# Athletes' mental health and the fear of returning to sport after an injury

ID7 Research Report

By Kobe Dent

# **Executive Summary**

#### Background

It has been found recently that the psychological impact of an injury can be equally, if not significantly, as the physical. Injuries cause a sudden disruption to routine, loss of identity, and future uncertainty can lead to various mental health issues. Common emotions are anger, frustration, sadness and anxiety

#### Benchmarking

From the product matrices, the gap in the market is the need for a consumer product that will help with an athlete's mental health during the recovery phase. There are no physical products that fit into this zone, with most of the products being digital and with them being used either as a preventive measure or a support after an injury.

#### Research

Qualitative research methods will be used. The triangulation method will be used as it will enhance the credibility of the findings by cross-verifying information from different perspectives. The two methods that are going to be used a surveys and interviews

#### **Analysis and Findings**

The survey showed that most people use physiotherapy, strength and conditioning and surgery after getting injured in sport, with 50% of people using medical tools during recovery, with only 6.6% of them doing a psychological recovery. The interview showed that fear of reinjury was prevalent after having an injury

#### Discussion

From the findings in both the surveys and interviews, both show the literature that was revealed in section 1, with the main theme being that psychological readiness is often overlooked when compared to the physical recovery.

#### **Design Implications**

The 5 design implications that were found from his report were rehabilitation equipment with instant feedback, emotional support braces where bulls with psychological reinforcements, environment-based recovery tools and a gradual loading device

# **Table of Contents**

Executive Summary	2
Table of Contents	3
Section 1 – The topic	4
Background	5
Benchmarking	6
Wearables Tech	6
Recovery Apps	6
Braces	6
RUN3D	6
Section 2 – The Research	8
Research	8
Survey	8
Interview	8
Analysis & Findings	10
Survey	10
Interview	13
Section 3 – Discussion and Design Implications	15
Design Implications	16
Conclusion	17
References	18
Appendix	19
Appendix 1 - Survey Excel Document	19
Appendix B – Interview 1 Coding	21
Appendix C – Interview 2 Coding	22
Appendix D – All Data Link	23

# Section 1 – The topic

Athletes are often admired for their physical powers despite the talent and demands of performance, which can take a toll on mental health. Recently, medical field sport organisations and pop culture have given more recognition to the importance of mental health and athletes. It was found that 35% of athletes have mental health concerns the top issues being athletes feeling burnt out, depressed or having anxiety. They often face unrealistic expectations from coaches, teammates, fans and even themselves. Their relentless pursuit of perfection can take a toll now being. Anyone can face mental health issues; however, athletes have a unique circumstance where pressure and stress can be high, leaving them vulnerable to mental health conditions. Sustaining an injury as an athlete can often put immense pressure on the rehabilitation to be quick so they can return to the field. If an injury said there in the athlete condo tend to their sport, they can often have issues such as anxiety and depression. (McLean Hospital, 2025)

This leads to the research question of -

How to fast-track athletes' mental health after an injury, allowing them to get back into their sport as fast as possible without fear of re-injuring, allowing them to play to the best of their abilities.

## **Background**

It has been found recently that the psychological impact of an injury can be equally, if not significantly, as the physical. Injuries cause a sudden disruption to routine, loss of identity, and future uncertainty can lead to various mental health issues. Common emotions are anger, frustration, sadness and anxiety. The common issues that arise from an injury are depression, loss of identity, anxiety and fear of reinjury. "A study in the British Journal of Sports Medicine found that fear of reinjury can significantly affect an athlete's confidence and willingness to return to play, often leading to prolonged recovery times and reduced performance levels. This fear can create a vicious cycle, where anxiety about reinjury hinders full physical recovery, increasing the actual risk of reinjury." (Balwyn Sports & Physiotherapy Centre, 2024)

Fear of injury can diminish sport participation in the layer returns to sport. Fear of injury is associated with distractions and affects an athlete's post-injury performance. As physical and psychological readiness to return to sport after injury do not always coincide, a fear of reinjury can stop people from returning to sport with half-resolved symptoms and physical impairments. It is now more important the athletes to recognise the influence of the fear of reinjury and how it can affect their return to sport. It is currently suggested to incorporate principles of psychologically informed practices into sport injury rehabilitation for people who have a high fear of reinjury. (Hsu, n.a)

Andrew J. Sheean, M.D, says, "Recent research indicates that psychological testing is the least-reported criterion when determining the readiness to return to sport among patients undergoing anterior cruciate ligament (ACL) reconstruction. Psychological readiness is underexamined, and now, perhaps more than ever, requires attention." Asl well as "Fear of reinjury is the leading reason for failure to return to competitive sport, reduced activity levels after sports injury, and greater reinjury rates" (Sheean, 2023)

With a final statement of "Psychological readiness to return to sport is underexamined and requires attention. With increased awareness, mindful intervention, and referral when indicated, we have yet another domain in which we can help our patients achieve best outcomes." (Sheean, 2023) This can help guide the research and determine how the user group and be helped.

