

How Do We Define Successful Surgery In Light Of Human Optimism?

A Qualitative Exploration Of Young Athletes' Experiences and Quality of Life After ACL Reconstruction in Australia and Canada

Hana Marmura, MPT, PhD; **Nicolette Garcia**, MPT, MCISc; **Lesley Kukoly**, MPT, MCISc; **Dianne M. Bryant**, PhD; **Julian A. Feller**, FRACS, FAOrthA; **Lachlan Batty**, FRACS; **Kate E. Webster**, PhD; **Haydn Klemm**, BSc&Nutr(Hons); **Jodie A. McClelland**, BPhysio(Hons); **Alan Getgood**, MD, FRCS(Tr&Orth), DipSEM

Faculty Disclosure Information

- Nothing to disclose



ISAKOS
CONGRESS
2025



MUNICH
GERMANY
June 8-11

ORTHOSPORT
victoria

HealthSciences



- The impact of ACL injuries and reconstruction (ACLR) on quality of life (QOL) is of global interest as the rate of ACL tears continue to rise in young athletes.
- Athletes' QOL is traditionally assessed with patient reported outcome measures while surgical success is often based on surgical (knee stability, complications, re-injury, etc.) and return to sport outcomes.
- **Current research using quantitative outcomes is limited in that information as to how athletes conceptualize constructs such as QOL is missing, and individual factors are not explored.**

To investigate young athletes' experiences with ACL injury/recovery and perceived QOL one year after ACLR and to compare the experiences of Australian and Canadian athletes.



ISAKOS
CONGRESS
2025



MUNICH
GERMANY
June 8-11



ORTHOSPORT
victoria

HealthSciences



Participant Eligibility Criteria

- Under 25 years old
- Participating in organized sport
- One-year post-ACLR

Themes from this Australian cohort  were compared to themes created from a cohort of Canadian athletes  interviewed in a previous study

Descriptive Methodology

- Semi-structured interviews: piloted, completed to saturation, transcribed
- Transcript coding and inductive thematic analysis

Interview Sections

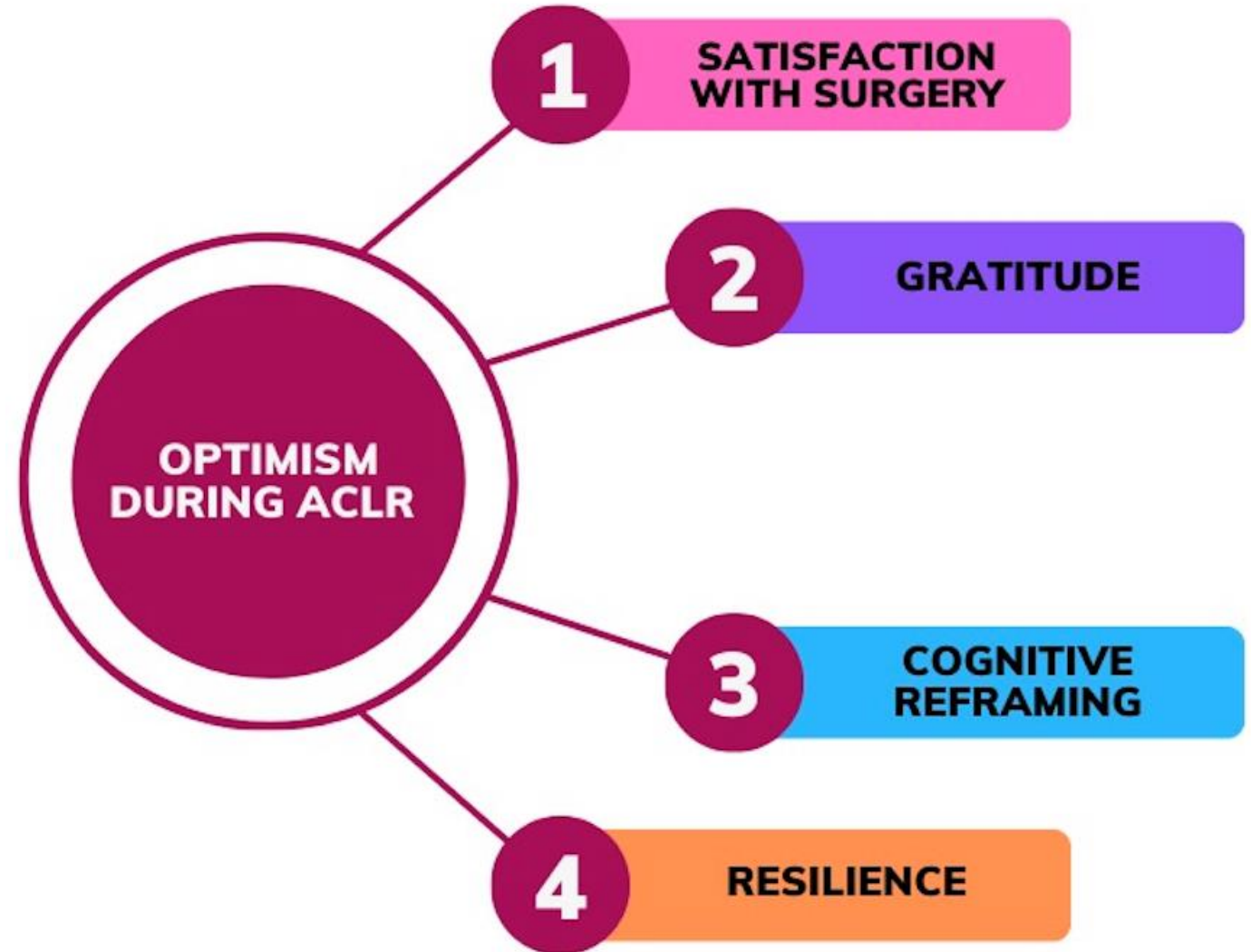
1. Personal definition of “quality of life”
2. World cloud describing components making up or determining QOL and impact of ACL injury
3. Visual analog scale of current, recalled pre-injury, and recalled pre-surgery QOL + definition of best and worst imaginable QOL (anchors)
4. Discuss attitudes and experiences related to injury, surgery, and recovery

