A Qualitative Exploration of Collegiate Student-Athletes' Constructions of Health, Fitness, and Body Image

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#### **ABSTRACT**

Collegiate student athletes are faced with unique challenges as they are often forced to negotiate between demanding social, athletic, and academic roles. These competing priorities can put student athletes at greater risk for experiencing physical and psychological health problems than their non-athlete peers. The purpose of this study was to examine how student athletes conceptualize health, fitness, and body image in the Canadian context, and to examine how they formulate these understandings. Semi-structured interviews were conducted with 20 activelycompeting collegiate student athletes from nine varsity sports at two academic institutions, and data were analyzed using interpretative phenomenological analysis. Findings revealed that participants constructed health holistically, with particular emphasis on physical and mental domains over social well-being. The quality of one's physical health was equated in many ways with athletic capacity, as was the quality of mental health to a lesser degree. Participants discussed a variety of sources from which they drew health ideas, but sport experiences were commonly cited as the most significant and difficult experiences in particular. Findings contribute both theoretical and practical applications. With regard to theory, findings can inform future research into health conceptualizations of other university student populations, and may inform further inquiry into how health ideas manifest into behaviour. With regard to practice, recommendations towards collegiate sport administrators include placing heavier emphasis on mental health resources, and improving support while athletes are acclimating to the demanding lifestyle of varsity sport.

## **RÉSUMÉ**

Les étudiants athlètes de niveau collégial sont confrontés à des défis uniques, car ils sont souvent obligés de négocier entre des rôles sociaux, sportifs et académiques exigeants. Ces priorités concurrentes peuvent exposer les étudiants athlètes à des problèmes de santé physique et psychologique par rapport à leurs pairs non sportifs. Le but de cette étude était d'examiner la façon dont les étudiants athlètes conceptualisent la santé, la forme physique et l'image corporelle dans le contexte canadien, ainsi que la manière dont ils formulent ces interprétations. Des entretiens semi-structurés ont été menés avec 20 étudiants sportifs universitaires en compétition active de neuf disciplines sportives dans deux institutions académiques, et les données ont été analysées à l'aide d'une analyse phénoménologique interprétative. Les résultats ont révélé que les participants construisaient leur santé de manière holistique, en mettant un accent particulier sur les domaines physique et mental avant le bien-être social. La qualité de la santé physique de l'individu était considérée à bien des égards comme équivalente à la capacité athlétique, tout comme la qualité de la santé mentale dans une moindre mesure. Les participants ont discuté de diverses sources à partir desquelles ils ont puisé leurs idées sur la santé, mais les expériences sportives ont souvent été citées comme les expériences les plus significatives et les plus difficiles en particulier. Les résultats apportent des applications à la fois théoriques et pratiques. En ce qui concerne la théorie, les résultats peuvent éclairer les recherches futures sur les conceptualisations de la santé d'autres populations d'étudiants universitaires et sur la manière dont les idées sur la santé se traduisent par un comportement. En ce qui concerne la pratique, les recommandations à l'intention des administrateurs de sports collégiaux consistent à mettre davantage l'accent sur les ressources en santé mentale et à améliorer le soutien alors que les athlètes s'adaptent au style de vie exigeant du sport universitaire.

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### PREFACE AND CONTRIBUTION OF AUTHORS

Bradley Crocker was the principal contributor to recruitment, data collection, transcription, data analysis and interpretation, and the preparation of this thesis.

Sidonie Chard contributed to the transcription of the audio-recorded interviews, and to data analysis and interpretation.

Dr. Lindsay Duncan, the candidate's supervisor, was actively involved throughout the entire research process, from the conceptualization of this project to the completion of this thesis and manuscript.

#### INTRODUCTION

Collegiate student athletes are faced with unique challenges as they are often forced to negotiate between demanding social, athletic, and academic roles (Miller & Kerr, 2002; Jolly, 2007). These competing priorities can put student athletes at greater risk for experiencing physical and psychological health problems than their non-athlete peers (Etzel, 2006). In a survey of 921 NCAA Division I student-athletes, 82% reported spending more than 10 hours per week practicing their sport, and 40% reported spending 10 hours per week playing their sport, in addition to their full-time academic studies (Potuto & O'Hanlon, 2006). Research investigating the lifestyle of Canadian student-athletes is more scarce. Through qualitative methods, Rothschild-Checroune, Gravelle, Dawson, and Karlis (2012) found that first-year Canadian varsity football players were expected by coaches to invest up to 40 hours each week into football during the competitive season, and 20 hours per week in the off-season. Miller and Kerr (2002) found that Canadian student-athletes reported similar time commitments to sport as their NCAA counterparts, despite significantly less media attention and financial incentive. Athletic scholarships were not permitted in the Canadian context until 2006, and unlike the American system are limited to the value of annual tuition fees (White, McTeer, & Curtis, 2013). Although there exists a large body of research examining student athlete experiences, such as their academic attitudes and experiences (Eitzen, 1987; Simons, Van Rheenen, & Covington, 1999; Martin, Harrison, Stone, & Lawrence, 2010) and their social life (Gayles, 2009; Chen, Snyder & Magner, 2010), no published research has specifically addressed how student athletes define and conceptualize health.

Synthesizing the works of many researchers, Tarlov (1992) suggested conceptualizing health as "an individual or group capacity relative to potential to function fully in the social and

physical environment" (pg. 725). It stands to reason that the unique, demanding nature of student-athletes' environments (Miller & Kerr, 2002; Jolly, 2007), will be reflected to some degree in their construction of health. When shaping health policy and implementing health resources, it is critically important to consider the viewpoint of individuals affected by said policy in order to maximize potential health gains (Smith, 2007). How people conceptualize health and illness will significantly impact their health-related behaviours, including decisions as to when it is necessary to seek professional help (Lyons & Chamberlain, 2006). Understanding people's beliefs and attitudes towards health can ultimately inform how we employ health education, health behaviour interventions, or health resources (Rogers & Pilgrim, 1997).

The aim of this research is to discern how Canadian university student athletes understand health, how they conceptualize a healthy state of being, and how they come to these understandings. "Health" is a complex concept that can mean many different things to different people (Davis & Drew, 1999). Constructions of fitness and body image are often closely linked to health, and may help to reveal values and beliefs pertaining to health (Adame & Johnson, 1989; Laffrey & Isernberg, 1983). As such, the research questions guiding this study are (i) In the context of Canadian university sport, how do student athletes construct health, fitness, and body image? (ii) Where do student athletes draw their ideas about health, fitness, and body image from?

#### LITERATURE REVIEW

## **Perspectives on Health**

Defining health has traditionally been left to biomedical experts and institutions, resulting in a narrow conceptualization of health as simply an absence of disease or illness. This has led to

health promotion initiatives derived almost exclusively from curative and preventive medicine, with very little emphasis on psychosocial factors (Antonovsky, 1998; Watson, 2000). Public interest in health has expanded considerably in recent decades, through which conceptualizations of health have evolved to include more holistic determinants such as culture, spirituality, and the 'role of the mind' (Engebretson, 2003). Medical-scientific literature, although important, cannot effectively explain the pursuit of health and wellness on its own (Conrad, 1994). People's ideas and perspectives of health are infinitely varied, deeply personal, elaborate, and intricate (Crawford, 2006). In the past few decades, literature has expanded considerably concerning nonphysiological determinants of health and illness, including cultural factors such as beliefs, values, and lifestyles (e.g. Backett, 1992; Corin, 1995; Wright, O'Flynn, & Macdonald, 2006). These cultural factors are shaped by experience and social structures, contributing to constructions of terms like "health" (Pill, 1991; Crawford, 2006). For example, Pierret (1984) found that one's career and socioeconomic status significantly affects concepts of health and illness. In her study, farmers associated health with fortuity, whereas those with insecure jobs constructed their health as a means to employment.

Multiple scholars have noted that among lay people, health is often constructed as a moral discourse, where health is valued and people tend to define themselves in accordance with their ability to adopt healthy practices and exhibit 'being healthy' (Crawford, 1984; Conrad, 1994). Particularly in a North American context, health promotion and education tools connect health with morality by presenting particular behavioural norms such as not smoking, exercising vigorously, and eating a low-fat diet as "guides to healthward conduct" (Conrad, 1994, p. 387). The notion of self-improvement through health behaviours has been an increasingly common sentiment through the last century as well, including the manifestation of self as a project

(Fellman & Fellman, 1981; Conrad, 1994). One's state of health is continually assessed and scrutinized by the self and others, and may be constructed as both a goal and a source of stress and anxiety (Crawford, 2006). The pursuit of health is manifested into essentially all aspects of contemporary life, fueled by the recognition from health-conscious individuals that their health is continuously in jeopardy (Crawford, 2006).

The World Health Organization defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (World Health Organization, 1948). This definition has come over criticism in recent scholarship. The notion of 'complete well-being' has been criticized as ambiguous and ineffective, as taken literally this would classify a vast majority of people as unhealthy (Smith, 2008). This way of defining health has been suggested to contribute to issues of over-medicalization in society, including promotion of quasi-medical treatments (Boyle, 1977), and fostering higher levels of medical dependency (Huber et al., 2011). Huber et al. (2011) have proposed shifting the focus in defining health from complete well-being to "the ability to adapt and self manage in the face of social, physical, and emotional challenges" (pg. 343). Using the same three domains of health, this would lead to classifying healthy people as those who can navigate health-related adversity, rather than targeting an impractical pristine state of holistic health.

## **Athletes' Perspectives on Health**

It is a commonly held belief that participation in sport is a means of improving one's health, however, scholars have called this assumption into question across many aspects of health and well-being (Waddington, 2004; Young, McTeer, & White, 1997). This questioning has included debate as to whether elite athletes are true exemplars of healthiness (Theberge, 2008). Athletes often demonstrate a willingness to play through pain and injury, and this 'culture

of risk' has been discussed as problematic in the context of sport and general athlete well-being (Curry, 1993; Hughes & Coakley, 1991; Theberge, 2008). Athletes often hold complex connections between health, body image, and functionality that can also play out in harmful ways (Bridel, 2013). The unquestioned equating of healthiness with an athletic body image, or with athletic capacity, can manifest into overtraining and body dysmorphic disorders, in addition to harmful normalization of pain and injury (Bridel, 2013). Social constructs of masculinity and femininity are often amplified in sport contexts as well, which has demonstrably produced negative outcomes for male and female participants through phenomena such as physical and verbal abuse (Anderson, 2011; Messner, 1990; Robertson, 2003), and body dissatisfaction (Bennett, Scarlett, Clarke, & Crocker, 2017; Lim, Omar-Fauzee, & Rosli, 2011).

Although a considerable body of literature exists critiquing the relationship between sport and health, research that specifically investigates athletes' constructions of health remains scarce. One example of this work comes from Dr. Nancy Theberge, who investigated elite athletes' perceptions of the relationship between health and sport participation with field hockey players, rowers, and wrestlers (2008). Theberge found that these elite athletes constructed health in accordance with their capacity to perform in their immediate competitive careers, discussing their bodies in similar fashion to a piece of equipment. Dr. William Bridel extended this work to Ironman triathletes, finding similar constructions even in a less competitive sporting environment (2013). Bridel found that these recreational athletes commonly referenced one's ability to be physically activity as a measuring stick for health, reflecting their ability to finish an Ironman as indicative of being 'healthier' than those who could not. Taken together, Theberge and Bridel's research demonstrates that athlete identity plays a major role in shaping constructions of health.

