PRACTICE

Federation University aims to promote and support responsible research practices by providing resources and guidance to our researchers. We aim to maintain a strong research culture which incorporates:

- Honesty and integrity;
- Respect for human research participants, animals and the environment;
- Respect for the resources used to conduct research;
- Appropriate acknowledgement of contributors to research; and
- Responsible communication of research findings.

Human Research and Ethics application, *Evaluation of the Cyan Crew's preparation for the Sydney to Hobart Yacht Race (2022-159)*, was approved by Federation University Human Research Ethics Committee (Appendix 1) prior to data collection and analysis. Consent to participate in the study and for participant’s de-identified transcripts to be used for research and evaluative purposes was obtained via signed informed consent forms before commencing interviews. Participant anonymity was maintained by removing any identifiable information from the evaluation.

10. ABBREVIATIONS

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<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>BRS</td>
<td>Brief Resilience Scale</td>
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<td>CERG</td>
<td>Collaborative Evaluation &amp; Research Group</td>
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<tr>
<td>LHIZ</td>
<td>Latrobe Health Innovation Zone</td>
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<tr>
<td>PSS</td>
<td>Perceived Stress Scale</td>
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<tr>
<td>SMBQ</td>
<td>Shirom-Melamed Burnout Questionnaire</td>
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<tr>
<td>La Nina</td>
<td>La Nina refers to the periodic cooling of ocean surface temperatures in the central and east-central equatorial Pacific.</td>
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Appendix 1: Crew Interview Questions

CYAN CREW PREPARATION AND POST-RACE EXPERIENCES IN THE SYDNEY TO HOBART YACHT RACE: QUESTIONS

Interview questions (phase 1):

1. What is your role in the yacht Crew?
2. How did you come to be with the Cyan Crew?
3. Have you developed new skills / attributes being with the Cyan Crew?
4. What skills / attributes do you still need to develop?
5. What do you find most challenging at the moment? (Physical/ social / mental / tactical / technical)
6. What are you looking forward to in the next event?
7. What does teamwork mean to you?
8. How do you prepare for each event? Ritual
9. What do you enjoy most about this experience?
10. What has been the highlight for you so far?
11. How do you feel about the next event?
12. What have you learnt about yourself?
13. Would you do anything differently if you had your time again?
   - Respect for sea / fear
   - Living on the boat
   - Gender
   - Personality type
   - The Skipper – motivation resources
14. Are there any other comments or thoughts you would like to share about your experiences to date?

Interview questions (phase 2):

1. Tell me about the race experience.
2. Was it what you expected?
3. What was the most challenging aspect?
4. What was the most rewarding aspect?
5. What does teamwork mean to you post-race?
6. What have you learnt about yourself?
7. Would you do it again? (If yes, what’s drawing you back?)
8. Would you do anything differently if you had your time again?
9. What has it been like to go back into your home/normal life again post-race?
10. Are there any other comments or thoughts you would like to share about your experiences?
Dear Joanne,

I am pleased to advise you that the HREC has approved your ethics application titled ‘Evaluation of the Cyan Crew’s preparation for the Sydney to Hobart Yacht Race’, reference 2022-159.

APPROVAL PERIOD 26 AUGUST 2022 TO 26 AUGUST 2027.

This approval is subject to the following conditions:

1. The project must be conducted strictly in accordance with the proposal approved by the HREC, including any amendments made to the proposal required by the Committee.
2. The Chief investigator must advise the Committee via email to research.ethics@federation.edu.au immediately of any complaints or other issues in relation to the project which may warrant review of the ethical approval of the project.
3. Where approval has been given subject to the submission of copies of documents such as letters of support or approvals from third parties, these are to be provided to the Ethics Office prior to research commencing at each relevant location.
4. Amendment requests must be submitted to the Committee PRIOR to implementation of such changes. Amendments cannot be implemented prior to receipt of approval from the relevant ethics committee. Amendment requests may include:
   - Changes to project personnel
   - Project extension (note, extensions CANNOT be granted retrospectively)
   - Amendments to project procedures
5. Annual and Final Reports MUST be submitted by the following deadlines:
   - Annual Progress Reports – annually on the anniversary of the approval date. Amendment requests will not be accepted for projects with overdue annual reports.
   - Final Report – within one month of project completion, which may be prior to the expiry of ethics approval. Submission of a final report will close off the project.
6. It is incumbent on the research team to keep track of reporting requirements and submit reports on time. Reminders may not be sent by the Research Office and should not be relied upon.

7. If, for any reason, the project does not proceed or is discontinued, the Committee must be advised via the submission of a Final Report.

8. The Human Research Ethics Committee may conduct random audits and/or require additional reports concerning the research project as part of the requirements for monitoring, as set out in the National statement on Ethical Conduct in Human Research.

9. The Ethics Team must be notified of any changes in contact details for any member of the research team. This may include, but is not limited to address, phone number and/or email address.

10. Failure to comply with the National Statement on Ethical Conduct in Human Research 2007 and all updates, and/or with the conditions of approval, will result in suspension or withdrawal of approval.

If you require any further information, if something is not clear or you would like to provide feedback, please contact the Ethics Team via email at research.ethics@federation.edu.au or call +61 3 5327 9765.