## **Benchmarking**

Benchmarking is the process of measuring products, services and processes against those of organisations known to be leaders in one or more aspects of their operations. "Benchmarking provides necessary insights to help you understand how your organisation compares with similar organisations, even if they are in a different business or have a different group of customers." Its main purpose is to help identify the gaps in the market. (ASG, 2024)

#### Wearables Tech

Over the past 10 years, fitness trackers and smartwatches have undergone massive changes. They are now able to track heart rate, sleep patterns, and even blood oxygen levels. These can be used to help keep athletes accountable for their own health and fitness goals. By keeping the users more aware of their activity levels, they are more likely to meet the targets. This has then been modified into a gamification system that allows the user to get badges and rewards for completing certain movement goals. With this, they have also made it so that you can share your activities with friends, making it more motivating to keep people on target. (AIF, 2024)

#### **Recovery Apps**

Recovery apps are one of the newer technologies that can be used to help people during their recovery. They offer active recovery solutions and are meant to balance with physical therapy. They offer personalised therapy rehab plans. They are so that people can be as accurate as possible when it comes to doing their exercises by themselves. (Louw, 2025)

#### **Braces**

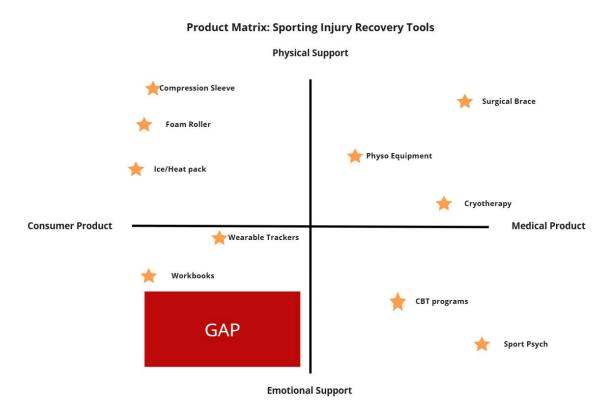
When it comes to sports recovery, getting up and moving as soon as possible is the most important thing. Braces help provide support to the injury, and they limit movement, making it less likely for you to hurt it. They offer pain relief by taking pressure off joints and muscles, they reduce swelling and provide peace of mind when recovering. (Bauerfeind, 2025)

#### **RUN3D**

"Run3D is the gold standard of gait and musculoskeletal analysis, providing all the information you need to understand the root cause of your injury, which is the first step to putting it right." This product does all the testing to see what the overarching problem is and then uses the data to provide the best and quickest recovery plan. (Run3D, 2025)

Criteria	RUN3D	Braces	Recovery Apps	Wearable Tech
Effectiveness	8	8	6	5
Ease of Use	3	8	9	7
Comfort	5	5	9	8
Technology Level	9	3	8	8
Accessibility	3 (expensive, clinical)	· ·	9 (low-cost, easy to buy)	6 (mid-price)
Reputation	6	9	7	6
Durability	8	8	9	7
Features	9	2	6	9

From the product matrices, the gap in the market is the need for a consumer product that will help with an athlete's mental health during the recovery phase. There are no physical products that fit into this zone, with most of the products being digital and with them being used either as a preventive measure or a support after an injury.



# Section 2 - The Research

#### Research

This section will investigate what qualitative research methods have been used and how they have been conducted. The triangulation method will be used as we can enhance the credibility of the findings by cross-verifying information from different perspectives. The two methods that are going to be used a surveys and interviews.

#### Survey

A survey is useful too, which allows you to reach a broad audience and can yield rich data. "When conducting a survey, researchers use a questionnaire to gather data. The questionnaire can be as simple as a series of free-text questions or as complex as a multiple-choice or yes/no question. In either case, the survey questionnaire requires the respondent(s) to fill in information about themselves" (Statistics Consultation, 2025) Its strength is that it allows you to ask specific management questions that can then be answered quickly. The downfalls of surveys are that people are less likely to go into detail, and there is no easy and quick way to ask follow-up questions to get a better understanding of an answer. (Jones, 2013)

This was chosen to help gain a general understanding of what type of injuries athletes get, how long they take to recover, what recovery methods they use, along with how they felt during recovery and what support systems they had in place.