#### **Student Athlete Health**

Collegiate student athletes are faced with unique challenges, as they are often forced to negotiate between demanding social, athletic, and academic roles (Miller & Kerr, 2002). These competing priorities can put student athletes at greater risk for experiencing physical and psychological health problems than their non-athlete peers (Etzel, 2006; Nattiv, Puffer, & Green, 1997). A significant body of literature has demonstrated that collegiate student athletes exhibit adverse health behaviours at a higher prevalence than their 'general student body' counterparts. This includes excessive alcohol consumption (Barry, Howell, Riplinger, & Piazza-Gardner, 2015; Grossbard et al., 2009; Martens, Dams-O'Connor, & Beck, 2006), disordered eating (Greenleaf, Petrie, Carter & Reel, 2009; Sundgot-Borgen & Torstveit, 2004), hazing (Diamond, Callahan, Chain & Solomon, 2016), doping (Bents, Tokish, & Goldberg, 2004), and committing sexual violence (McCray, 2015). Mounting evidence has also demonstrated student-athletes being at particular risk across consequences such as burnout (Gould & Whitley, 2009; Dubuc-Charbonneau, Durand-Bush, & Forneris, 2014), depression (Weigand, Cohen, & Merenstein, 2013; Yang et al., 2007), poor academic performance (Levine, Etchison, & Oppenheimer, 2014; Riciputi & Erdal, 2017), and poor sleep quality (Mah, Kerizirian, Marcello, & Dement, 2018). It has also been noted that, despite exhibiting significant psychological distress (Blacker, Sullivan, & Cairney, 2017), student athletes seek professional support less often than their non-athlete peers (Pinkerton, Hinz, & Barrow, 1989). In their college years, students see substantial change in their health-related beliefs and behaviours (Lau, Quadrel, & Hartman, 1990), and it's been suggested that this transitional period of being responsible for one's own health may have critical long-term health implications (The World Bank, 2007).

As mentioned previously, no published research has specifically addressed how student athletes define and conceptualize health. In my own work at the University of Calgary prior to this study, I inquired into these concepts with a group of male collegiate varsity swimmers (Crocker & Bridel, 2019), where my findings both reflected and challenged past literature concerning athletes' constructions of health. I conducted in-depth, face to face, semi-structured interviews with ten varsity swimmers at a Canadian university, which involved conversations around their ideas of health and their experiences in managing academic, athletic, and social commitments. The varsity swimmers in my study often connected health with their body image and perceived athletic capacity, which conforms to findings from other groups of athletes (Bridel, 2013; Theberge, 2008). The swimmers also generally held themselves to a stricter standard of physical health than they deem necessary for the general population, which may foster the development of body dysmorphic disorders during and after their sport careers. There was also a pervasive notion of poor mental health literacy, where, despite identifying that mental health is an important component of 'being healthy', these student athletes expressed uncertainty as to how mental health can be evaluated, how poor mental health is demonstrated, and how one could improve their mental health. This is also of concern, as it may leave student athletes predisposed to "suffering in silence" with mental illness. These findings warrant further research on student athletes' constructions of health more broadly, as these could provide important implications for current practices in the Canadian interuniversity sport system.

#### **METHODOLOGY**

## **Paradigm**

The research questions presented above are situated within, and best inquired into, using a constructivist paradigmatic lens. Constructivism represents the view that knowledge, and thus

all reality, is contingent on human practices, and is developed and transmitted within social contexts (Crotty, 1998). This includes the recognition that knowledge is consistently changing, and that any attempt to discern this knowledge is inherently shaped by both the 'knowledge-seeker' and the 'knowledge-holder' (Lee, 2012). Constructivism stems from a relativist ontology, which reasons that multiple realities exist, and these are specifically constructed by each person's experiences and the differing meanings that they attribute to these experiences (Guba & Lincoln, 1994). Constructivism is also commonly associated with both transactional and subjectivist epistemologies, which reason that knowledge is co-created by the participant and researcher, and as such there is no objective truth to be known (Guba & Lincoln, 1994).

This paradigm fits the aims of this research well, as its been identified that health-related beliefs and behaviours are largely socially constructed (Courtenay, 2000; Sharf & Vanderford, 2008) and can differ vastly between demographic groups (Wright, O'Flynn, & Macdonald, 2006). Recognizing that constructions of health stem from an individual's experiences is critical to addressing the research questions posed, as the unique experiences of student athletes will undoubtedly produce constructions of health that both reflect and challenge past findings of athletes' constructions of health (e.g. Bridel, 2013; Theberge, 2008).

## **Interpretative Phenomenological Analysis**

In order to address the research questions of this paper, I decided to use interpretative phenomenological analysis (IPA). IPA synthesizes concepts of phenomenology and hermeneutics to form a methodology intended to be both descriptive and interpretative (Smith, Flower, & Larkin, 2009). Phenomenology involves suspending assumptions, and searching for fundamental meanings that are essential to understanding a phenomenon (Sparkes & Smith,

2014). Hermeneutics concerns the theory of interpreting meaning from text, which involves comprehending a person's mindset and language in order to translate their experiences (Freeman, 2008). In combination, it becomes the researcher's responsibility to represent the data in a meaningful way, while also providing accurate and useful interpretation of those data to ultimately convince the reader of its significance (Smith, Flower, & Larkin, 2009). The analytical process of IPA involves a dual interpretive process, as the researcher is attempting to make meaning of the participants' meaning-making (Smith & Osborn, 2008).

### Researcher Background

Researcher reflexivity is used as a means of improving credibility and trustworthiness, where researchers are encouraged to critically assess the influence of their own background, conceptions, and motives on the qualitative research process (Good, Herrera, Good, & Cooper, 1985; Ruby, 1980).

As a former student athlete, I completed four seasons of varsity swimming at the University of Calgary while obtaining an undergraduate degree in kinesiology, followed by one final season at McGill University during the first year of a Master's program. My athletic and academic commitments fluctuated slightly throughout these five years, but I typically spent approximately 26 hours each week training for swimming, approximately 15 hours each week in university classes, and approximately two hours each night studying. I also maintained a part-time job for my first four seasons of varsity swimming, which occupied an additional 12 hours each week. The balance of these commitments, in addition to taking the time necessary for family and social commitments, forced me to be proficient at managing my time. There were several instances where I was forced to negotiate between these commitments, and in these cases

I prioritized my academic and part-time job commitments. Instances where I sacrificed family and athletic commitments produced significant stress, and I think ultimately led me to engage in some unhealthy coping behaviours such as limited sleep and episodes of binge drinking. It is my understanding that my experiences are by no means unique, and many student athletes balance schedules more demanding than this.

The research assistant acting as a 'critical friend' in this study was an actively competing varsity hockey player at McGill University in her third year of undergraduate study in kinesiology and physical education. Through these three seasons, she similarly spent approximately 25 hours per week dedicated to training, 15 hours per week dedicated to classes, and dedicated three hours per night to studying. Participating in hockey at this level also involves many weekend travel commitments throughout Canada and the Northern United States for games, particularly during the Fall and Winter terms.

Stemming from my personal experiences, including interactions I have had with my teammates and varsity athletes from other sports, I believe that this lifestyle common to student athletes tends to shift attitudes towards health, and what constitutes normative health behaviours. I reason that the demanding nature of balancing athletic, academic, and social roles often forces student athletes to adjust or sacrifice behaviours that contribute to their physical, mental, and social well-being. This forces student athletes to constantly prioritize aspects of their health over others, which over time may shift their ideas about health and healthy behaviours in general.

#### **Data Collection**

### Inclusion Criteria and Recruitment

To be eligible for this study, participants were required to 1) speak English, 2) be at least 18 years of age, 3) be actively competing as student athletes in any sport at a Canadian

university, 4) have already completed at least one full season as a university student athlete, and 5) have lived away from their parents or guardians for at least the two most recent academic terms.

The decision to include current student athletes who have completed at least one full season was made to ensure that participants would be reflecting on relatively current experiences in the Canadian university sport system, and to ensure that participants had adequate experience as collegiate student athletes to draw upon in the interviews. The criterion that participants must live away from home was based on the assumption that student athletes living away from home tend to take on more responsibility for some aspects of their health than those who continue living with their parents or guardians, such as nutrition.

Sixteen participants were initially recruited through social media, utilizing my personal connections with current student athletes at McGill University and the University of Calgary. Snowball sampling took place after this, where remaining participants were contacted by the initial participants. Recruiting participants from two institutions as opposed to one was beneficial in reducing potential institutional bias in athlete experiences, though there seemed to exist no systematic differences between participants from either university. Of the potential participants that expressed interest in the study, participants were purposively selected to ensure a diversity of sport backgrounds and an equal amount of male and female participants. Participants were also prioritized from sports that are typically more time-demanding and travel intensive, as the busy schedule resulting from this may have amplified their need to modify health behaviours. Once participants were screened and deemed eligible for the study, an interview was scheduled. Participants were continually recruited until data saturation was reached, which was deemed to be true at 20 participants. This surpasses the typical point of data saturation for qualitative

research in health sciences, which typically occurs around 12 participants (Guest, Bunce, & Johnson, 2006), re-affirming our judgment that further interviews would have been unlikely to contribute further to answering the research questions at hand. In addition to improving the likelihood of data saturation, surpassing 12 participants allowed us to represent a broad variety of varsity sports.

## **Participants**

The participants for this study were 20 collegiate athletes (age range, 18 to 26 years; mean =  $20.2 \pm 1.1$  years) from either McGill University (n = 13) or the University of Calgary (n = 1). The athletes consisted of 10 men (50%) and 10 women (50%) representing volleyball (n = 1), swimming (n = 1), soccer (n = 1), rugby (n = 1), hockey (n = 1), baseball (n = 1), football (n = 1), track & field (n = 1), and synchronized swimming (n = 1). The athletes' present year of varsity eligibility ranged from n = 10 to n = 11. The athletes in their n = 12 year, n = 13 in their n = 13 year, n = 14 in their n = 15 year of varsity sport (mean = n = 15.5 n = 16 year of varsity eligibility). The athletes represented four faculties of study, including arts (n = 11), science (n = 12), business (n = 12), and engineering (n = 12). Eighteen of the athletes were in undergraduate programs (90%), and the remaining two were in the first year of Master's programs (10%).

## Informed Consent

Prior to the interview, I orally explained the study procedure and gave participants an opportunity to ask any questions they had about the process. This included an oral explanation of participants' ongoing right to withdraw consent and leave the study at any time without penalty.

Once all of their questions were answered to their satisfaction, and they stated that they

understood the procedures involved as well as the ongoing nature of their consent, they provided formal written consent by signing and returning a consent form to the me.

