

# **“It’s Just My Knee”: The Process of Reframing and Young Athlete’s Perceived Quality of Life Between ACL Injury and Surgery**

**Hana Marmura, BSc, MPT/PhD (c), Dianne Bryant, MSc, PhD,  
Alan Getgood, MD, FRCS (Tr & Orth), Fiona Webster, PhD**

The authors have no relevant conflicts of interest to disclose.

- Worsened quality of life (QOL) is commonly referenced as a consequence of anterior cruciate ligament (ACL) injury and reconstruction, especially for young athletes whose sport participation is impacted<sup>1</sup>
- However, QOL is a personal experience, and it is important to understand individual perspectives following ACL injury

To understand the factors influencing young athletes' perceptions of QOL following an ACL rupture, prior to reconstructive surgery.

## Participant Eligibility Criteria

- Under 25 years old
- Participating in organized sport

## Descriptive Methodology

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

## Methodological Rigour<sup>2,3</sup>

- Adequate sample size for data saturation (n=20)
- Memo notes and reflexive journaling
- Member checking and reflection

1. Discuss familiarity with the concept of and definition of “quality of life” + associated vignettes
2. World cloud describing components making up or determining QOL → discussion of each and impact of ACL injury
3. Visual analog scale of current QOL + definition of best and worst imaginable QOL (anchors)

# Patient Demographics

Participant Number	Sex	Age (years)	Months from injury to interview	Days from interview to surgery	Current QOL rating (0-100)
1	M	22	15.3	5	73
2	F	15	2.4	10	13
3	M	17	1.3	13	35
4	M	20	1.2	8	88
5	M	20	8.7	24	79
6	M	21	2.5	5	95
7	M	20	4.5	1	87
8	M	20	1.8	36	79
9	F	16	1.1	2	31
10	M	14	1.3	5	70
11	M	25	2.3	1	81
12	F	23	4.2	37	71
13	F	16	4.0	36	79
14	M	17	5.2	54	76
15	F	16	3.1	2	55
16	M	16	3.9	57	73
17	F	15	4.7	20	83
18	M	15	2.8	21	85
19	F	15	5.1	36	71
20	F	17	3.1	23	62

# Results: Thematic Analysis

## Codes

- Adaptation
- Burden
- Coping
- Expectations
- Family
- Fear of re-injury
- Friends
- Fun
- Goals
- Health
- Independence
- Isolation
- Mental state
- Mobility
- Money
- Motivation
- Nature
- Pain
- Participation
- Previous Activities
- Pets
- Religion
- School
- Social interaction
- Sport
- Surgery
- Travel
- Work