The research was gathered at Sporting Physio Clinic, getting their patients to fill in the information as they were in the waiting room for their appointment. The respondents were asked a general consent question at the start of the survey, making sure that they were okay with their information being used for analysis. To help protect their privacy, no names or genders were asked to help make them feel comfortable answering the questions.

#### **Interview**

"Qualitative interviews, as a form of customer research, are valuable for understanding the subjective experiences, perceptions, and behaviours of individuals. They provide rich and nuanced data that goes beyond surface-level understanding, enabling effective data interpretation. These interviews help researchers construct a deeper understanding of customers and their needs" (Digital Leadership AG, 2023) The type of interview that will be conducted is a semi-structured interview. This style allows for structured questions while allowing for probing and exploring emerging themes, and it allows for a more free-flowing conversation.

This research method was chosen to get a better and deeper understanding of the unanswered questions that will come up from the surveys. It will allow us to get a more personal side of what it is like for an athlete. By having the free-flowing conversation, it will allow for the more important topic to come through, and so what is truly important.

This research was gathered from family friends who have experience with fear of re-injury. It was done in a neutral space and was audio recorded. The participant signs a disclosure statement before the interview starts. It was ensured that the participants understood what was happening and that they could withdraw at any time.

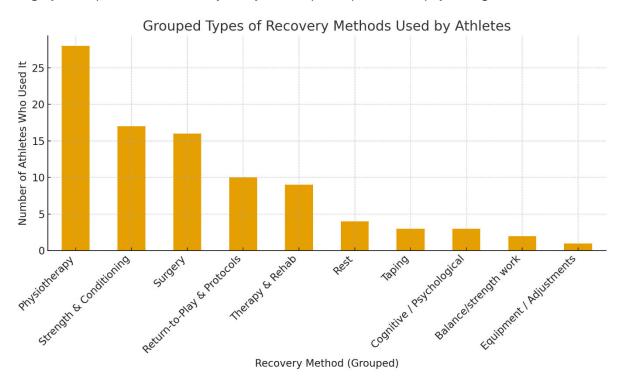
# **Analysis & Findings**

#### Survey

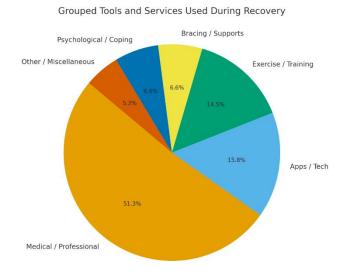
All the data was transferred from the respondent's handwritten responses into an Excel document. The data was then analysed through graphs for all the qualitative data to make it easy to understand what the common themes are. Then, for the short response and paragraph answers, a mini coding system was used to see the recurring themes.

The first part of the survey was broken up into 6 different sections, being Injury Background, Impact on Daily life & Sport, Mental & emotional Impact, Coping & Support, and Reflections & Advice. The most important section of the report was where Mental & emotional Impacts and Coping & Support. This was so that I could get an idea of what athletes really do during their recovery and the methods and tools that they use.

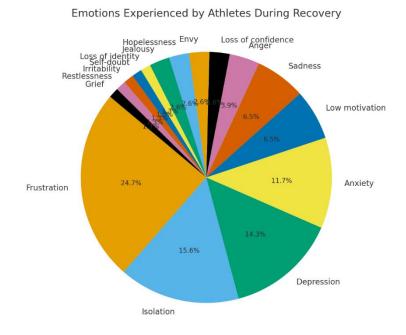
For the types of recovery methods, everyone gave very sport-specific answers, so these were then grouped into general categories that could be used by all athletes. As can be seen in the bar graph below, everyone used physiotherapy. With around half the participants needing surgery to help with their recovery. Only 10% of participants used psychological methods.

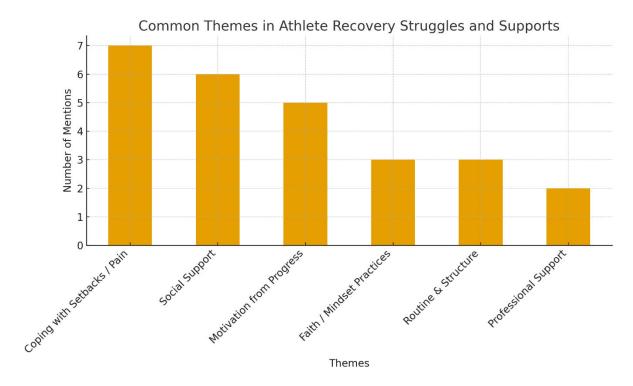


For the tools that were used, around 50% of people used medical tools. This counts as physio special tools and tools that you can't acquire as a consumer. Apps/Tch refers to training and recovery apps and smart devices like watches and other monitoring gear. Only 6.6% of people seek psychological help during their recovery.