#### Semi-structured Interviews

Data for this study were collected using semi-structured, one-on-one, face-to-face, audiorecorded interviews in which I asked student-athletes questions about their ideas and experiences relating to health, fitness, and body image. The interviews lasted between 42 and 75 minutes, with an average length of 62 minutes. An interview guide was initially devised (see Appendix 1: Interview Guide), informed by the World Health Organization's definition of health (World Health Organization, 1948), a review of relevant literature (Bridel, 2013; Theberge, 2008; Wright, O'Flynn, & Macdonald, 2006), and from my personal experience. The interview guide began with broad conversation regarding participants' history in sport and experiences as a student athlete, before progressing to discussion around their ideas specific to health, fitness, and body image. This structure facilitated the building of rapport and a sense of comfort in participants before topics that might be perceived as more sensitive were explored. It is also recognized that through a constructivist lens, the participants' experiences and the meaning they attribute to these experiences form the basis of their constructed reality. As such, discussing these experiences first helped me to shape effective questions surrounding topics of health, fitness, and body image.

Participants were given the opportunity to choose the setting for their interview, provided it was quiet enough to allow for a high quality interview and audio-recording to take place, and secluded to help maintain their privacy. If participants did not choose a location, a private room in the Department of Kinesiology and Physical Education at McGill University, or the

Department of Kinesiology at the University of Calgary, was used. This was selected with the participants' convenience in mind, as the majority of participants trained for their sport in the same building.

Semi-structured interviews were selected for this study due to their versatile nature, as they allow the interviewer to address aspects important to their line of inquiry, while also allowing participants to stray from the interview guide to address aspects that are important to them (Fylan, 2005). The interviewer has the freedom to construct questions during the interviews to further explore elements of participants' answers, and likewise participants are encouraged to contribute thoughts or experiences that they feel relate to the research topic, whether or not the interviewer inquires about them. This method especially suits the constructivist paradigm through which this study was conceived, as it facilitates the transactional nature of generating knowledge between the researcher and the participants. Semi-structured interviews are also regarded as an appropriate format for discussing sensitive topics, such as health, by maintaining a conversational style to facilitate a comfortable atmosphere for participants (Fylan, 2005).

As interviews draw to a close, participants were thanked, provided with a \$40 compensation in cash, and reminded that they could reach out to myself or my research supervisor if they had any further questions or concerns. The decision was made to offer compensation to facilitate the recruitment process, and as a thank you for participants taking time out of their demanding schedules.

Following each interview, I made brief written notes on my general feelings about the interview, in addition to notes on body language and tone that may not come across in the transcription process.

## **Data Analysis**

## **Transcription**

Raw interview recordings were transcribed into written documents by myself and one research assistant. During the process of transcription, names of people, specific locations, or any other identifiable data were replaced with pseudonyms.

## **Process of Analysis**

This study utilized Smith, Flower, and Larkin's (2009) framework for IPA data analysis. All transcripts were initially read once by myself, creating familiarity with the entire data set. I then performed three subsequent readings of each transcript, where I utilized NVivo 12 software to form notes to summarize participant experiences, highlight key points, highlight notable language, and to make connections within transcripts. Once this process was complete for all transcripts, a fifth and final reading of each transcript took place where emerging themes were noted, derived from previous notes, and supported by participant responses. Throughout this entire process, meetings with a 'critical friend' took place biweekly to provide additional perspective on data interpretations. The 'critical friend' read each transcript in full, after identifying information had been redacted by myself for the sake of participant confidentiality, to inform her perspective.

Emerging themes from all transcripts were then listed and organized, with some being clustered based on shared meaning or references. Clusters were given labels meant to represent the essence of all themes within them, and all clusters and themes were cross-checked with original transcripts to locate specific excerpts lending to their credibility. During this process, some less prevalent themes that didn't fit well within the emerging structure of the analysis, or that weren't supported by rich evidence within the transcripts were discarded.

## **Qualitative Rigour**

Given the co-created nature of findings for this study, both in the data collection and analysis processes, it largely falls upon the researcher to ensure that high quality data are obtained, and that they are authentically represented (Lee, 2012). For this project, my "insider status" as a recently graduated student athlete facilitated my ability in this position, as I can, to different extents, relate to the experiences of participants.

Although there exists no gold standard to ensure academic rigour in studies of this nature, qualitative researchers are encouraged to consider which strategies are best applied in the context of their study to improve authenticity and 'trustworthiness' of their findings (Sparkes & Smith, 2014). To accomplish this, two primary strategies were used to promote reflexivity throughout the research process, and to lend to the 'trustworthiness' of this study.

## Interview Guide Reflexivity

Over the course of data collection, consistent meetings occurred between myself and my research supervisor where we discussed the outcomes of interviews. My research supervisor had access to interview recordings as data were collected, from which she provided feedback to both enhance my skills as an interviewer and to improve the quality of findings. Decisions to make additions or modifications to the interview guide throughout the study were made jointly from these conversations, generally leading to more fruitful interviews as the study progressed. For example, following the third interview, the question "What advice would you give yourself entering university as a student-athlete?" was added, prompted by a participant discussing this topic. My supervisor and I jointly decided this would be a useful question to ask all participants going forward to examine what they perceived had changed in their values or behaviours since entering university.

#### Critical Friend

Throughout the data analysis process, a current student-athlete peer acted as a "critical friend" (Sparkes & Smith, 2014, p. 182). This role involved reviewing the primary investigator's marked up transcripts at the end of their fourth reading, and providing a competing perspective on data interpretation when deciding major themes. The role of the "critical friend" is ultimately to encourage reflexivity in the process of data analysis by offering differing explanations and interpretations of transcripts (Sparkes & Smith, 2014).

#### **RESULTS**

In IPA it is the researcher's responsibility to represent the data in a meaningful way, while also providing accurate and useful interpretation of those data to ultimately convince the reader of its significance (Smith, Flower, & Larkin, 2009). With this in mind, the general format of the results section for this study will be to introduce key themes, supplement these themes with excerpts direct from transcripts, and provide insightful interpretation.

### How do athletes conceive of health, fitness, and body image?

## Holistic Definitions of Health

When asked to define 'being healthy', participants responded with various conceptions of health, ranging from relatively simplistic definitions of health as strictly physical, to holistic definitions of health touching on the three constructs present in the World Health Organization's definition of health: Physical, mental, and social well-being (World Health Organization, 1946). The vast majority of participants identified physical and mental well-being in their definitions of health, placing these at the forefront of 'being healthy'.

"Being healthy can be looked at as mentally healthy and physically healthy. Mentally healthy in my opinion is having purpose every single day, having a goal that you're going for no matter how you feel. If you feel down sometimes, you know how to pick yourself up, and not to drown in it. For physically healthy, just taking care of your body as an athlete so you're not injury-prone. Eating well so you're both lean, still strong, and to make sure you don't have any toxins going into your body, you're nourished, no problems or risks of anything, so you can do what you need to do."

Christine, Swimming

Being healthy has two different aspects. There's physically healthy, so eating well and exercising. Then there's mentally healthy, so taking care of yourself, not running yourself into the ground. So physically healthy and mentally healthy.

Jillian, Hockey

Conversely, social well-being was initially recognized by only three participants, though all participants recognized that relationships could be beneficial to health once prompted. It is also notable that the two participants with strictly physical definitions of health were both male, which supports past findings of young men associating health primarily with physical capacity (Wright, O'Flynn, & Macdonald, 2006).

In recognizing health as multifaceted, many participants further expressed that 'being healthy' necessitated a good state of being in each dimension of health, and that being exceptionally healthy in one aspect could not compensate for poor health in another.

I think being healthy is about having balance with everything. I think it's really important to not be stuck in just one facet of your life. It's the same thing with food right, if you just have steak everyday you're not healthy. You need a variety of things to keep you going. A balance between athletic life, academic life, social life. You can get stuck in focusing on just one of those things at times, and that's not healthy.

George, Track & Field

Stemming from this multifaceted construct of health, the majority of participants generally recognized themselves as exceptionally healthy if they were succeeding in both their athletic and academic roles. The following excerpts came in response to the question "To what extent are student-athletes healthy?".

"I think most of our lives are very healthy just based on the amount of stuff we have going on in our lives. The balance plays into every day as a student athlete. In order to succeed you have to take care of everything in your life, and I don't think the majority of other people could handle that. We do handle it, and I think we drive each other to be healthier by being successful in balancing everything."

Timothy, Swimming

Yeah, I think so. Just because of the aspects of being well-rounded. Being a student-athlete helps you be more well-rounded, so I could see student-athletes having better mental health, making better food choices, so with those things in mind I would say yes.

Peter, Hockey

It is worth noting that some participants questioned this belief as well, recognizing that despite succeeding to some degree in athletic and academic roles, student-athletes could still be unhealthy.

"I know some varsity athletes that are very healthy, and I also know some varsity athletes that are not healthy. I know some of them, when they're going out with friends they will do drugs recreationally, they'll smoke, they won't exercise a whole lot. I don't know how those guys are able to play, like how they do cardio for a whole game. So there are definitely athletes that are not healthy, but then there are athletes going to the gym every day, they're huge, they probably eat well too. I'd say for the most part they are healthy, but there are definitely athletes where like, I don't even know how they make it as athletes with their lifestyles honestly."

Oscar, Baseball

"I would say most student athletes are probably struggling with things, but they won't talk about it, and if you gave them the opportunity to put their ego aside and just talk about everything that bugs them or ask them if they feel healthy, I'll bet you the majority of them would say they're not. Out of season you might not get that response, but at the busiest time of the season I guarantee you'd get some answers like that. Most people are struggling mentally, physically, emotionally, because it's just exhausting doing what we do. It's hard to be at your best when you're so run down, but you're still expected to always be at your best."

Hillary, Volleyball

When asked to describe unhealthy behaviours, participants generally listed behaviours destructive to bodily health, such as excessive alcohol consumption, physical inactivity, an unhealthy diet, and smoking. Some participants also touched on things they perceived to either

lead to negative mental health outcomes, or to be the result of poor mental health, such as laziness and oversleeping.

"I guess smoke, drink, eat garbage. Fast food and stuff, which is fine, you can eat fast food like once or twice a week, it's totally fine, but not every day. Someone who eats at restaurant every day. One of my roommates, he eats at a restaurant at least once every day. He's not healthy. Not doing sports, obviously. Sports are very important, lucky me. And that's it, smoke, drink, eat fast food."

Ryan, Football

"Binge-drinking is unhealthy, don't binge-drink too much. Oversleeping I think is bad too, if you sleep too much and stay inside all day that's bad for mental health. Not working out. I think those are the big ones."

Ian, Rugby

Participants generally recognized that health is multifaceted, and that nearly every aspect of their lives involves decisions with 'healthy' or 'unhealthy' consequences, referring primarily to their bodily health or mental health. Participants frequently extended discussion of these consequences by stating the impact they may have on athletic or academic success, constructing these as a perceived measuring stick for holistic health.

#### Physical Health

Participants conceived physical health primarily as having an acute awareness of your body, fulfilling your body's needs, and functional capacity, meaning one's ability to perform physical tasks.

"Physically, it's about listening to your body. If something's not feeling right, you should take care of that. Eating properly, that's something I've always struggled with. Basically giving your body what it needs to do your daily activities."