## Sub-themes

Positive perception of general QOL not influenced by ACL injury

Negative influence of ACL injury on specific domains of QOL

Expectation of temporary impairment and future goals

Framing the impact of ACL injury on overall QOL and life satisfaction

## Themes

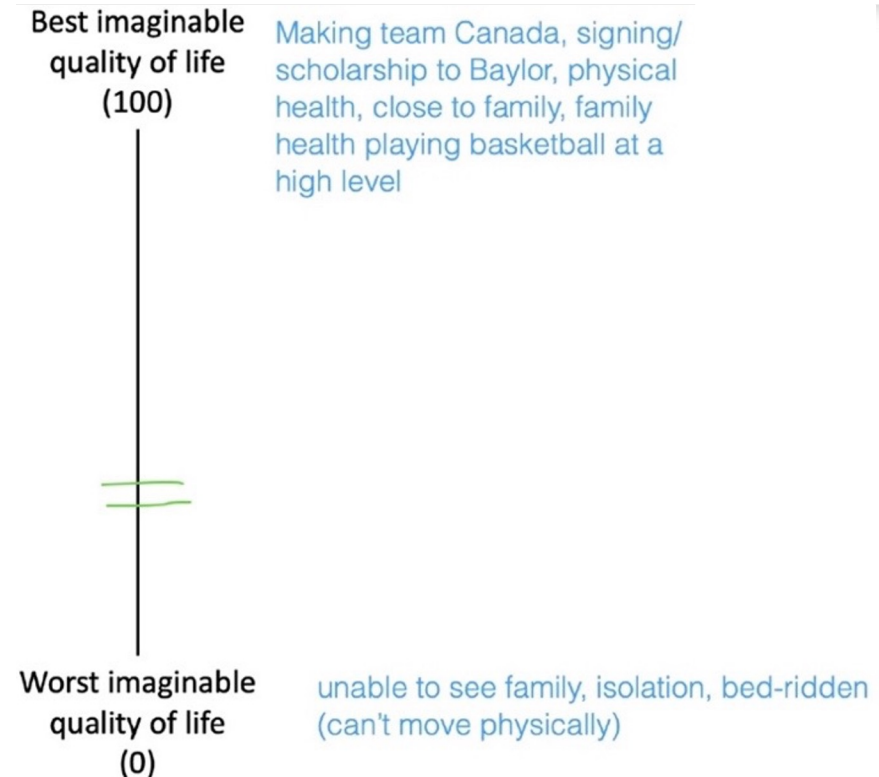
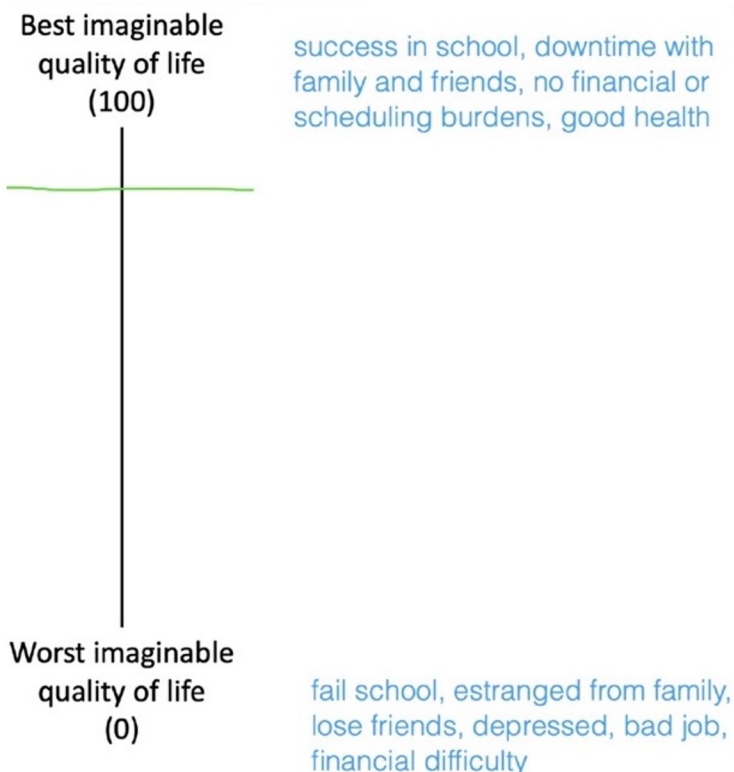
**Common components make up young athletes' QOL: support, sport, health, independence**

**Expectations of temporary impairment and imminent recovery to reach future goals**

**The influence of reframing the components of QOL on perceived QOL**

# Young Athletes' Quality of Life

- Young athletes shared key elements of their QOL and recovery expectations
- However, athletes' ratings of their post-injury/pre-operative QOL and definitions of QOL anchors were quite variable:



# Reframing Following ACL Injury

- Athletes shift focus to draw more/less meaning from various components of overall QOL
- Participants with better QOL ratings (70+): shift attention to pillars of QOL not greatly affected by injury (family/friends, school/work, health)
- Participants with especially low QOL ratings emphasized losses associated with their injury (inability to play their sport/socialize)
- Three of the four lowest QOL ratings were held by female participants
  - Potential socioenvironmental factors contributing to more prominent reductions in QOL for female athletes
- Reframing appears to occur as part of a process of adapting to injury that may not simply be linked to length of time from injury

- We should avoid labelling athletes as copers/non-copers or negative/positive thinkers and instead work to identify the stage of adaption an athlete is in
- There may be a role for individualized psychological interventions in the treatment and management of ACL injuries, especially in the time between injury and surgery

## **Individualized interventions should acknowledge athletes'**

1. Current perspective and stage of adaptation
2. Gender
3. External expectations, available supports and opportunities

# Conclusions

- **Individual processes of adapting to and reframing the injury experience may have more to do with QOL following ACL injury than the actual injury itself**
- **The process of reframing likely occurs at varying rates and will be influenced by socioenvironmental, individual, and structural factors**
- **Identifying these factors may help target potential psychological interventions or supports likely to enhance athletes' adaptation to injury**
- **This could attenuate reductions in QOL following ACL injury as young athletes await their surgery date and may consequently improve overall outcomes**

# References

1. Filbay SR, Grindem H. Evidence-based recommendations for the management of anterior cruciate ligament (ACL) rupture. *Best Pract Res Clin Rheumatol*. 2019;33(1):33-47.
2. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol*. 2006;3(2):77-101.
3. Tracy SJ. Qualitative quality: Eight a "big-tent" criteria for excellent qualitative research. *Qualitative Inquiry*. 2010;16(10):837-851.