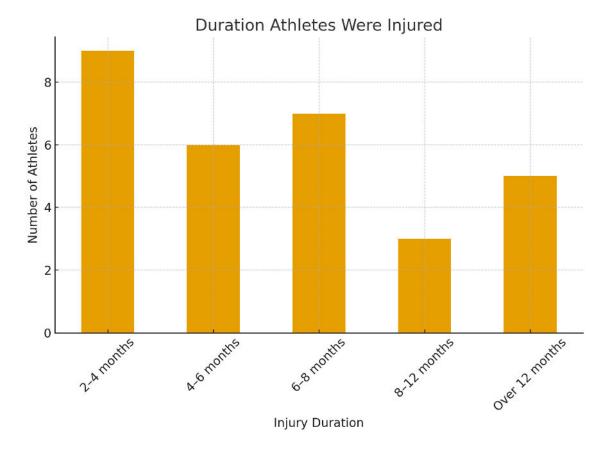
The most common emotions that people were experiencing were frustrations, this was since they just couldn't play their sport. Isolation from having no support system, and anxiety from the fear of returning to the sport.





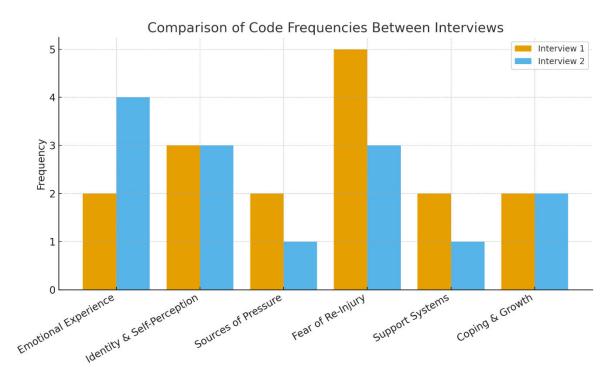
This graph shows what people used or did to help them get through their recovery. This was taken from short answer responses, and I was trying to find the general themes that came from it.

On average, the athletes are injured for 2-4 months.



#### Interview

For the interviews, they were transcribed and then coded into 6 different codes that can be seen in the table below. These were looked at to help find the underlay causes of the participants' fears and what they were able to do to eventually help themselves.



Some of the key quotes and takeaways from the interviews were

#### Interview 1

- "Competing in the adults division put pressure to perform while fearing popping it out again."
- "Once it happens, your body feels like it's gonna happen again, it makes you stop being good at your sport."
- "I was anxious and conscious of how much I used my shoulder, I lost motivation, progress, and it affected other sports."
- "Some things I just don't even do anymore, I don't deadlift, I don't bench."
- "Most people view it like you'll get better in six months, body always remembers the pain, it becomes a defence mechanism."

### Interview 2

- "Shoulder jolted landing on the ball, scary thinking it was major, MRI showed nothing."
- "Did little self-checks after dives and tried to reassure myself it was fine."
- "Needed physical test results for reassurance and tied recovery to measurable progress."

# Section 3 - Discussion and Design Implications

From the findings in both the surveys and interviews, both show the literature that was revealed in section 1, with the main theme being that psychological readiness is often overlooked when compared to the physical recovery. The studies highlighted the fact that he role of fear of reinjury and the mental health challenges that athletes face. The research shows that the real-world participants have the same issue that revolves around the psychological aspect not being considered in a practical setting.

In the survey, it was found that only a small number of athletes had psychological support during their recovery, while most people were relying on physiotherapy, surgery and braces. This reflects the ongoing use of physical tools and methods despite the literature acknowledging that the fear of reinjury anxiety can delay or prevent a fast and successful return to sport. Any views furthered the understanding, showing the lived experience behind the statistics. For example, a participant described becoming overly cautious of boarding key exercises or just losing motivation due to the constant anxiety of reinjury. These findings show the "vicious cycle" has been described in the literature, which undermines confidence that it can reduce performance and increase the likelihood of getting injured further.