Claire, Soccer

"For physical, it's all about ability. If you can move around, and lift stuff, and not be tired all of the time, then you're physically healthy. The degree of that I don't know, like I don't know how strong you need to be, or how good your cardio needs to be to be fit, but the more of that you have the more healthy you are. Obviously as an athlete we need a lot of that, so to be healthy like we need to be able to lift a lot and run a lot"

Ryan, Football

This conception of physical health as functional capacity extended to many participants gauging their own physical health in accordance with their capacity to perform in sport at any given time.

"I think I assess and realize how healthy I am more because I practice every day. If I have a good practice I feel great, I feel energized, I feel focused, and that really reflects how healthy I am in pretty much every aspect. The next day, I might go through my whole day thinking I feel great, then at practice I'll feel exhausted and I can't focus, and that's when I know that I'm pretty unhealthy then. So it's about finding a way to make that great feeling in practice sustainable over multiple practices and games and things, and I think that's what health really is."

Rebecca, Volleyball

"My sport is where I end up noticing my health the most. In the off-season, I can eat whatever I want. I won't look great, I won't feel my best, but I'm not going to see that until I jump in the pool and try to swim a few kilometers, and realize that I don't feel like a swimmer anymore, I feel like a gigantic lump. Or I'll get a stomach ache after a few laps. That's when you really see it the most. Or even diving in the pool, I know I haven't slept enough if it feels cold. My ability to tolerate high or low temperatures changes a lot depending if I'm rested enough, and that's where I'll notice it much more than walking around campus."

Natasha, Artistic Swimming

Consistent with this association between health and sport performance, participants generally characterized injuries as an unhealthy, but common outcome of participation in sport.

"We get a lot of injuries. We're in a sport where we have to hit each other as hard as we can. Most of the guys have injuries. Like last year I tore my ACL and meniscus and I dislocated my shoulder. So I had a surgery and like right now, I'm not healthy, but I still play, so I'm at least kind of healthy since I can still do that."

Charlie, Football

"My knees hurt right now, but I still feel healthy. I'm healthy, but a little bit injured, so I guess there's a little asterisk there."

Peter, Hockey

In the following two excerpts from a participant with a long-term back injury, it's established that her definition of 'healthy' changed over the course of her injury, as she began to normalize a certain level of pain.

"Doctors told me I could start playing again when my back doesn't hurt, but at a certain point you have to accept that it's never going to be zero pain again, so I have to start playing and just manage the pain. Then when you have a little bit of pain that's a good day, and when you have a lot of pain that's just a bad day but you know that you're still relatively healthy."

Theresa, Soccer

"I think the saying 'everything in moderation' applies, and we go above and beyond the moderate level of activity. I don't think we're super healthy to be hurting every day, like a normal person wouldn't be healthy if they're experiencing that, but to a degree we can still be healthy while going through that."

Theresa, Soccer

Taken together with the previous quotes from Charlie and Peter, it's evident that student athletes have mixed feelings as to how injury, and consistent exposure to risk of injury, affects their physical health. Other participants expressed that their experiences of being an athlete in general led to different standards of acceptable physical health, again typically defined in terms of functional capacity.

"When I wasn't an athlete, I felt that if I walked ten thousand steps in a day, that's healthy. Now, I think ten thousand steps is like nothing, I could get that done in like two hours, that wouldn't make me healthy. Am I injured? No. So if I'm not injured, good I'm healthy. Am I foam-rolling all of the time? Am I able to lift weights without being in pain? Good, then I'm healthy."

Danielle, Track & Field

"Some of the girls that I'm friends with, they play volleyball but they never come off the bench. They're healthy for a certain point, they'd be healthy for general population, but for their sports, maybe they're not enough."

Ryan, Football

Participants' made frequent reference to athletic experiences when discussing physical health, often discussing physical health as a means to sport performance. In this regard, student

athletes generally perceived themselves as exceptionally physically healthy, as long term sport participation provided them with heightened body-state awareness, and an improved ability to perform physical tasks within and outside of the context of sport.

#### Mental Health

Mental well-being was recognized as an equally, and in some cases more, important dimension of health than physical well-being by all but two participants. Mental health was discussed as having two main tenets: Life satisfaction, and having a feeling of purpose.

"I'd say joyful. Someone that I see enjoying their life, or always seems happy. Sometimes it might not be that inside, but just being happy and showing that can help your mental health. Obviously mental is inside, so we can't always see it, but if you express it outside that you're a person that enjoys your life, wants to go to hockey, wants to go to school, then that might help you in the long-term with your inside self."

Lauren, Hockey

"Mentally healthy in my opinion is having purpose every single day, having a goal that you're going for no matter how you feel. If you feel down sometimes, you know how to pick yourself up, and not to drown in it."

John, Swimming

Many participants constructed physical and mental health as co-dependent, indicating poor mental health would likely manifest itself into poor physical health, and vice versa in the cases of injury or considerable fatigue.

"I think it's the pillar of physical health, because I think our physical health is really just a manifestation of what we think, what we want. I think if your mentality isn't there, your body totally reflects it."

Emma, Track & Field

"If you aren't in the right presence of mind to perform, you just won't be able to perform. You need to be in a state where you're able to focus, able to feel comfortable and get yourself into a relaxed state of just feeling energetic. If you don't take care of yourself mentally, you're not going to be able to do anything physically."

Natasha, Artistic Swimming

As seen in the excerpt above, many participants also linked mental health with performance in sport, going as far as describing mental health in terms of one's possession of sport-related mental skills.

"For student-athletes, mental health is something I'm generally more concerned for than physical health. I still believe that your mental health is probably 70% of your result in sport, 30% is the physical aspect. If you want to get far, you need to be mentally tough, and like I said if you have issues outside of the sport, then it's going to affect your physical aspect as well. So to me it's the biggest part. It encompasses how you do the physical aspects, as well as your ability to perform."

John, Swimming

"In sport there's a saying it's 90% mental, 10% physical. So if you're not in the game mentally, it doesn't matter how skilled you are, you're still going to make a bad pass because you're not focused on where the pass needs to go. I would say being mentally healthy is a way bigger part of being healthy overall then most people give it credit for."

Jillian, Hockey

Similar to the link participants made between physical health and their capacity to perform in sport, mental health was also described by some as measurable in sport performance, though less explicitly than the links drawn between physical health and sport performance.

Participants also recognized inherent stigma surrounding mental health conditions and general mental well-being in the context of sport, as well as the broader social context.

"It's just a tough issue to talk about, because no-one really understands it, and if you don't necessarily have mental health issues, then it's hard to talk about because people could say that you don't know what you're talking about. So I could talk to a hundred people with mental health issues, and I probably have, but that doesn't mean I'm an expert, and so I would just say yes it's important."

Peter, Hockey

"I also think that mental health is a huge part of overall health. A lot of people tend to ignore that, especially, I think, for student athletes because again, there's such a culture of being strong, of being tough. Mental health is not a visible injury."

Shannon, Swimming

Shannon's perception of sport contexts as being particularly prone to mental health stigma was shared by many participants, who attributed hesitance towards mental health help-

seeking to a culture of toughness, poor reputation or lack of available resources, and time constraints.

It is also notable that, in contrast to how they describe physical health, participants often discussed mental health in the context of broad life experience, rather than consistently referring to sport experiences.

## Social Well-being

As discussed previously, the majority of participants did not include social well-being in their initial definition of health or 'being healthy', however when prompted all participants recognized that relationships could be beneficial to one's overall health. Several participants described social well-being as critical to positive mental health.

"In general, there's a baseline for what a healthy relationship should be like, and how to socialize in a healthy way. I think that's important to overall health because of the way it affects your mental health. If you're not in a healthy relationship, or your friends aren't treating you properly, or you're not treating them properly, that can really hurt you . . . if you're isolated, that's unhealthy."

Lauren, Hockey

"Oh it's important, you know. Mostly for your mental health, but also for your physical health. When you get relationships with people and you interact with them they help you without even knowing it. You can talk to them, and they can talk to you, and you feel good with them and you make friends and stuff like that."

Ryan, Football

In addition to its relationship with mental health, participants also discussed social well-being as beneficial when your relationships drove you to make healthier decisions. This was mentioned as either by means of social support to make healthier decisions, or from pressure to enact a healthy lifestyle in fear of judgment or embarrassment.

"I didn't think I was close with the twenty girls on my team, until I went through a horrible situation, then I realize that these girls would do anything for me, and they did so much for me. That prevented future mental health issues and stuff like that, just

because I had these people that supported me, got me moving, got me out of bed, and got me doing what I needed to do."

Timothy, Swimming

"Well, sometimes it can encourage you to live your best so that you don't feel embarrassed to be around other people. I want them to see me as a healthy person. I guess that would be it from a positive stance. If there are other people trying to make positive changes to be healthy that your friends with, then that's also good".

Natasha, Artistic Swimming

Of the three domains of health explored in this study, participants discussed social well-being with the most brevity. It's notable that although many participants identified connections between physical health and sport performance, as well as mental health and sport performance, no such connections were made between social well-being and sport performance, even amongst those in team sports.

#### **Fitness**

Participants generally defined fitness in similar terms to physical health, but with higher emphasis on functional capacity, and an added element of aesthetic considerations.

"I would say someone's fit if they ride a bike, did a VO2 test, and they did well regardless of what they look like. But for most people you can just look at them and say they're fit. If you look at a guy, and he's not necessarily built but he's slim and maybe has a little bit of muscle definition, but you don't necessarily need that, you could call him fit."

Peter, Hockey

"You can be tall or short and still be fit, but I'd expect a decent amount of muscle mass on you either way. You don't need to be super buff, but you should look like you're capable of doing physical things. I think cardio is a huge part of it too, which a lot of people lack, like the ability to run. You can't necessary tell by looking at someone if they're fit, well you usually can, but they could look really good and not actually be able to do things. It matters what they can do more so than how they look, but I mean if you do a sport like we do I'd expect them to usually look fit as well. It just comes with it."

Claire, Soccer

It is also notable that some male participants described fitness and health as inextricably linked, expressing that there was little difference in their mind between 'being fit' and 'being healthy'.

"Usually when you look healthier and fitter, you're less likely to suffer from illnesses and stuff like that. Being fit and being healthy are very hard to separate. Maybe being fit is part of being healthy, but maybe not the other way around, like you don't have to be healthy to be fit always, which is why student athletes sometimes aren't healthy but of course they're fit. Really hard to say."

John, Swimming

"To me personally, that's almost the same thing. Somebody fit is somebody who can run far, run a lot, lift weights, somebody strong. Somebody who's able, physically, to do a lot of stuff. It's almost the same thing as health, really the same thing to me."

Charlie, Football

In similar terms as their description of physical health, participants generally perceived student athletes to be exceptionally fit. It's notable that student athletes were perceived as fit even if they didn't conform to a traditionally fit body image, as described in the following excerpt.

"If you see someone who is overweight you're not going to look at them and think they're fit, which is tricky because they still could be. Everyone has different body types. If you look at the football guys, they train a ton, but there are some of them who are just like necessarily bigger for the position they play. People definitely tend to associate being fit with a more lean stature, but those football guys are still really fit I think."

