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EXPERT OPINION

The Importance of Qualified Exercise Professionals in Canada Darren E. R. Warburton¹ and Shannon S. D. Bredin²

Background The health and fitness industry has undergone considerable change in recent years. As part of this movement, we have observed a need for the regulation of the industry and the development of standards for personnel working within the field. In Canada, the term Qualified Exercise Professional was created recently to denote the level of training, education, and certification required for personnel working with varied asymptomatic and symptomatic populations.

Purpose The primary purpose of this paper was to discuss the importance of Qualified Exercise Professionals in Canada.

Methods A narrative review of the literature was conducted.

Results There is clear evidence of the need for safe and effective physical activity/exercise interventions that improve the health and well being of Canadians. The risks associated with physical activity/exercise testing and training are extremely low. However, specialized training (such as that provided to Qualified Exercise Professionals) is warranted for work with varied populations (especially with individuals that are at higher risk for adverse exercise-related events).

Conclusions Qualified Exercise Professionals are integral members of the allied health profession team working to promote widely the health benefits of physical activity in Canada. Their specialized training allows them to play central roles in the safe and effective physical activity/exercise interventions for asymptomatic and symptomatic populations. Health & Fitness Journal of Canada 2009;2(2):18-22.

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The health and fitness industry has undergone a great deal of growth and change. As part of this movement, there is an increasing need for regulation and quality control.

Recently, through the systematic review and revision of Canada's Physical Activity Readiness Questionnaire (PAR-Q) we have defined the term "Qualified Exercise Professional" to denote those individuals with advanced education, certification, and practical training in the exercise sciences (Jamnik et al., 2009; Warburton et al., 2009a; Warburton et al., 2009b). This designation represents the overwhelming body of literature that supports the need for specialized training and certification when working with various asymptomatic and symptomatic populations (Warburton et al., 2009b).

In Canada, Qualified Exercise Professionals with advanced academic and practical training have been recognized through the wide ranging CSEP certifications.

Since its inception, the Canadian Society for Exercise Physiology (CSEP) has sought to "ensure that quality fitness practices and physical activity counselling services are available to assist in the promotion of an active lifestyle for all Canadians" (Canadian Society for Exercise Physiology, 2003; Canadian Society for Exercise Physiology, 2007; Canadian Society for Exercise Physiology, 2008).

At both the national and provincial level, CSEP has worked to protect consumers by establishing and regulating the standards for physical activity, fitness, and lifestyle appraisal personnel and centres.

The CSEP Health & Fitness Program certifications reflect progressively more sophisticated capability in providing health and fitness services. This includes the CSEP-Certified Personal Trainer® (CSEP-CPT) **CSEP-Certified** and the Exercise Physiologist® (CSEP-CEP). These certifications cover the spectrum of health and fitness including working with individuals interested in improving their health status (CSEP-CPT, and CSEP-CEP), high performance athletes (CSEP-CEP) and clinical populations (CSEP-CEP). Similar certifications can be found internationally as well (such as those provided by the American College of Sports Medicine (ACSM) (2008), the Australian Association for Exercise and Sports Science (2007), and the British Association of Sport and Exercise Sciences (2008)).

In Canada, it is clear that many use the title of a health and fitness professional with no formal academic training in the exercise sciences (Warburton et al., 2007a). Furthermore, it is disheartening to CSEP Qualified Exercise Professionals when fitness and community centres do not recognize the importance of their advanced education and training above other certifications (despite differences in qualifications and training). However, in recent years, we have observed a growing desire of the general population to work with Qualified Exercise Professionals who have received extensive academic training and advanced certifications (such as those provided by CSEP and ACSM). Moreover, we have seen an increased awareness of the medical community regarding the importance of advanced education and training in the exercise sciences (Sharma, 2007).

The general population is increasingly aware of the apparent lack of regulation in the health and fitness industry (American College of Sports Medicine, 2003). Safety concerns have also arisen regarding individuals working in the field who lack formal training (especially when dealing with at risk populations) (Sharma, 2007). Recent lawsuits of personal trainers is further evidence of these concerns (Herbert, 2000; Herbert, 2003).

It is now more important than ever that we ensure that individuals working in the health and fitness industry are trained adequately to deal with the unique needs of a diverse clientele (Warburton et al., 2007a). The lack of formal and rigorous academic training in health and fitness compromises one's ability to safely and effectively work with clients (Warburton and Bredin, 2005; Warburton et al., 2007b).