The interviews also showed how athletes will try to suppress or minimise their psychological challenges because they can find it "embarrassing" to show weakness or just want to reminisce on their past, except for success, rather than get help. This aligns with Sheean's call for increased attention to being psychologically ready, as athletes often downplay the mental barriers to being resilient. Importantly, participants also provided insight into a physical solution, such as desensitisation strategies and reassurance through physical checks and the value of supported coaches to always modify training methods.

In conclusion, this research shows a critical gap between what athletes need and what the current recovery system provides. Mental health is being treated like a secondary action to physical rehabilitation, which leaves athletes vulnerable to prolonged anxiety, reduced performance and in some cases withdrawal from the sport entirely. The data also offers a practical, athlete-driven perspective on how trying out for the fear of reinjury can manifest and how it might be addressed through a design invention.

# **Design Implications**

#### 1. Rehabilitation equipment with instant feedback.

This would be standard gym and physiotherapy equipment that is designed to have real-time feedback on things like posture distribution, joint alignment, it allows for a safer and easier way to help people get confident quickly. We have sensors built in to alert the athletes when they're moving safely versus when they could risk re-injuring themselves.

#### 2. Wearables with psychological reinforcements

What's the wearables track data like, heart rate and sleep patterns, but very few help aid the physical recovery of an athlete. Redesigning A wearable that could help integrate lightweight joint support was also monitoring the health could reassure athletes that their body is being reinforced while training. Is wearable doesn't have to be only things like watches, but could also be equipment used in sports like shin guards, gloves and pads. This would integrate a support system into stuff that's already used within their athletes' sport.

#### 3. Emotional Supporting braces

Since braces already provide physical support capability, a new design could be taken on to help reduce anxiety by giving athletes confidence in vulnerable joints. It is a smart brace that includes indicators and sensors that can provide feedback to the user while training to keep them safe when doing high-risk movements.

#### 4. Environment-based recovery tools

This would look at integrating a physical tool into certain training environments would look at specifically sports, to help athletes desensitise their fear. These would have to be sport-specific designs but would have the aim to support the athlete with their specific injury, whichever is most common within that sport. The aim of these products would be to directly help both physical and emotional readiness for the sport while allowing them to get back into the sport as quickly as possible.

#### 5. A gradual load device

In the interviews, they both talked about losing trust in their bodies after their injury. A device that would help gradually progress them back into their sports could be useful. Things like resistance bands and modular weights are something that slowly reintroduces load in very controlled increments. By using these, it could help physically show progression, allowing the athlete to feel more comfortable progressing. This officer's bias would mainly focus on improving their mental health, were also trying to show physical progression at the same time.

#### Conclusion

In conclusion, this report explored how athletes can be better supported when addressing psychological challenges during injury recovery, focusing on the fear of reinjury. The literature showed that physical rehabilitation has always been prioritised, and the mental aspects have never been focused on, even though psychological readiness can strongly influence the recovery outcomes. This was confirmed with the surveys showing that most athletes heavily rely on physical treatment such as physiotherapy and surgery embraces whilst a very small amount used psychological support systems. The interviews provided more insight into the lived experience of the athletes, which truly revealed the fear of reinjury, which produced confidence and caused opponents of key movements and potential withdrawal forms. It was found in the benchmarking that the market currently includes fitness tracker apps and braces, but your physical products directly address supporting an athlete during the recovery phase, and none of them focus on mental health during that time. 5 design implications that were found from his report were rehabilitation equipment with instant feedback, emotional support braces where bulls with psychological reinforcements, environment-based recovery tools and a gradual loading device

#### References

- McLean Hospital. (2025). Strength Isn't Just Physical: Exploring Athletes' Mental Health.