Natasha, Artistic Swimming

Although participants referred to both functional capacity and a 'fit' appearance as elements of fitness, the majority of participants appeared to place higher value on functional capacity in the context of calling someone 'fit'.

### **Body Image**

In order to investigate how student-athletes conceptualize a healthy body, participants were asked what body image or behaviours they associate with someone who is healthy. After

re-affirming health as a holistic concept, some participants noted that it would be hard to classify someone as healthy or not based solely on their appearance.

"I don't think there's a certain look that's healthy. I know people who are healthy, they eat clean, they just drink water, they don't have any sugar, they don't put anything bad in their body, no toxins in their body, but you wouldn't know that by looking at them. I don't have a thing that if I see in a person they're for sure healthy."

John, Swimming

Other participants, while also acknowledging health as a holistic concept, felt they could gauge some aspects of one's health from their appearance.

"I think you could gauge some aspects of health. Definitely nutrition can be gauged by body image. I've seen it go both ways, where some people aren't eating the healthiest so they get fatter. Then there's a grey area where people are getting a little bigger but they're still healthy because they're taking care of themselves, but maybe they just have a higher workload so they're eating more to manage that."

Rebecca, Volleyball

"A healthy person is just somebody who, appearance-wise, looks semi-active. It looks like they take care of themselves, isn't dirty, just a normal body. I think that encompasses everything. I think they just don't look run down, they're in good spirits. If someone is unhealthy they tend to look run down. In terms of overall physical appearance, just somebody that has a normal body, not obese, is pretty active."

George, Track & Field

Participants' discussion of a healthy body image also re-affirmed a close connection between fitness and health, again most notably in male participants.

"When I picture someone who's healthy I think of an Instagram person that works out. Just a toned person, not with crazy big muscles, but compact, does cardio, works out, eats well. Honestly I think of the people I see on Instagram that are super fit and it seems like they're perfect. When I think of 'healthy' that's where my mind goes."

Oscar, Baseball

"I know my perspective is warped because of the people I'm around, but it's somebody who looks really fit is healthy. Like whether it's a girl or a guy. They look like they're able to move without pain. If I see someone able to do pull-ups, push-ups, running, I see that person as healthy. Whereas if I see someone struggling walking up a hill, out of breath from doing like eight push-ups, I associate that with unhealthy."

Ian, Rugby

Participants were also asked if there was a body image they associate with elite athletes in their sport, to which the vast majority of participants affirmed there was. Understandably, this body image differed vastly by sport, and to a lesser degree by gender.

"I'd say tall and skinny for guys. That's what every single one of us looks like. I think you notice their legs, they have muscular legs, and not much in the upper half. 6-packs because we're all so lean. I guess those are the physical attributes of a good runner."

George, Track & Field

"I think they're all big. Rarely is someone small, rarely is someone under 200 pounds at the elite level. There are exceptions obviously with guys that are very good at what they do, but I think in general they all have to be big. They're pretty much all 240 pounds, maybe 210 pounds but really quick, I think that's where you start. Like I've been told a lot to "go gain weight, go gain weight". That's the basis of rugby."

Ian, Rugby

"Huge shoulders, typically pretty tall. One thing that I always say, and people always laugh about, is that really good swimmers have really muscular calves. Definitely very lean, like not a lot of body fat."

Christine, Swimming

Although participants identified these elite athlete body types in their sport, many participants were also quick to add that many exceptions existed where elite athletes did not fit this body type, and that many aspects of being an elite athlete aren't detectable in one's body image, such as tactics.

"There's also things that make you good at your sport that you can't necessarily see, like how fast your reflexes are, or your hockey IQ. Those are things that you can't see, but also make you an elite hockey player. So I would say that if you look at someone like Sidney Crosby, you think that's the body type of an elite hockey player, but really that's just one of fifty body types an elite hockey player can have."

Jillian, Hockey

"It's hard to look at someone to see if they're a fast swimmer or not. If you look at a bunch of people standing on a pool deck, including maybe non-varsity athletes, and you didn't see them swim, it wouldn't be easy to pick out the swimmers. Body types are so different. Overall we tend to have more defined muscles, we tend to be slimmer, but there are also some not quite as slim that swim really fast."

John, Swimming

Participants expressed that student-athletes aspired to fit their sport-specific elite athlete body image to different extents, but ultimately their performance in sport motivated their health-related behaviours more so than affecting their body image. A fit body image was often discussed as an expected outcome of their athletic commitments, rather than a source of motivation.

"We train for results. We're trying to run faster, we're actually trying to lift more weight, we're trying to run further distances. With that though, the good looks come, but like as an after effect. It happens, but it's not what we're training for."

Charlie, Football

"I think everybody wants to do the best that they can in their sport, and putting weight on or taking it off can definitely make improvements for most people in terms of strength-to-weight ratio. You want to look good too though. I think it's inherent in swimmers and athletes to want to improve themselves, and whether that's in body image or performance, they do both. Performance matters more than body image, but having that athletic body image is a nice perk."

Timothy, Swimming

Whereas the majority of participants felt that aspirations toward a particular body image did not significantly impact their training or health-related behaviours, it is notable that some participants described pressure to conform to an 'expected' or 'desired' body type, whether specific to their sport, or in the broader social context.

"In volleyball, you're wearing tight spandex, so I think people want to have a nice butt. People want that, they want nice muscular legs that are also slim. You don't want massive quads, but that usually happens if you're strong. You also wear a really tight jersey, so you want to have a flat stomach, and if you're wearing a t-shirt you want nice arms. You're an athlete, that's how you identify, so that's how you want to feel and look."

Hillary, Volleyball

"I'd say one physical attribute I expect for student-athletes in general is a strong build. They won't look like toothpicks, they wouldn't look like a sack of potatoes, just a good inbetween build where they look like they can do athletic things. Otherwise I'd probably question how much of an athlete they really are."

Claire, Soccer

In summary, participants' related a healthy body image, a fit body image, and an athletic body image in various ways. Generally, fit and athletic bodies were constructed as being healthy. Although very few participants discussed body image in their initial definition of health, many participants recognized that athletic bodies were typically indicative of a healthy lifestyle, and as such were valued outcomes of sport participation. Conversely, it was also recognized by the majority of participants that in general, one does not need to resemble an athlete to appear healthy.

# From where do their understandings of health, fitness, and body image derive?

Participants recognized multiple discursive sources that have impacted their ideas of health, fitness, and a healthy body. These included formal education, family (parents in particular), media, and sport experiences.

"I think the media is a big one. They push a standard of health on you. For example, there are always ads on TV about organic food and supplements, anti-smoking, stuff like that. There's that. Then the way I was brought up too. My parents told me to try not to eat ten cookies in a day because that's not super healthy for you. Sometimes I do that, I'm not going to lie, but even when I'm doing it I know it's not good for me or healthy. So yeah, my family affected my eating habits. Essentially on every team I've been on we've had nutrition seminars, for a couple years we had a sport psychologist come in and try to help us manage everything happening in our lives."

Lauren, Hockey

"My physical education and health classes as a kid, you go in and they teach you how to be healthy and how to exercise and what you need to do and eat and stuff. Different foods that are healthy. I'd also say my coaches definitely had an impact on knowing how to be healthy. They definitely impacted me to stay in shape, to exercise. My high school was kind of a sport school, so a lot of people around me played sports, and that was definitely something that inspired me and prompted me to stay active I'd say the biggest thing is probably my inner circle of friends, and of course a lot of them are my teammates. They're very healthy, very health-conscious about the things they do like how much they eat, how much they sleep, what they're putting into their body. So that's definitely something that has played a big role for me. Probably the biggest thing."

Oscar, Baseball

It is notable that Oscar also mentioned social media influencing his concept of a healthy body in an earlier excerpt, in addition to the many sources he discusses here. Sport experiences, and varsity sport in particular, were recognized by most participants as being exceptionally significant in shaping their ideas of health.

"Team sports have really influenced what I think it means to be healthy. I really believe a team environment is healthy, well it can be unhealthy but I think a good team environment is healthy, and I've been in good environments. I think that has definitely played into how I feel about that, how I feel about exercise, how I feel about not laying in bed and being outdoors a lot. So I think my past experience as an athlete have really shaped what I call healthy right now."

Ian, Rugby

"Varsity sport definitely makes you more mindful of what you're doing, what you're eating, the choices you're making, and the people you have around you. Before I didn't really care if people smoked around me, now I really care."

Emma, Track & Field

Emphasizing sport experiences in their definitions of health is rather unsurprising, given the majority of participants have been participating in their respective sport consistently since early childhood. However, it's notable that despite a wealth of youth sport experience to draw from, many senior participants expressed that their ideas surrounding health shifted primarily from their experiences in varsity sport. Emma, from the above excerpt, was in her 5<sup>th</sup> year of varsity eligibility at the time of the study.

# How do athletes negotiate health, fitness, and body image within the Canadian academic setting?

Throughout the interviews, participants spoke extensively about their life balance and daily challenges, providing insight as to how they negotiate their academic, athletic, and social roles in the context of Canadian collegiate sport. This dialogue illustrates how this population is unique

from other university students, and also sheds light on how participants integrate concepts of health, fitness, and body image into their demanding lifestyle.

# Scope of Commitment / Student-Athlete Balance

When describing their typical day, participants almost exclusively referred to their academic and athletic commitments. They often noted that their days start early to accommodate 4 – 5 hours dedicated to training, and they provided limited discussion of activities that didn't pertain directly to their athletic or academic roles.

"So I'll be up around 5:15am or 6:15am depending on the day, then practices goes from 6am — 8am or 7am — 9am. Then I get out of workout, grab breakfast at school, grab a coffee which is a must, then go to right to class. Some semesters have been harder where I'll just go the whole day either in class or workout. Then eventually I'll grab lunch, go to practice again, then either go to the gym or head home to take care of school, especially if midterms or finals are coming up. If I don't have class in the afternoon then I might come home after the first classes in the morning and come home to eat before heading back for practice, but usually it's me staying at school."

Emma, Track & Field

"Most of our days we have morning practice, so I would get up around 4:30am when we have morning practice. I'd leave the house by 5:30am, get here around 6am, train from 6am to 8am. Then I'll do homework from 8am to 1pm when I have my first class, then I have class until 5:30pm, then I swim two hours after that, and head home. I get home around 8pm, get to bed around 9pm."

Timothy, Swimming

Whereas the specific structure of a typical day varied significantly between sports, the exclusive discussion of academic and athletic roles was relatively constant, with only a few participants making mention of time for 'relaxing' or other activities such as volunteering or part-time work. On the contrary, the majority of participants identified that they had to sacrifice part-time work and extracurricular activities in order to fulfill their student-athlete roles.

"If I was a normal student, I would firstly spend more time on school so I could potentially do better, secondly get a part-time job and actually get some money for school, and thirdly I'd have more time to socialize. Hockey takes a little bit away from every other aspect of school that there is. It's definitely a sacrifice, but pretty worth it.

Jillian, Hockey

"Other students have the same time I do to work during the day, but then they also have their afternoons and evenings to work or pursue other things they want to do. For example, down the road I might want to pursue a career in finance, so it would be helpful to join clubs like an investment club, and other students have time to do stuff like that and other things on their own that fulfills their career aspirations, but for me in-season it's just schoolwork, baseball, eating, sleeping."