It is critical that individuals who conduct health and fitness assessments and interventions are aware of the relative and absolute contraindications to these procedures (Franklin et al., 2009). A recent systematic review of the literature (Warburton et al., 2009) revealed that this knowledge base is best achieved through formal university training in the exercise sciences with the direct assessment of core competencies through a national evaluation process (involving both written and practical examinations). This level of training is consistent with other allied health professions. Moreover. there compelling support that this level of training minimizes the risks for an exercise-related event (particularly in high risk populations). It is important to highlight that the majority of studies, establishing a low risk of exercise-related events (in asymptomatic and symptomatic populations), employed stringent staff training requirements including the use of Qualified Exercise Professionals (Goodman et al., 2009; Warburton et al., 2009a).

Using **Oualified** Exercise a Professional ensures that this individual has a documented understanding of the optimal means to evaluate physical fitness and improve health status via physical activity/exercise in a safe and individualized manner. Furthermore, this level of expertise and training assists with accurate, reliable, and meaningful data collection. This is why so many health promotion initiatives (such as the Support Physical Activity Line (www.physicalactivityline.com)) require the CSEP certifications as the standard for employment. In fact, in our practice (involving the annual assessment of thousands of participants from across the lifespan) we have seen clearly the benefits of having our staff take advanced training and certification. Similar to other laboratories and programs (such as the Physical Activity & Chronic Disease Unit, School of Kinesiology & Health Science in York's Faculty of Health) all staff working with our asymptomatic and symptomatic populations must be Qualified Exercise Professionals with advanced CSEP certifications.

Employing Oualified Exercise a Professional (such as a CSEP or ASCM certified member) facilitates adherence to the highest standards for physical activity, fitness and lifestyle appraisal and intervention. This is particularly important for fitness appraisals and interventions (involving

moderate to vigorous intensity exercise). Although the risks associated with testing and exercise training extremely low (Goodman et al., 2009; Warburton et al., 2006a; Warburton et al., 2006b). one cannot overlook the likelihood of an inadequately trained individual to place their client at a greater risk of an adverse exerciserelated event (please refer to the Exercise Standards and Malpractice Reporter for recent lawsuits and legal proceedings).

The promotion of the importance of obtaining advanced training certification starts within kinesiology and exercise sciences. As exercise science/kinesiology faculty, we are often asked by our undergraduate students about the "value-added" in attaining CSEP or ACSM certifications when easier less rigorous certifications are readily available. This is compounded by the fact that many lecturers and/or exercise science/kinesiology faculty do not themselves advanced possess certifications for working with clinical populations. As such, students are often given vastly differing positions regarding the need to become a Qualified Exercise Professional (despite the considerable support for obtaining this level of education and training). This particularly challenging since many fororganizations now provide certifications or registrations that give the impression that its members are qualified to work with at risk populations (Gillespie, Sharma. 1993; 2007). However, to those exercise science faculty who work with varied clinical and high performance populations, it is clear, you must receive advanced education and certification before you attempt to work with these clients. For instance, in Canada, most (if not all) clinical exercise physiology and rehabilitation programs

require that their staff have obtained the advanced academic and practical training and certification provided by the CSEP and/or the ACSM (Canadian Society for Exercise Physiology, 2008; Stone and Arthur, 2005). These standards are outlined clearly in the most recent version of the Canadian Guidelines for Cardiac Rehabilitation and Cardiovascular Disease Prevention (Stone, 2009). Therefore, personnel working with both asymptomatic and symptomatic populations would have at a minimum completed a bachelor degree in exercise science and passed a standardized national examination process covering key core competencies. This is similar to the recommendations provided in the United States (Franklin et al., 2009). Unfortunately, this message is often lost. Therefore, greater efforts should be taken to highlight the need and importance of advanced education and certification both within and outside of the exercise science settings.

Conclusion

evidence There is increasing supporting the need for Qualified Exercise Professionals in optimizing the health status of Canadian society. Individuals that have completed undergraduate or graduate education in the exercise sciences/kinesiology with advanced certifications (from internationally recognized bodies (American College of Sports Medicine. 2008: Australian Association for Exercise and Sports Science, 2007; British Association of Sport and Exercise Sciences, 2008; Canadian Society for Exercise Physiology, 2008)) are now seen as important members of the allied health profession team. It is up to every Qualified Exercise Professional and faculty member in the exercise sciences to promote widely the benefits of advanced education and training when

working in the health and fitness industry.

Qualifications

The authors' qualification are as follows: Darren Warburton, PhD, CSEP CEP, MSc; Shannon Bredin, PhD, CSEP CEP, MSc, BEd.

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