  Retrieved from https://www.mcleanhospital.org/essential/athlete-mh
- AIF. (2024). Harnessing the Power of Wearable Technology: How Fitness Trackers and Smartwatches Improve Your Workouts. Retrieved from https://fitness.edu.au/the-fitness-zone/harnessing-the-power-of-wearable-technology-how-fitness-trackers-and-smartwatches-improve-your-workouts/
- ASG. (2024). What is Benchmarking? Retrieved from https://asq.org/quality-resources/benchmarking?srsltid=AfmBOoqm5jb68Qho4X3tsoHSOYJdQkqzYKwxxonDUYiCPL2ZnL1KU7Oa
- Balwyn Sports & Physiotherapy Centre. (2024). *The Psychology of Injury: Mental Health in Sports Medicine*. Retrieved from https://www.balwynsportsphysio.com.au/the-psychology-of-injury-mental-health-in-sports-medicine-2/#:~:text=The%20severity%20and%20duration%20of,Medicine%20in%20Addressing%20Mental%20Health
- Bauerfeind. (2025). Why Bracing is so Important for Injury Recovery. Retrieved from https://bauerfeind.com.au/blogs/news/why-bracing-is-so-important-for-injury-recovery?srsltid=AfmBOooyHoJSSueyuxlfVESqdpWO5kCvKqq\_0ZuzHZS71XIDaCUYn6y t
- Digital Leadership AG. (2023). *Qualitative Interviews vs. Quantitative Interviews for Deeper JTBD*. Retrieved from https://digitalleadership.com/glossary/qualitative-interview-vs-quantitative-interview/
- Hsu, C.-J. (n.a). Chao-Jung Hsu. Sports Health.
- Jones, T. (2013). A quick guide to survey research. Retrieved from https://pmc.ncbi.nlm.nih.gov/articles/PMC3964639/#:~:text=Conclusions,are%20critic al%20to%20this%20process.
- Louw, M. (2025). *How can a physiotherapy app treat sports injuries?* Retrieved from https://www.exakthealth.com/en/blog/how-can-a-physicaltherapy-app-treat-injuries
- Run3D. (2025). 3D GAIT ANALYSIS & MUSCULOSKELETAL TESTING. Retrieved from https://www.run3d.co.uk/
- Sheean, A. J. (2023). Psychological Readiness to Return to Sport: Fear of Reinjury Is the Leading Reason for Failure to Return to Competitive Sport and Is Modifiable.
- Statistics Consultation. (2025). Evaluating Efficacy of Survey Research as a Quantitative Research Method. Retrieved from https://www.statisticsconsultation.com/evaluating-efficacy-of-survey-research-as-a-quantitative-research-method/

# **Appendix**

# **Appendix 1 - Survey Excel Document**

Question	Recovery methods used	Emotions experienced during recovery (check all that apply)	During your recovery what tools or services did you use?	Were there moments where you felt like giving up? If so, what helped you push through?	Time unable to participat e in sport
Athlete 1	Surgery, Physiotherapy, Progressive strength, Return-to-run program	Anxiety, Frustration, Isolation, Loss of confidence	Physiotherapy program, Recovery-tracking app, Brace/taping	Yes, when swelling returned I wanted to quit, teammates kept me accountable and present.	8–12 months
Athlete 2	Rest, Physiotherapy, Low-impact cross-training, Bone loading protocol	Anxiety, Isolation, Frustration	Physiotherapy, Meditation app, GPS watch to cap volume	There were nights I questioned continuing, but my partner's belief steadied me.	4–6 months
Athlete 3	Physiotherapy, Taping, Balance/strength work	Frustration, Low motivation, Isolation	Physio plan, Resistance bands, Balance board	Yes pain flare-ups broke my spirit, my physio reframed them as normal, which helped.	2–4 months
Athlete 4	Surgery, Physiotherapy, Scapular strengthening, Gradual stroke reload	Depression, Frustration	Physio, Meditation, Pain diary	I nearly stopped when progress stalled, faith and journaling pulled me through.	6–8 months
Athlete 5	Rest, Graduated return-to-play, Cognitive pacing	Anxiety, Depression, Isolation	Medical monitoring, Counseling	Yes, after a setback I felt done, but seeing tiny gains week to week revived me.	2–4 months
Athlete 6	Physiotherapy, Eccentric loading, Ergonomic adjustments	Frustration, Low motivation	D. 18 D.1 1994	I wanted out when sleep was terrible, structured routines and walks helped me cope.	4–6 months
Athlete 7	Surgery, Physiotherapy, Gradual load, Aero position re-fit	Depression, Isolation	Physio, Pain management plan	Yes, watching others compete hurt, video calls with friends kept me connected.	6–8 months
Athlete 8	Surgery, Physiotherapy, Progressive loading, Return-to-spring protocol	Anxiety, Loss of confidence	Surgery, Physio, Rehab app	I thought about quitting during plateaus, long-term goals on the fridge kept me going.	Over 12 months
Athlete 9	Physiotherapy, Rotator cuff strengthening	Anxiety, Frustration	Physio	Yes, I cried after failed tests, coach reminded me healing isn't a straight line.	2–4 months
Athlete 10	Physiotherapy, Taping, Eccentric quads work	Frustration, Isolation	Physio, Taping, Strength plan	I almost gave up after failing a return-to-run, breathing drills calmed me.	4–6 months
Athlete 11	Physiotherapy, Core strength, Technique adjustments	Frustration, Anxiety, Low motivation	Physio, Yoga, Heat/ice routine	Yes, I dreaded rehab days, music playlists turned sessions into rituals.	2–4 months
Athlete 12	Physiotherapy, Progressive running, Flexibility work	Frustration, Low motivation	Physio, Strength plan	Frustration peaked during setbacks, tracking wins in a notebook kept me focused.	2–4 months
Athlete 13	Surgery, Physiotherapy, Hand therapy	Depression, Frustration	Surgery follow-ups, Counseling	Yes, financial stress made me want to quit, community fundraisers lifted me.	4–6 months
Athlete 14	Rest, Physiotherapy, Footwear changes	Isolation, Low motivation	Physio, Ice/heat, Calf strengthening	I felt done when pain spiked, meditation and short walks reset my head.	d 2–4 months
Athlete 15	Surgery, Physiotherapy, Aquatic therapy	Depression, Loss of identity	Physio, Counseling, Training log	Yes, I worried I'd be replaced, mentor check-ins reminded me of my value.	Over 12 months
Athlete 16	Physiotherapy, Ergonomic coaching, Scheduled breaks	Anxiety, Isolation	Ergo consult, Physio, Timer apps for breaks	I wanted to stop after a re-strain, pacing and smarter load fixed the spiral.	d 4–6 months
Athlete 17	Surgery, Physiotherapy, Rotator cuff strength	Depression, Frustration	Physio, Therapy, Strength plan	Yes, isolation got heavy, group sessions at the clinic gave me energy.	6–8 months
Athlete 18	Surgery, Physiotherapy, Home exercise plan	Isolation, Frustration	Physio, Home rehab app	I nearly bowed out when exams clashed, teachers' flexibility kept me afloat.	6–8 months
Athlete 19	Physiotherapy, Balance/strength work	Isolation, Frustration	Physio, Ankle brace	Yes, I feared permanent damage, clear scans and a plan restored belief.	
Athlete 20	Physiotherapy, Finger rehab tools, Taping	Anxiety, Frustration	Physio, Fingerboards, Rehab bands	I lost heart after a bad week, my kids' notes and drawings kept me smiling.	2–4 months