Regards,

Ethics & Integrity Office

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Federation University Newsroom

How research could make for smoother sailing in world-famous race

24 February 2023

When a fleet of 109 set off from Sydney Harbour for Hobart in Australia’s famous yacht race at the end of 2022, it’s unlikely many entrants would have been much better prepared than Wayne Seaward’s Cyan Moon crew.

Cyan Moon won its division – the Performance Handicap System – despite being Mr Seaward’s first go at the Sydney to Hobart Yacht Race – remarkably as an owner and skipper.

From the outset, Mr Seaward was keen to do things a little differently. This included partnering with researchers at Federation University to document each crew member’s preparation for the race and their experiences during and after the race.

Director of Federation’s Collaborative Evaluation Research Group (ICERG) Professor Jo Porter says the crew was unique because it comprised members with varying degrees of sailing experience, with a 50-50 split of males and females.

“Part of our job was to capture the crew’s resilience, with the race requiring the team to operate at high levels of skill and alertness with little rest. Photos: Wayne Seaward

The project tracked the crew’s resilience with the race requiring the team to operate at high levels of skill and alertness with little rest. Photos: Wayne Seaward.

Professor Porter said:
“Part of our job was to capture the crew’s story, which is the human side of it, and we wanted to create a document, a report, that any crew that’s thinking about going into the Sydney to Hobart could pick up and say, ‘here’s an experience of one crew and how they went about doing it,’” Professor Porter said.

“Here we have a crew and the captain – the owner of the boat who has never done the Sydney to Hobart, but it was always his dream to do it. He’s worked extremely hard to go through all the hoops and get everything up to specification and be ready for this great challenge and what can be an extremely dangerous race.”

Professor Porter says the crew’s participation in some lead-up events became the ideal time for Mr Seaward to set a course for the challenge. The race is a gruelling 628 nautical mile event that can have a high rate of attrition because of the conditions that can become treacherous in the Bass Strait.

“This crew was unique in that it had a 50 per cent male and female split – there’s not a lot of women in sailing – most yachts in this level of competition are crewed by males. But Wayne has a lovely philosophy around giving everyone an opportunity – he’s very strong at capacity building among males and females, and that’s why he’s done this.”

“He runs an incredibly tight ship as far as health and safety, he set out numerous drills and provided regular updates and pamphlets. He’s an incredible motivator, with lots of team-building exercises and plenty of work on technical skills. He’s really vigilant on the compliance and safety elements, and he was very proud that he passed all inspections with flying colours.”

In interviews before setting sail, some crew members said they were drawn to competing simply because of the allure of the world-famous race. Others were attracted to the challenge of finishing an event where crews are often forced to pull out. Many crews have been rescued over the event’s history, and the race has seen tragedy.

“Even though the conditions can be dangerous, that adds to the real sense of finishing.”

The project also tracked the crew members’ resilience, with the race requiring the team to operate at high levels of skill and alertness with little rest. The crew worked in three-hour shifts, alternating between being on deck and trying to sleep while lying at a 45-degree angle.

“There’s a real risk for resilience and an ability to cope with high-stress levels and decision-making,” Professor Porter said.

“There’s a real risk of burnout before they even make it to the start line. Those three-hour shifts over the race days are difficult. We had a survey out to each of the crew members and did that periodically up to the race and then post-race, exploring the crew’s levels of stress, burnout and resilience to help us understand what it takes to perform at this elite level.”

“We also did a series of one-on-one interviews with each crew member about their individual preparation, feelings of apprehension and excitement, and about the team dynamics and why teamwork is important to successfully complete the race.”

“Some described it as 95 per cent boredom and 5 per cent of sheer adrenalin because there’s a lot of downtime in there as well, a lot of monotonous sailing, just getting on and getting things done.”

CECU researcher Meg Jackson says the crew were expecting challenges, and they got more than they bargained for. This included a broken gooseneck – the connection that joins the boom to the mast – severe enough to end the race for other yachts who suffered the same fate.

“The crew wondered whether they would have to quit, but Wayne’s response was, ‘no, we’re finishing this race whether we have to crawl over the finish line.’ On the last day, when Wayne told his crew that they would win their division, the crew did not believe him at first. They were tired and had no contact with race tracking being so far offshore for most of the journey,” she said.

“I spoke with him a lot about where he has to go to get that sort of motivation to cross the line. He said that every time something broke, it presented an opportunity for a less experienced crew member to learn or do something they had not done before. There may have been disagreements between crew during high-pressure situations, but Wayne would be there to offer guidance and support to help resolve concerns and keep the crew sailing.”

The crew remained strong in their teamwork and support of each other, even in the last tiring moments when there was another boat going past them – a boat they knew couldn’t beat them in their division – his crew jumped up and started cheering them on.

“So despite all of the battles they faced, the culture that Wayne had built was still staying really true,” she said.

“I’ve also spoken to other crew members who said that one of the most rewarding things was seeing Wayne when they crossed the finish line, seeing him cry and be overwhelmed with joy. One crew member said, ‘I’ve done this race a lot, I’ve done lots of sailing, but to see Wayne’s reaction was the most rewarding part for me.’”