Results: Participants (Australian Cohort)

Participant Number	Sex	Age (years)	Sport	Pre-injury QOL (0-100)	Current QOL rating (0-100)
1	F	17	Netball	82	64
2	F	16	Netball	88	75
3	F	17	Basketball	66	75
4	M	20	Aussie Rules Football	75	75
5	F	22	Aussie Rules Football & Soccer	92	84
6	M	21	Aussie Rules Football	77	76
7	F	25	Aussie Rules Football	92	96
8	M	20	Aussie Rules Football	69	76
9	F	25	Netball	67	50
10	M	19	Soccer	67	93
11	M	19	Aussie Rules Football	95	86
12	M	24	Indoor Soccer	73	88
13	M	25	Weight Lifting	85	71

Results: Overarching Theme

- **Overarching theme: Optimism**
- Young athletes described perspectives, experiences, and coping strategies that allowed them to maintain a positive psychological outlook related to their ACL injury experience



- 1. Satisfaction with Surgery:** Participants showed patterns of perceiving a favourable outcome after surgery regardless of challenges or setbacks
 - 100% of participants stated satisfaction with surgery (🇨🇦 & 🇦🇺)

“Like the surgery was a success from the beginning, the graft is really stable and the surgery itself wasn’t an issue, it’s just that I’ve had a complication with my muscles and I don’t think that’s the surgery’s fault so I’d say yes, I’m satisfied with my surgery”

2. Gratitude: Each participant was able to identify an area in their life that had improved as a result of the injury

- 8/13  athletes were grateful and would not take back their injury
- While  athletes were not asked explicitly, they similarly expressed gratitude

“I feel that it might of needed to happen because before my ACL I was...falling out of basketball but I wasn't enjoying it as much, this happening made me realize how much I missed it in a way so I guess I'm kind of grateful it happened, also I feel like I'm really, I'm stronger mentally”

3. Cognitive Reframing: Participants displayed patterns of shifting perspectives and a growth mindset with regards to their overall goals and value of sport in their life

- Cognitive reframing was identified longitudinally pre-to-post-operative in the 🇨🇦 cohort and reflected on retrospectively by the 🇦🇺 athletes

“I’m enjoying trying out different things and I think it’s for the better... I’m getting to that age now where work and paying off a house has become more important than kicking goals at a social soccer match”

4. Resilience: When reflecting on the adversities associated with the surgery, participants recognized the strengths that they had gained as a part of the process (physically and mentally)

“I think it was really transformative...I feel different than what I did before in terms of just conviction in my own opinions and the way I see myself. Like before this, I had really lacked a sense of self and direction...but I know that I will be able to get myself wherever I want to go because I’ve got the mental resilience to do it.”

Conclusions

- Young athletes after ACLR exhibited optimism through four distinct mechanisms:
 - **Satisfaction with surgery** (being content with the outcome)
 - **Gratitude** (identifying benefits resulting from the injury experience)
 - **Cognitive reframing** (focussing on aspects of life outside of those affected by injury)
 - **Resilience** (recognizing personal strength)
- These themes were consistent across participants in Canada & Australia
- Interpretation of ACLR outcomes must consider athletes' innate ability to adapt.

References

1. Marmura H, Morassutti O, Bryant DM, Getgood AMJ, Webster F. Reconceptualisation of sport and quality of life in young athletes following anterior cruciate ligament reconstruction: understanding the experiences behind the numbers through a prospective mixed-methods study. *BMJ Open Sport Exerc Med*. 2025 Mar 13;11(1):e002107. doi: 10.1136/bmjsem-2024-002107.
2. Marmura, H., Bryant, D., Getgood, A., & Webster, F. (2024). 'It's just my knee': a qualitative study investigating the process of reframing and young athletes' perceived quality of life between anterior cruciate ligament injury and surgery. *BMJ open*, 14(5), e076799.
3. Vaismoradi, M., Jones, J., Turunen, H., & Snelgrove, S. (2019). Theme development in qualitative content analysis and thematic analysis. *Journal of Nursing Education and Practice*, 6(5), 100–110.
4. Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to Meet the Trustworthiness Criteria. *International Journal of Qualitative Methods*, 16(1), 1–13. SagePub. <https://doi.org/10.1177/1609406917733847>