

Prior Injury, Health-Related Quality of Life, Disablement, and Physical Activity in Former Division I Women's Soccer Players

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Health of Former College Athletes

- Former collegiate athletes have shown a decline in health outcomes:
 - Lower HRQoL
 (Simon & Docherty, 2013; 2016; 2017; 2020)
 - Challenges in maintaining PA levels across lifespan
 (Reifsteck et al., 2013; Sorenson et al., 2015)
- Prior sport related injury is a likely contributing factor to these declines
 (Cowee & Simon, 2017; Russell et al., 2017)



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Definitions

- HRQoL = health related quality of life
 → multi-dimensional personal measure of health
- Disablement
 → Inability to perform activities that are important to an individual (due to physical or mental issue)



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Why Women's Soccer?

- Women's soccer has high participation & injury rates (Kerr et al., 2015; Lopez-Valenciano et al., 2021, NCAA, 2017; US Youth Soccer, n.d.,).
- Previous soccer specific research has been on male athletes
- Prien (2017) identified knee, ankle & head injuries as areas of concern for female soccer athletes



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Purpose

To examine the role prior sports injury played in the health-related quality of life, disablement and PA of former Division I women's soccer players.



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Methods/Data Collection

- Cross-sectional design
- Web-based survey
 - Email
 - Social media
- Convenience & snowball sample



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Survey

- Demographics
- Soccer playing history
- Injury history
- Health Outcomes
 - HRQoL (PROMIS)
 - Disablement (DPA)
 - PA (Godin)
- Current Health Concerns
- Exploratory Questions



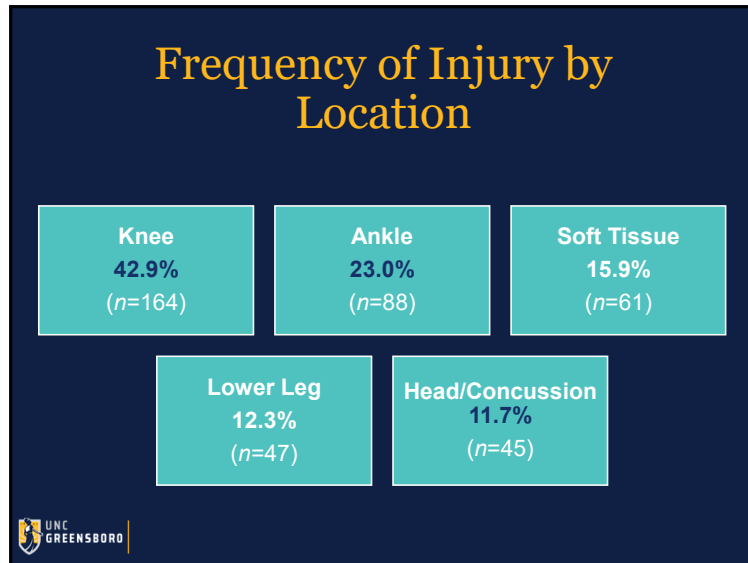
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Characteristics of Participants

<p><u>Sample:</u></p> <p>$n = 382$</p> <p>NCAA years played: $M = 3.86$</p> <p>$M_{age} = 36.41$, Range: 22-59</p> <p>78% were 10+ years removed from NCAA</p>	<p><u>Severe Injury:</u></p> <p>$n = 261$ (68.3%)</p> <p><u>No Severe Injury:</u></p> <p>$n = 121$ (31.7%)</p>
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Comparison of Health Outcomes by Injury History

	No Severe Injury		Severe Injury		p
	M	SD	M	SD	
HRQoL-Physical	54.82	6.37	52.91	6.54	.008*
HRQoL-Mental	54.70	7.89	54.17	7.35	.525
DPA-Physical	8.86	10.69	13.77	11.60	.0001*
DPA-Mental	2.94	3.26	2.95	3.41	.971
PA	40.49	23.54	38.08	21.66	.336

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* Significant p < .01 (two-tailed)

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Correlations Among Health Outcomes

- Higher PA → Higher HRQoL
 $r = .310^*$ physical; $r = .199^*$ mental
- Higher disablement → Lower PA
 $r = -.152^*$ physical; $r = -.148^*$ mental
- Higher disablement → Lower HRQoL
 $r = -.623^*$ physical; $r = -.468^*$ mental

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* Significant p < .01 (two-tailed)

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- ### Exploratory Questions
- Current health concerns?
 - At least one area of concern – **60.5%**
 - Joint health – **39.0%**
 - Mental health – **18.1%**
 - Injury impact on ability to participate in PA/sport?
 - Almost Always or Often - **28.4%** of injured group
 - How has soccer playing experience negatively impacted your PA & health?
 - Physical impairments – **39.8%**
 - Limited in PA or Forced to Make Adjustments to PA – **24.7%**
 - Negative Mental Health Impact – **9.3%**
 - Fear of Health Issues in Future/Fear of Injury/Pain – **8.6%**
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Study Takeaways

- High rates of injury, specifically to knees & ankles of women's soccer players
- Sports injuries can have long-term consequences
- Injury can be additional challenge to transition out of athletics & maintaining PA across lifespan



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Where do we go from here?

- Emphasis should be placed on injury prevention
- Injuries will occur
 - Emphasis on rehabilitation programs
 - RTP protocols (appropriateness)
- Continued research needed



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Thank you!

Questions?

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