Athlete 20	Physiotherapy, Finger rehab tools, Taping	Anxiety, Frustration	Physio, Fingerboards, Rehab bands	I lost heart after a bad week, my kids' notes and drawings kept me smiling.	2–4 months
Athlete 21	Surgery, Physiotherapy, Strength and conditioning	Frustration, Sadness, Isolation, Self-doubt	Rehab app, Online ACL groups	Yes, sponsor pressure crushed me, my agent pushed back and bought me time.	8–12 months
Athlete 22	Surgery, Physiotherapy, Orthotics	Depression, Envy, Frustration	Physio, Recovery boots, Therapy	I wavered when I saw others qualify, friends reminded me my race will come.	Over 12 months
Athlete 23	Surgery, Physiotherapy, Progressive weight-bearing	Anger, Sadness, Envy	Physio, Ankle supports, Online rehab group	Yes, missing my 'last season' stung, teammates made me part of memories anyway.	6–8 months
Athlete 24	Surgery, Physiotherapy, Stability work	Anger, Depression, Hopelessness	Physio, Counseling	I almost quit when headaches lingered, therapist normalised the timeline.	6–8 months
Athlete 25	Surgery, Physiotherapy, Bracing	Frustration, Jealousy, Sadness	Rehab program, Counseling	Yes, loneliness hit hard, club coffees and walks reconnected me.	8–12 months
Athlete 26	Rest, Cognitive therapy, Return-to-read protocols	Anxiety, Depression, Irritability	Cognitive therapy, Counseling	I wanted to quit after a crash, gratitude lists helped on dark days.	6–8 months
Athlete 27	Physiotherapy, Strength program, Technique tweaks	Frustration, Sadness, Restlessness	Physio, Bands, Mobility work	Yes, the fear of re-injury froze me, graded exposure rebuilt trust.	2–4 months
Athlete 28	Surgery, Physiotherapy, Mobility work, Gradual re-loading	Depression, Frustration, Hopelessness	Physio, Counseling, Pain specialist	I struggled when money ran tight, side work and support eased the stress.	Over 12 months
Athlete 29	Surgery, Physiotherapy, Strength & proprioception	Depression, Grief, Isolation	Physio, Sports psychology	Yes, progress graphs dipping scared me, my clinician explained the big picture.	Over 12 months
Athlete 30	Surgery, Physiotherapy, Sling-to-strength progression	Sadness, Anger, Jealousy	Physio, School accommodations	I nearly stopped after another tweak, remembering why I started pulled me through.	2–4 months