Oscar, Baseball

As Oscar noted, participants in some sports expressed that their schedules in-season differed vastly from their schedules in the off-season, due primarily to the demanding nature of their athletic roles.

"There's two parts of the year. The off-season and the season, and they're very different. During the season, so right now, it's really hectic. You have class in the morning, then practice all afternoon. So we're out on the field from 3pm to 6pm, then we have meetings during the day, so it's 5 to 6 hours of football every day. Then on top of that you need to manage school. So it's very hectic. In the Winter it's not as bad, because you just need to go lift weights, and apart from that you're on your own so you can focus a little more on school and other stuff in your life. But during the season, for the big chunk of it, we're really busy. Really busy."

Charlie, Football

In addition to discussing the demands of their athletic role in-season, the majority of participants identified the most demanding time of their year to be the result of merging pressures from demanding academic and athletic times of the year, such as meaningful competitions concurrent with exam periods.

"At that point you're 4 or 5 weeks into the season, your body is all banged up, you're tired, you're at a crucial part of school, and a crucial part of the season too because you start to figure out who's going to make playoffs and who's not based on how your games are going. At the same time you have midterms, which ends up being the same time for all courses, so you end up with a ton of assignments and exams to do all at the same as time as you having an important game on the weekend. So to me that's the hardest part of the season."

Theresa, Soccer

Participants generally considered sport as either debilitative, or facilitative to their roles in school and their ability to time-manage more broadly. The participants noted that sport could act as a significant source of stress, particularly when athletes felt they were under-performing, which could undermine their motivation in other aspects of their life.

"I've also seen some girls, when they're not playing well, they don't feel as valued on the team, then they might feel that coaches are picking on them and not helping them, and so if they get that into their head and other things in their life start to pile on, they can get more and more fed up with everything. They just don't enjoy it."

Rebecca, Volleyball

"I've seen guys get frustrated because of playing time. I'd say playing time is a really big thing because if you're putting in such a big time commitment into something, and you're not getting what you want to out of it, that can be really, really disheartening and can really suck for someone."

Oscar, Baseball

Conversely, some participants described sport as a 'break' from other responsibilities, and as ultimately beneficial to their academic roles.

"As far as day-to-day life, you have to take your athletic experience as a break from school. People who don't play a varsity sport, it's recommended to go to the gym and do something, and it should help you study and keep your mind sharp, and make you feel good, get a better sleep, all of that."

Peter, Hockey

"Everyone else is putting their problems aside and just doing this for an hour and a half, or three hours or four hours or however long practice is that day. It gives your brain a break from everything else to focus on something different. Then practice ends and you go back to real life. But at that time, it's really just one thing."

Natasha, Artistic Swimming

It is notable that a subset of participants did not find this role separation feasible, expressing that stress outside of their sport manifests itself into their training. In this way, stress from their academic role was also viewed at debilitative to their sport at times.

"If something is going on in your life, you can come to practice and think you're only going to think about swimming right now and I'll be fine, and when I leave the pool that's

when I'll start thinking about other things, but that doesn't happen. When you're at the pool, at training, any problems you have outside the pool are still going to follow you."

Shannon, Swimming

While the student-athletes of this study negotiated their athletic and academic roles in various ways, it was consistent that balancing these roles leaves little time for engagement in other activities, particularly during the competitive season of their respective sport.

# Expectations and Sacrifice

Participants often discussed having expectations of success and unwavering commitment to their team from their peers, their coaches, and themselves.

"On our team there's a strong sense of doing things for each other. If you're going to be late for something, you try not to be late because if you are late you're not helping your team."

Jillian, Hockey

"I find expectations to be really hard as a student athlete. I've always struggled with this, I always feel like I'm swimming not only for myself but for the hundred people that have helped me before, so that's something that I struggle with because I feel like if I fail, I've failed them as well. I think that's something that a lot of student athletes feel."

Christine, Swimming

Even amongst participants who identified their academic role as being more important to them than sport, many athletes expressed hesitance to sacrifice any aspect of their athletic commitments for the sake of homework or studying.

"Say you've been going to every practice all season, and then you have to miss a week because you have a major midterm, your teammates are definitely not going to like that because you should have been studying more before evidently. I think the senior guys mostly have that balance and their study tactics figured out, so it's a little easier for them to avoid making those mistakes, and they're often the ones applying the pressure saying that you should be able to make every workout."

John, Swimming

"Honestly, I always go to football first because the football season is so short and you have to perform. We have 8 games and then the playoffs so I kind of put the academics

aside early, I have to focus on football. When football ends it's the end of midterm season, but I can still pick it up in the finals and get decent grades."

Ryan, Football

This hesitance to sacrifice their athletic commitments for academic performance led many participants to characterize their academic and athletic roles as seemingly incompatible at times. That is, performance in sport was described as inversely related to performance in school.

"Second year, I came into the season a lot faster than the first year, and I was on the edge of making the national team and was putting everything into running. I would come right home from class and run and just not do anything for school. I would stretch, roll, eat, and go to bed kind of thing. It put be behind in school, and really put me into a hole academically."

George, Track & Field

Whereas the vast majority of participants acknowledged elements of their academic and athletic roles that conflicted with each other, it was also noted that coaches were generally supportive of decisions to prioritize school over sport when it was deemed an acceptable circumstance to do so, such as for writing exams.

"If you can make it work and adjust school to work around volleyball, you're expected to take every action to make that happen. Sometimes the teachers aren't as flexible with that though, and the coaches will understand in that situation. Like one practice we had three girls writing the same test because that one couldn't be moved, and the coaches were fairly understanding. I think it depends on what part of the season we're in too though and what's coming up. If it is a more relaxed week, then that's okay, but if it were around playoffs or bigger games then coaches might not be as understanding with those things."

Rebecca, Volleyball

"The coaches understand that a lot of guys are here because they want to be in school. It's not because their sport is their number one priority, and if it is their number one priority they're also going to make sure that school comes first sometimes. Our coaches know that, so if I need to miss a practice for a lab, or I have an exam, I'll tell my coach I have an exam until 5:30pm, our practice starts at 4:30pm, and I'm not able to make it. Maybe he won't like it, but he'll be ok with it, because that's just the way it is."

Peter, Hockey

Though participants generally characterized their coaches as being relatively lenient, they often described more pressure from their teammates to fully maintain their athletic commitments, sometimes to the detriment of their academic responsibilities.

"It just sucks when you're at practice trying to work on structures and key people aren't there because they have schoolwork. It absolutely sucks. If you show up on game day, but you weren't at practice when we're working on structures, now you're confused. Personally I feel that if you make this commitment, you knew what you're getting yourself into, you should be here at training. I don't know how it would feel in an individual sport, but in team sports we really need everybody there."

Ian, Rugby

"Our coaches for sure are student first, athlete second. I think the girls on the team balance that by pushing each other to be more athletic, so if you don't firmly believe school is very important, it can be a struggle to not fall to that pressure from them and skip classes and studying and stuff for soccer. Or you just end up missing out on a lot of sleep."

Claire, Soccer

In addition to their own athletic aspirations, student-athletes perceive pressure from various sources to accommodate all athletic commitments, leading them to make decisions that sometimes seem to contradict their stated academic values and career aspirations.

# Social Implications

Participants consistently discussed social commitments as a distinctly lower priority than their athletic and academic commitments.

"Socially, I think social commitments take a back seat. Our social life is pretty much the pool. We do some social things, but I mean when you have to take care of business you have to take care of business, and that's pretty much all of the time, so they don't happen much. I think it's important to have fun, but for me, since coming to this university, I'm about doing things right. So I'm not going to risk my performance in the pool or in the classroom because a teammate wants to do something fun."

Timothy, Swimming

"I would prioritize school first, then hockey, then family and friends. Obviously if there's a family emergency that would jump to the front. I spend a lot less time with my friends

because I'm at the rink, then when I come home from the rink, if all of my friends go out, I'm not going to go because now I have to use that time to study. So I would definitely say friends are below hockey and academics, at least for me this year that's what I'm choosing to prioritize."

Jillian, Hockey

Due to the demanding nature of their athletic and academic roles, many participants felt that their ability to engage in social events was significantly restricted, and not something they ultimately had time for.

"We don't have social lives, we really don't. A lot of us live away from our families, so family time might happen on weekends that we don't have soccer. Anything social we typically end up doing together, because we have the same busy schedule. In terms of conflicts, there aren't any conflicts because we don't make plans, because we know these schedules in advance."

Claire, Soccer

Anything that involves leaving campus, I just don't go. If it's something that's like a 2-in-1 thing, like a social-work thing or a social-team thing that I have to be at, or if you don't go it's frowned upon, then I'll go. But other than that I try to integrate my social life kind of in-between things. So at the gym, in class, in settings where I see people I say hi and try to be friendly, and that's pretty much it as far as committed social time. I don't really do it. So for me it's school, my job, and then track and field training, and that's it.

Danielle, Track & Field

Unsurprisingly, participants described their primary, and in some cases only, source of socialization to be with their teammates and fellow student-athletes.

"Almost all of my social interactions during the season are with my teammates, when I'm not in in class I'm studying with them and helping some of the younger girls to study. We're running around and doing our laundry together. One person will cook meals while the others are studying. We have a close-knit team, but yeah we're still limited quite a bit in our social interactions during the season."

Theresa, Soccer

"For most girls on the team, their social life is the team. We spend so much time at the rink that for a lot of them, especially if they didn't live in residence, didn't make a lot of friends outside of the team, so if they go to the movies with someone, it's going to be someone on the team. So there's a lot of socializing in that regard."

Jillian, Hockey

Although the tendency to socialize exclusively within their team was largely attributed to time constraints, participants also discussed having little desire to socialize outside of their team, as the social aspect of varsity sport satisfied their social needs.

"First and foremost it's the time constraints that keep us from doing social things, but yeah outside of that I don't know if everyone really wants to meet a bunch of other people either because they do already have their team. I think the sport and the schedule is the first constraint, but because they have their team I don't know that they'd necessarily want to."

Hillary, Volleyball

Some participants went further to question their ability to maintain relationships outside of their varsity team, expressing that the demands of their sport and school tend to erode other relationships over time.

"For my friends outside of the swim team, it starts to erode those relationships, and you worry about people not really understanding why I'm always prioritizing sport over them. I'm worried it seems like I'm not making an effort, and I've found a lot of my non-swimming relationships have become more distant."

John, Swimming

In summary, student athletes discussed social commitments, particularly outside of the context of sport, as a necessary sacrifice to fulfill one's academic and athletic roles. It is also notable that participants discussed little hesitance in making this sacrifice, and by being a member of a varsity team, did not feel socially disadvantaged when compared to their non-athlete student counterparts.

### Health Ideas Shift During University

When discussing ways in which varsity sport shaped their ideas of health, participants often referred to establishing a deeper understanding of what it takes to succeed in their athletic and academic roles.

"They have developed way more since becoming a student-athlete. I started to think more about it as a student-athlete, so I won't crash. Doing well in school, doing well in sport,

everything, finishing my degree, I have to be always thinking about that. So yeah, definitely, being a student-athlete helps me figure out how to be healthier, and to just be ready to succeed in general."

