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Canadian Disability Participation Project

The CDPP is an alliance of university, public, private and government sector partners working together to enhance community participation among Canadians with physical disabilities. The research team for this project has expertise in exercise psychology, disability, and physical activity.

Quality Participation in Military Veterans with an Acquired Physical Disability

Importance of Physical Activity

Physical activity (PA) is key for maintaining health, whether it be physical, social, or psychological.¹ It is particularly important for persons with physical disabilities, who, despite experiencing higher rates of inactivity comorbidities (i.e., obesity, diabetes, and coronary heart disease), exhibit low PA participation and maintenance rates.² Past research analyzed the development of PA in different populations such as youth³; athletes⁴; and athletes with disabilities.^{5,6} However, few studies have examined how individuals with physical disabilities—particularly those with acquired disabilities—maintain PA long-term, after initial exposure.

Fostering Long-Term Physical Activity Participation

To bridge this research gap, CDPP researchers, Doctors Latimer-Cheung and Shirazipour, examined the pathways through which military veterans with a physical disability participated in PA, from the time of their injury to present.⁷ Researchers interviewed veterans who had successfully maintained PA long-term to determine how and why they stayed active and which elements of quality participation (QP) helped them do so.⁷

Researchers defined QP using the Quality Parasport Participation Framework (QPPF), left, which identifies six experiential elements (i.e., building blocks) of quality PA participation: autonomy, meaning, challenge, engagement, belongingness, and mastery.^{7,8}



AUTONOMY

Having independence,
choice, control

BELONGINGNESS

Feeling included, accepted,
respected, part of the group

CHALLENGE

Feeling appropriately tested

ENGAGEMENT

Being in-the-moment, focused,
absorbed, fascinated

MASTERY

Feeling a sense of achievement,
accomplishment, competence

MEANING

Contributing toward obtaining a personal
or socially meaningful goal; feeling a sense

Elements of Quality Participation

Resesarchers analyzed interview data to determine whether the building blocks of QP influenced the transition between pathway phases.⁷ Of the six building blocks, belongingness, mastery, challenge, and meaning were the most influential in supporting these transitions.⁷ The individual meanings of these elements differed for each participant at each point in their PA pathway, but overall, influenced continued participation as follows:

Belongingness

Veterans achieved belongingness through including family members and peers in their PA journeys.⁷ Belongingness allowed for strengthening of family dynamics post-disability acquisition and provided veterans with a sense of community and acceptance after their injury, particularly if they could not return to active military duty.⁷

Mastery and Challenge

Mastery and challenge were typically present together. In Pathways 1 and 2, veterans sought mastery and challenge through attempting and mastering new challenges.⁷ In Pathway 3, they continued to learn new sports, seeking challenge and mastery in each new experience.⁷

Meaning

Initially, participants derived meaning from personal goal achievement.⁷ As they progressed through their PA journey, participants derived meaning from prosocial responsibility, often taking on coaching, mentorship, and leadership roles.⁷ Interestingly, veterans viewed their roles as mentors or advocates as being pivotal to their military identities.⁷

Given their key role in supporting continued PA participation, we recommend developers incorporate experiential elements of QP into programming. When developing programs, policies, and practices; distributing resources; and providing coaching education, program providers should incorporate the building blocks of QP to promote quality experiences and foster continued PA participation among adults with an acquired disability.

CDPP researchers analyzed existing interviews with 18 military veterans with a physical disability across the US, UK, and Canada. Researchers used interviews to develop PA participation timelines from childhood to present. Timelines not only included PA participation, but also individual life milestones (i.e., graduation, marriage, joining the military, etc.) and psychosocial elements of PA (i.e., environment of programs compared with desired environment, outcomes of participation, PA goals, etc.).⁹

After developing the timelines, researchers analyzed them for commonalities. Researchers used common themes across different participants' timelines to discover four experiential elements of QP and three long-term pathways through which military veterans with an acquired disability not only initiate PA, but also maintain PA long-term.⁷