## Appendix B – Interview 1 Coding

Athlete: In terms of how other people in the field may see me, I wasn't concerned about that. I think in any sporting environment your team is very supportive of you, like they're happy to welcome you back and lift you up and things like that. [Support Systems]

Athlete: Sometimes of coming back to the environment, that was great, had no complaints there. Umm in terms of the actual support itself was really disappointing because, umm, the injury happened while training for Nationals, so I missed my chance... [Emotional Experience] [Sources of Pressure]

Athlete: I was about 17½ and it happened and injured myself was out for six months. I came back and I was competing in the adults division, not the kids division anymore, which is significantly harder... So it was obviously pressure to perform in this whole new division while getting over the fear of popping it out again... [Sources of Pressure] [Fear of Re-Injury] [Identity & Self-Perception]

Athlete: Once it happens, your body feels like it's gonna happen again... you don't put your everything into it... you become over cautious and you actually stop being good at your sport. [Fear of Re-Injury] [Identity & Self-Perception]

Athlete: There is that sounding initially... denial of now this hasn't happened... then accepting and being angry about it... really frustrating... It was right before nationals... it was defeating... missed a really big opportunity... sad about it for a very long time. [Emotional Experience] [Identity & Self-Perception]

Athlete: So much so that I haven't gone back to it. [Coping & Growth]

Athlete: I was worried... anxious and more conscious of how much I used [my shoulder]... couldn't swim anymore... lost the motivation, lost the progress... didn't get back into it and it affected other sports... [Fear of Re-Injury] [Emotional Experience] [Identity & Self-Perception]

Athlete: Some things I just don't even do anymore... I don't deadlift anymore, ever... I don't bench ever. [Fear of Re-Injury] [Coping & Growth]

Athlete: It's embarrassing... I'd rather tell people about how back in the day this is what I was lifting and capable of doing... instead of reaching out for help. [Identity & Self-Perception] [Support Systems]

Athlete: Most people view it like, 'you'll get better in six months and be right back.' It's not like that... your body remembers the pain... puts up its defence mechanism. [Fear of Re-Injury] [Support Systems]

Athlete: It was easier to let it go and reminisce than to try and let my body recover. [Coping & Growth]

Athlete: I'd tell them to go sit in the gym again with your team... so that people can acknowledge it and you desensitise it... I just didn't want to set foot in the gym again... if you're still part of the culture, you want to jump back in. [Support Systems] [Coping & Growth]

Athlete: Maybe something like an app that adapts training regimes based on injury. [Coping & Growth]

# Appendix C - Interview 2 Coding

Athlete: I tried to dive and landed on the ball, shoulder jolted... trained on, brushed it off for a week... eventually bugging me, saw physios, scary thinking it was major, then MRI showed nothing. [Emotional Experience] [Fear of Re-Injury]

Athlete: Pretty frustrating... bounced between physios, no answers, questioned if pain was in my head. [Emotional Experience] [Identity & Self-Perception]

Athlete: No timeframe to return, scary unknown. [Emotional Experience] [Sources of Pressure]

Athlete: Needed confidence to trust my body, frustrating when told I was fine but I knew something was wrong. [Identity & Self-Perception] [Support Systems]

Athlete: Harder mentally than physically. [Emotional Experience]

Athlete: Did little self-checks after dives... reassured myself it was fine, helped reduce worry. [Fear of Re-Injury] [Coping & Growth]

Athlete: Teammates/coaches checked in, gave me options to avoid stressing shoulder, easier than admitting it myself. [Support Systems] [Coping & Growth]

Athlete: Didn't want to seem injured in front of team selections, confidence issue not pain. [Identity & Self-Perception] [Sources of Pressure]

Athlete: Needed physical test results for reassurance... tied recovery to measurable progress. [Coping & Growth] [Fear of Re-Injury]

Athlete: Learning shoulder instability was a real problem gave me validation. [Identity & Self-Perception] [Emotional Experience]

Athlete: Hard to explain to others, fear of being judged as weak or lazy. [Identity & Self-Perception] [Support Systems]

# Appendix D – All Data Link

https://drive.google.com/drive/folders/1uUeamYfr\_mJ0yOPg1yVWkz5wO-Nxz0ts?usp=drive\_link