



A mixed-methods case study examining the developmental networks of athletes in a wheelchair rugby team

Jordan S. Lefebvre^{*}, Danielle Alexander, Shane N. Sweet, Gordon A. Bloom

Department of Kinesiology and Physical Education, McGill University, Quebec, Canada

ARTICLE INFO

Keywords:

Para sport
Peer mentoring
Social network analysis
Athlete development

ABSTRACT

Objective: The purpose of this study was to examine the developmental networks of athletes in a wheelchair rugby team.

Design: A convergent mixed-methods design embedded within an instrumental case study (i.e., wheelchair rugby team).

Methods: Participants included seven wheelchair rugby athletes (five male; two female) and seven non-athletes linked to the team (four male; three female). Five athletes had a spinal cord injury and two athletes had a congenital impairment. Non-athletes included one current coach/romantic partner, three parents, one kinesiologist, and two administrators. The quantitative data were analyzed using social network analysis. The qualitative data were analyzed using thematic analysis.

Results: Wheelchair rugby athletes had small networks ($M = 6$) that included a diversified set of developmental relationships, such as peers, coaches, parents, romantic partners, and rehabilitation specialists. Furthermore, the quality of relationships varied as a function of the type of developmental relationships, which led to distinct developmental contributions, such as athlete's integration into the wheelchair rugby community, continued participation in this sport, and athletic development.

Conclusion: These results provide pertinent and useful information on the relationships of para sport athletes, including the development of collaborative learning environments for them.

1. Introduction

People with impairments are often exposed to a number of daily physical and psychosocial challenges, including increased risk of chronic pain resulting from their impairment (Turner et al., 2001) as well as social isolation (Emerson et al., 2021). Fortunately, sport and physical activity can provide these individuals with a means of positive psychosocial interaction and facilitate community integration by increasing peer interaction and socialization (Allan et al., 2018; Evans et al., 2018; Tawse et al., 2012). For example, Allan et al. (2018) conducted life-history interviews with 21 current and former para sport athletes and found that para sport participation was associated with an enhanced sense of pride, empowerment, confidence, and acceptance in their lives. Despite these benefits, sport participation rates are consistently lower for people with impairments than their able-bodied counterparts (Evans et al., 2018).

To maximize their personal and sport-related development, athletes with an impairment rely on support from a number of individuals, such

as peers, coaches, and parents (Allan et al., 2018; Gainforth et al., 2019; Tawse et al., 2012). For instance, a growing body of research in the disability literature is providing evidence for the value of *peers* (Chemtob et al., 2018; Gainforth et al., 2019; Machida et al., 2013). In the spinal cord injury literature, peer mentoring has been defined as “a peer interaction that aims to provide encouragement, counsel, and information to individuals who share similar lived experiences” (Gainforth et al., 2019, p. 1916). For example, adults with a spinal cord injury described their peer mentors as positive role models capable of enhancing their sense of autonomy (i.e., offering choice and flexibility), relatedness (i.e., empathy and trust in the relationship), and competence (i.e., completing tasks, such as transferring out of their chair; Chemtob et al., 2018). Additionally, Machida et al. (2013) interviewed 12 male wheelchair rugby players and found that athletes acted as peer mentors to help their teammates deal with adversity by providing belonging, confidence, and motivation. These findings highlighted the important role of peer mentoring in enhancing well-being of people with a spinal cord injury, both within and outside of the para sport context. Other studies have

^{*} Corresponding author. Department of Kinesiology and Physical Education, McGill University, 475 Pine Avenue West, Quebec, H2W 1S4, Canada.
E-mail address: jordan.lefebvre@mail.mcgill.ca (J.S. Lefebvre).