John, Swimming

"If there's one thing that university has changed is that I didn't realize how hard it was to be healthy, like to make these everyday changes in your life to be better. Like I didn't know it took so much discipline. That's a big thing I've learned here, it's all about discipline. Maybe a part of me thought it was just natural before, like some people are just meant to be healthy and some aren't, but it's really not that. There's people that get up every day and do things that other people aren't willing to do, that's what makes the difference. I think that's what I've really learned being in university, from sport and the education part."

Charlie, Football

These excerpts also re-affirm participants' connection between health and performance in their athletic and academic roles. It is also worth noting that some participants expressed that their university experiences outside of the varsity context also played a significant role in shaping their ideas of health, such as moving away from home, and encountering more people in general.

"Living on my own was a big one, because you have to manage all of those things yourself, nobody is going to manage those things for you. Feeding yourself is one of those things that's an easy one to point out. I think I can attribute it to being on my own, and figuring out what I need from the mistakes that I've made."

Timothy, Swimming

"I've realized that there's a lot of ways to be unhealthy, I would say. This isn't necessarily to do with being a student-athlete, but before I came here, I just went to school, went home, played hockey, hung out with my friends, no major adversity came out of that. I essentially just looked to the media to see what was unhealthy, which was people who were super, super thin or pretty overweight. Nobody talked at all about being mentally healthy. Then I got here, and I met people who aren't mentally healthy, another person who isn't physically healthy, a person who smokes a lot of weed. So I would say my definition, or understanding of the word health, and the concept of being healthy, has definitely broadened and I've synthesized it a bit more since I've come to university."

Claire, Soccer

Many participants felt their most impactful experiences, in terms of shaping their conceptualization of health and healthy behaviour, came from times of difficulty or adversity. In

the context of being a student athlete, this was frequently discussed with reference to balancing demanding athletic, academic, and social roles.

"If you're faced with a problem, how do you deal with it, how do you move forward, and through our sport we learn ways to deal with those problems. We've all had conflicts, we've all been really tired, we've all been faced with tough decisions that other students haven't had to deal with. In being exposed to these tough decisions in university, that's truly helped us understand being healthy."

Peter, Hockey

The vast majority of participants described the most difficult period of their university experience, and for some the most difficult period of their lives, to be in their first years as university student athletes. The transition from high school to university, and from high school sport to university sport, was frequently characterized by feelings of stress, confusion, and being overwhelmed.

"I think [student-athletes] are not equipped. It's not something you're taught, it's something you're expected to learn, which I believe is an issue with varsity sport. It's really dependent on what your experiences were growing up as an athlete in high school. There's no structured teaching of proper organization for sport and class, they don't teach that in school, you need to learn it yourself. Some people pick that up quickly, but a lot of people make it work at a significant cost to their mental health, some people can never make it work."

John, Swimming

"A lot of the first years freak out, and I can laugh at that now as a third year because I stressed just like them, but now I know better. Someone coming in should really think about taking a step away from school and sport at times, and focusing on ensuring you're happy outside of those things. If you're stressed constantly about academics and athletics you're going to have a really hard time, you're not going to enjoy yourself, and you're going to end up quitting one or both if you don't deal with that. A lot of people have."

Claire, Soccer

"I think a lot of first and second year students really stress when the classes get busier. They don't know how to study properly, they don't know how to manage that with their sport, they have to re-learn how to study, a lot of people bottle up that stress and it hurts you in your academics, your athletics, and your life."

Hillary, Volleyball

Within these excerpts as well, it is notable that participants recognize that, as a result of these stressful experiences, student athletes learn to cope by shifting their mental approach to fulfilling their athletic and academic roles, and ultimately modifying their behaviour. Although these experiences are perceived to lead to positive personal development in the long term, stress and resultant academic underperformance in earlier years was described by some participants as detrimental to their career aspirations.

"I would come right home from class and run and just not have time for school. I would stretch, roll, eat, and go to bed kind of thing. It put be behind in school, and really put me into a hole academically. That was my turning point. Never get to that. To be honest my grades fell below the point of probation, and I don't know that I'll ever get into the grad school program I want because of that."

George, Track & Field

Participants also described looking to their teammates as role models for successful strategies to cope with their demanding athletic and academic roles, as well as for how to maintain a healthy lifestyle more broadly.

"Depending on the team you're on, every team has different people that are good at different things, and there's a lot of help you can get within that peer group. The more you use them the better. Especially for us, there are guys that are really good in the pool, and there are guys that are really good at school, then there are a couple that are really good at doing both. You can look to each and every one of those people to figure out how you can manage, and you're around them every day so if you're in a bad spot they can tell you what you can do."

Timothy, Swimming

"It was very interesting meeting and talking to one of my teammates last year who seems very regimented and maintains a lot of good habits. He's not the buffest person on the team, he's not the slimmest person on the team, but I do believe he might be one of the healthiest just because of all of the hard work he puts into staying healthy and maintaining proper habits. That's someone I model a lot of what I do from."

George, Track & Field

It is evident that student athlete experiences, both from their own perspective and

vicariously through their teammates, played a significant role in sculpting constructions of health and healthy behaviour in our participants.

## **Desire for health improvements**

When asked what could be improved to benefit student-athlete well-being in the Canadian university sport context, the most common element touched on by participants was a need for wellness resources specific to student athletes. They described a particular need for general wellness information and resources in their earlier varsity years, and mental health resources throughout their time as varsity athletes.

"I think being more informed about what athlete well-being really is. We do know what it is sort of, but we're never really told how we should act differently than regular students. So maybe having presentations on health for student-athletes specifically."

Lauren, Hockey

"As far as well-being, I've used the tutoring service that varsity provides in first year. Nutrition is fairly well covered here. For well-being though, I'd definitely say the mental health resources are lacking. That would just be something that I would like to see more of, and emphasize the importance of. I see myself as being in a healthy frame of mind, but I feel like it could be better, and worked on. I have a lot of teammates who aren't in as healthy a frame of mind as me, and I want them to be at their best. That's the main thing."

Emma, Track & Field

"I would say the support is pretty decent for school, it's pretty good for physical injuries, it's pretty good for fitness, we have physiotherapists and everything. I would say if we needed more support, it's for mental health. Things like body image, managing that with our sport. Concussion protocol is very specific as to what to do, but anything else mental is not. At the beginning of the year we have seminars for hazing, nutrition, varsity information, but there's no seminar on mental health or how to manage everything. That's the thing that's severely lacking and nobody ever mentions it."

Charlie, Football

These recommendations by participants shed light on their attitudes towards aspects of health in general, as well as what they perceive to be the most pertinent threats to student athlete well-being in the present Canadian context. Many participants expressed a need for mental health

resources, both in terms of counselling services and health education, which reaffirms the value they place on mental health as discussed previously.

While advocating for these resources, participants also expressed hesitance as to whether student athletes would embrace them, anticipating potential aversion to help-seeking.

"The other thing is though, even if the support was there, a lot of people still might not use it. Nobody wants to be that person, the one that says they need help. So it might just be a waste of money, I'm not sure."

Charlie, Football

"Nobody is going to come out and say it, like they won't tell you they feel like garbage and they can't go on any longer. They definitely need more help though, and they might benefit from opening up a little bit more about their struggles. Student-athletes especially tend to hide those things I think."

Rebecca, Volleyball

Gaining perspective from participants as to what they believe would improve student athlete well-being may provide meaningful insight into implications from this research, which will be discussed further in the conclusion section of this document.

#### **DISCUSSION**

The purpose of this study was to investigate how student athletes construct health, fitness, and body image in the Canadian context, and to identify discursive sources they draw these ideas from. The student-athletes of this study constructed these concepts in various ways, both supporting and challenging past findings drawn from athletic and general populations. Drawing from the World Health Organization's definition of health (World Health Organization, 1946), participants generally highlighted the importance of physical and mental well-being, while putting less emphasis on social well-being. Fitness was generally equated to exceptional physical health, with emphasis on functional capacity and an 'athletic' aesthetic. Body image was discussed in various ways, pertaining to both a 'healthy' body image, a 'fit' body image, and an

'athletic' body image specific to their sport. Participants discussed multiple sources of information impacting their conceptualization of health, with a particular emphasis on the role of their experiences as varsity athletes, and their experiences in sport more broadly. Experiences involving adversity or negative outcomes were particularly emphasized as shaping one's conceptualization of health, aligning with the idea of health as self-managing in the face of challenges as proposed by Huber et al. (2011).

Student-athletes' conceptions of good physical health as being 'in tune' with the state of your body, fulfilling your body's needs, and functional capacity, both support and add to past findings in similar populations. Conceiving health as one's capacity to perform physical tasks is by no means unique to athletic populations (Makoul, Clayman, Lynch, & Thompson, 2009; Schatz & Gilbert, 2014), and using performance in sport as a measurement of one's health has been recognized in elite and recreational athletes (Theberge, 2008; Bridel, 2013). As discussed by Bridel (2013), the equating of health and athletic capacity may contribute to problematic trends amongst athletes such as the normalization of pain and injury, overtraining, and body dysmorphia. Normalizing pain and injury was described to varying degrees by participants in this study as well, which conforms to past findings with athletic populations (Curry, 1993; Nixon, 1993; Theberge, 2008). Participants of this study perceived themselves as healthy at times despite playing through a debilitating injury, which was interwoven with their identity as an athlete. For example, Theresa, a fifth-year soccer player with a history of injury, differentiated between an athlete's ability to be healthy through pain, and that of a "normal person".

Physical health constructs of being 'in tune' with one's body, and to fulfill bodily needs, were discussed as contributors to participants' performance in sport, but additionally as guidelines for health more broadly, and as such are presented as distinct. It's notable that in

surveys of the general American population in 1995 and 2002, 'sensitive to physical state' was among the least prevalent conceptions of physical health (Makoul et al., 2009), whereas this concept appeared quite commonly amongst our participants. A heightened awareness of physical state in athletes resulting from years of sport participation may contribute to participants perceiving proficiency in evaluating their physical health at any moment in time, in part explaining their emphasis on this aspect of physical health. Participants generally discussed fulfilling bodily needs in terms of effective coping with their demanding athletic lifestyle, such as getting enough sleep, or eating enough healthy foods.

Participants identified life satisfaction, and having a feeling of purpose in life to be primary tenets of mental health. Participants often made reference to mental illness when describing mental health, similar to recent findings with elite divers (Coyle, Gorcynski, & Gibson, 2017). In contrast to Coyle et al.'s findings, and my own findings with collegiate swimmers (Crocker & Bridel, 2019), participants generally demonstrated confidence in describing their understanding and experiences of mental health. Consistent with previous research, participants also perceived stigma, both specific to athletes and in the broader social context, as a barrier to discussing mental health or seeking help (Gulliver, Griffiths, & Christensen, 2012). Recent mental health awareness initiatives, such as Bell Let's Talk, may be contributing to more comfort in student athletes discussing aspects of mental health, at least in a one-on-one conversational setting. Although our findings indicate progress in this regard, the consistent recognition of mental health stigma by participants demonstrates that there remains work to be done in this area.