Pathways for Long-Term Physical Activity Participation

Pathway 1 consists of four phases: rehabilitation, competitive opportunity or program invitation, seeking new programs or higher levels of competition, and mentorship and continued parasport participation.⁷ Participants typically entered this pathway if they had recently been injured in combat.⁷

Pathway 1 (High-level parasport pathway):

- Phase 1 – Veterans introduced to PA through rehabilitation facilities
- Phase 2 – Veterans transitioned to competitive parasport opportunities or invitations to parasport programs
- Phase 3 – Veterans sought new programs or a more competitive environment, including taking specialization approaches
- Phase 4 – Veterans continued sport participation but took on additional mentorship/coaching or advocacy/activist roles

Pathway 2 consists of three phases: vicarious experience or clinic invitation, further opportunities for success, and mentorship and continued sport participation.⁷ Participants typically entered this pathway if they experienced noncombat injuries or progressive conditions.⁷

Pathway 2 (High-level parasport pathway):

- Phase 1 – Veterans introduced to PA through vicarious experience or program invitation
- Phase 2 – Veterans sought greater competitions through seeking either new sports or civilian programs
- Phase 3 – Veterans continued participation through prosocial activities such as mentorship/coaching or advocacy/activist roles

Pathway 3 consists of only one phase: continuously seeking new programs for participation. Participants typically entered this pathway if they experienced noncombat injuries or progressive conditions.⁷

Pathway 3 (Recreational pathway):

- Phase 1 – Veterans received invitations from military sport programs, and sought out different programs and activities for engaging in PA

Understanding how military veterans maintain PA highlights the need for program providers to transition from a focus on PA initiation to promoting long-term PA participation.⁷ By considering the different pathways through which veterans maintain PA long-term, program providers can foster environments and experiences which promote continued, quality participation among adults with an acquired physical disability. Below is a visual representation of the three pathways.



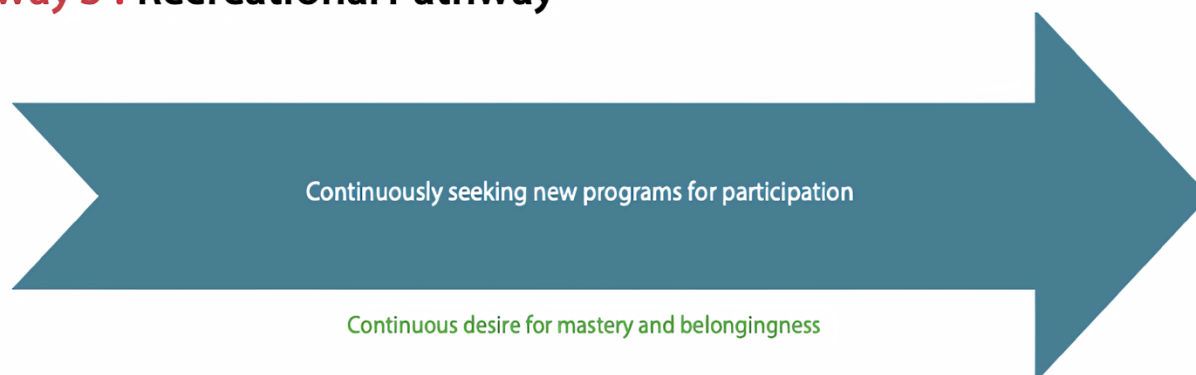
Pathway 1 : High-level Parasport Pathway



Pathway 2 : High-level Parasport Pathway



Pathway 3 : Recreational Pathway



In Summary

Our research identified four elements of QP that support long-term PA participation in military veterans with an acquired physical disability and three pathways of long-term PA participation. These findings highlight the need for the adapted PA field to shift its focus from initiation and awareness to exploring how initiation and awareness become continued, long-term engagement.⁷ We recommend program providers consider integrating our findings in the development of programs, research, and frameworks that promote long-term PA participation. By understanding the experiential elements of QP that encourage continued PA engagement, we hope that program providers can successfully promote long-term PA participation for adults with acquired disabilities.



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