Social well-being was identified as a determinant of health, unprompted, by only three participants, and was discussed primarily in terms of benefitting mental health and establishing

social pressure to make healthier decisions. Participants largely recognized social well-being as beneficial to health once prompted, but it remains notable that social factors, such as social stability and positive relationships, did not consistently arise when student athletes described necessary conditions of being healthy. This conforms to findings from a survey of the American public where social aspects arose in very few participants' conceptions of health (Makoul et al., 2009). While public discourse has seemingly shifted towards holistic ideas of health (Engebretson, 2003), it seems social well-being continues to be recognized by relatively few as a prominent tenet of health.

Participants' conceptualizations of 'being fit' and 'being healthy' shared many similarities, with the primary distinction being the holistic nature of health ideas, and the strictly physical nature of fitness ideas. Definitions of health showed little variability between male and female participants of our study, however, relationships drawn between health and fitness differed considerably. It is notable that whereas eight of the ten male participants identified some aspect of mental well-being when defining health, the majority of male participants still conflated fitness and health later in their interviews. Female participants generally differentiated these concepts in accordance with fitness being strictly physical, and health being more holistic. It may be inferred that male student-athletes emphasize physical capacity in their conceptualization of health more so than their female counterparts, which conforms to past findings in constructions of health in young men (Wright, O'Flynn, & Macdonald, 2006). This conflation of health and fitness may also suggest that male student athletes value physical well-being more than mental well-being in their construction of health, despite recognizing mental health as important. Whereas male and female student athletes share many similar experiences,

gender differences in their conceptualizations of health are unsurprising as they are invariably situated within larger public discourse around gender norms and health.

Participants constructed a healthy body in various ways, including the recognition that many aspects of health cannot be gauged from one's physical appearance. With that in mind, participants acknowledged that some aspects of one's physical health could be approximated from their body, such as a leanness indicating their capacity for physical activity. This supports past research with Canadian youth, who similarly connected health with being "not too fat" (pg. 145), and being physically active (Rail, 2008). The student athletes of this study recognized that although one did not need to fulfill a 'fit' body image to be considered healthy, those with fit bodies tend to be healthier. A 'fit' body image was commonly discussed as an expected outcome, or 'perk' of varsity sport, and not something student athletes were actively working to obtain. This conforms to past studies showing student athletes being less vulnerable to stress from body dissatisfaction (Wilson & Pritchard, 2005) and generally having a more positive body image than their non-athlete counterparts (Hausenblaus & Downs, 2001). Student athletes' conceptions of a 'healthy' or 'fit' body image often conformed with sport-specific athletic bodies more so than hegemonic masculine/feminine ideals. Accordingly, there were considerable differences in participants' construction of body image across sport, and notably less difference stemming from gender. For example, male and female swimmers in this study described elite swimming bodies as tall, lean, and long-limbed, and male and female hockey players both emphasized large, powerful legs. Participants generally expressed satisfaction with aspects of their bodies that they felt aided them in their sport, and as a result demonstrated some resistance to the pressures of dominant gender discourse, at least in sport contexts. This supports past findings of athletes' body satisfaction being dependent on context (Greenleaf, 2002; Krane, Waldron, Michalenok, &

Stiles-Shipley, 2001), however this should be tempered with the acknowledgment that congruency between athletic and gendered body image was not a specific focus of these interviews.

It's clear from these findings that no single informational source distinctly accounts for the majority of health ideas in student-athletes, which is unsurprising given the complex manifestation of health concepts in essentially every facet of life (Crawford, 2006). A wide variety of discursive sources were indicated by participants as contributing to their understanding of health, with sport experiences commonly identified as the most significant. Sport experiences account for a significant part of student-athletes' life experience in general, both during and prior to university, signified by athlete identity often outweighing academic identity in collegiate athletes (Adler & Adler, 1991; Potuto & O'Hanlon, 2007; Sturm, Feltz, & Gilson, 2011; Beamon, 2012). Student athletes identifying sport experiences as particularly significant to their health ideas then conforms to findings from Michaelson, McKerron, and Davison's (2015) research with Canadian adolescents, where it was suggested that personal experiences accounted for shaping health ideas more so than didactic learning. In this athletic population, conceptualizations of health seem particularly vulnerable to change in sport contexts, and therefore interventions looking to address holistic health in athletes should integrate their messages directly into positive sport experiences when possible.

#### **CONCLUSION**

#### Limitations

In addition to managing the role of their own perspective, qualitative researchers must also be cognizant of how discomfort and social desirability may impact their participants' responses in interview settings (Galetta, 2013). In the context of this study, some thoughts and experiences pertaining to health may have been considered sensitive information to participants, and as such they may have felt some discomfort in disclosing these to the interviewer. I did my best to minimize this discomfort through a cordial demeanor, however the participants' right to abstain from answering any question was maintained. It is notable that participants of this study did not decide to exercise this right at any point. There also exists the possibility that participants felt obligated to represent a stereotypically busy, stressed, resilient student athlete to a higher extent than their lived experiences reflect. To minimize this, I refrained from prompting participants with any discursive norms or expectations of student athletes, and refrained from overtly affirming or degrading participant responses during the interview.

The transferability of findings from this study are limited by the inclusion of athletes from only two of the fifty-six academic institutions in the Canadian collegiate sport system.

These two schools were selected to capitalize on my existing connections with athletics programs. Although no consistent differences emerged in our findings between participants as a result of their academic institution, it should be acknowledged that findings from student athletes of two academic institutions may not perfectly reflect the entire Canadian collegiate sport system, and this should be addressed in future research.

# **Implications**

Findings from this research have theoretical and practical applications. With regard to theory, this research can inform further inquiry into how collegiate student athletes from specific sports, and university students more broadly, conceptualize different aspects of health. If student athletes construct health as a capacity to perform in their sport, in both physical and mental aspects, how might football players' ideas of health and healthy behaviours differ from those of an artistic swimmer? How might student athletes' conceptions of health differ from other students forced to negotiate between demanding roles, such as a that of a student parent or those with a full-time job? Future research is also needed to establish how conceptualizations of health manifest into behaviour, and ultimately how they influence health outcomes. For example, conceiving of health as a capacity to do one's sport may contribute to classifying behaviours as unhealthy only so much as they impair sport performance. A particularly problematic example of this was described by Oscar, a third-year baseball player, in the context of alcohol consumption: "When they [athletes] do go out they don't really drink beer, they just chug vodka, which probably is the most healthy option for them. In terms of carbs and that stuff it's more worth it for them.".

With regard to practice, findings from this study support two recommendations for athletic administration servicing Canadian academic institutions. First, many participants of this study indicated experiencing debilitating stress, unrealistic athletic commitment expectations, and resultant poor academic performance during their first year of varsity sport. This conforms to past findings with student athletes in American contexts (Tracey & Corlett, 1995; Saxe, Hardin, Taylor, & Pate, 2017). Participants of this study attributed their negative experiences in this regard to misjudging the extent of their athletic and academic commitments throughout their first

year, and having no means of learning to navigate these demanding commitments except by trial and error. A 2<sup>nd</sup> year varsity swimmer in this study aptly summed this up as "being thrown to the sharks without being taught to swim, and yeah you'll eventually figure it out, but not without some bad bites that stay on your transcript forever". In a system where academic scholarships, athletic scholarships, and future career aspirations are contingent on maintaining a competitive grade point average, struggling through this first year can have significant financial and long-term career implications. My recommendation to address this issue is to develop structured peermentoring programs, or group educational sessions, led by senior or recently graduated varsity athletes to set appropriate expectations and provide advice to incoming varsity athletes.

A second practical application stems from many participants of this study calling for increased mental health support, both in the form of counselling access, and mental health education sessions. As discussed in the literature review section of this document, a significant body of research has suggested student athletes may be especially predisposed to high levels of mental distress (Blacker, Sullivan, & Cairney, 2017), and mental illness, including disordered eating (Greenleaf, Petrie, Carter & Reel, 2009; Sundgot-Borgen & Torstveit, 2004) and depression (Weigand, Cohen, & Merenstein, 2013; Yang et al., 2007). Participants of this study felt dissuaded from seeking information, or seeking help at times, due to issues of stigma, accessibility, and time constraints from their demanding roles. My recommendation to address these concerns is to invest into student-athlete-specific mental health resources, including counselling and general mental health education, that cater to the unique lifestyle factors and schedule constraints of student athletes. I temper this recommendation by acknowledging the stringent financial resources permeating the Canadian collegiate context, particularly when compared to our American counterparts.

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# **Appendix 1: Interview Guide**

#### Introduction

- 1. Oral briefing of purpose of the study
- 2. Oral briefing on recording of interviews and distribution of transcripts
- 3. Review and signing of the consent form

# **Student-Athlete Questions**

- 1. What is your background in sport, and how did it lead into your current position on a varsity team?
- 2. What factors did you consider when choosing your current academic institution? Did the school's varsity program play a role in that decision?
- 3. Can you describe your typical day as a student-athlete? In what ways do you think your university experience differs from other students?
- 4. Does your day-to-day schedule vary at different times of the year? Which times of the year do you find the busiest? Which times of the year do you find you have the most relaxed schedule?
- 5. Do you feel that student athletes are generally equipped to manage both their academic and athletic commitments? Is there a tendency to prioritize one over the other? Do social commitments, family commitments, or work commitments?
- 6. What activities do your team social events typically consist of? How are team social events managed around athletic and academic commitments?
- 7. What advice would you give someone yourself university as a student-athlete?

#### **Health Questions**

- 1. In general, how would you define "being healthy"? What behaviours or physical attributes would you associate with someone who is healthy?
- 2. Paint a picture in your mind, what does someone who's "healthy" look like? What does their lifestyle involve? What does their lifestyle not involve?
- 3. Where do you think your ideas of what constitutes "being healthy" come from? Have these ideas changed or been altered since you became a varsity athlete?
- 4. Do you think participating in varsity sport aids in maintaining a healthy lifestyle? Are there ways in which it may hinder the maintenance of a healthy lifestyle?
- 5. Have you experienced a significant injury in your athletic career? How did this affect your role as an athlete? Did the limitations on your athletic role filter into other parts of your life?
- 6. How important do you think mental health is in the overall picture of "being healthy"?
- 7. What are the ways participating in varsity sport benefits one's mental health? What are the ways in which it can harm one's mental health?
- 8. What role do you think socialization and relationships play in "being healthy"?
- 9. Do you think participating in varsity sport benefits one's social well-being? Are there ways in which it can harm one's social well-being?
- 10. Think about the varsity athletes you know. To what extent are they healthy? Do you generally perceive student athletes to be healthier than their non-athlete student body counterparts?

# **Fitness & Body Image Questions**

- 1. In general, how would you define "being fit"? What body image or physical attributes would you associate with someone who is fit?
- 2. What specific body image, or physical attributes, would associate with elite athletes in your sport? Are these something that you've personally aspired towards?
- 3. What physical attributes do you associate with student athletes more so than the general student body in university?

What do you feel could change in the structure of varsity sport, or the resources provided to student athletes, to improve student athlete well-being?

Is there anything else you'd like to add to address any of the previous topics, or anything that you feel is relevant to the conversation?