Aqua Percept: A successful program from multiple perspectives

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Positioning myself

I was in grade 6 when I had my first memorable encounter with a classmate who was "a little different". At the time, I was not aware of his diagnosis and it did not matter. He was sitting next to me, and he was my classmate. To me, he wasn't much different than all my other classmates.

Another memorable encounter occurred at 16 years of age which was a turning point. At the Malcolm-Knox Aquatic Centre (MKAC) in Pointe-Claire, I became an instructor in the adaptive programs, including the Aqua Percept (AP) program for about 4 years. While I had worked as a swimming instructor in the regular lessons, the joy experienced in the adaptive programs was incomparable. I remember being excited to see the little children every week and how they were able and capable. I had never participated in such a rewarding activity.

At 19 years old, confused about what field to study and what career to pursue in university, I decided to discover the world instead. I travelled extensively in Australia, New Zealand, and South East Asia for a period of two years. A few months after my return, I realized how much I missed interacting with everyone in the adaptive programs at the MKAC. It made me realize how passionate I was about teaching and being involved with children of all abilities. I returned and worked as an instructor exclusively in the adapted programs for a few more years.

Working as an instructor in the adaptive programs is also what inspired me to obtain a Bachelor's degree in kinesiology. After graduating, it simply made sense for me to pursue my studies in adapted physical activity, and more specifically, to learn more about the AP program.

The reason I decided to centre my thesis around the AP program was to better understand how and why it works. I have the ambition to one day establish an improved version of this program across the province, and maybe across the country. I firmly believe that our population could use modern and fun adapted physical activity programs and centres for children and teenagers of all abilities.

Abstract

This study investigated the components of an adapted physical activity program perceived to be successful from multiple perspectives, those being the adolescents, the instructors, and the parents. Their personal experiences and interpretations were ascertained by interviews, and field observations. The literature review involved arguments from topics such as individuals with disabilities and physical activity, research in sport and recreation programs, research gaps in the study of APA programs, program success and program components, instructors and training, and intervention models. Evidence-based practice was the main theoretical framework that guided this study.

An interpretative phenomenological analysis (IPA) confirmed that the Aqua Percept program is a successful program. Specifically, the following components were considered to play a significant role in the success of the program by all three groups: instructors, facilities, atmosphere, and program outcomes. The structure/organization of the AP program and training were important components according to the parents and the instructors only. In addition, another theme emerged for all three groups during the analysis: challenges and recommendations. The Aqua Percept program is a successful program within its community and over the years has evolved to adapt to the individual needs of its participants. The model of success of the Aqua Percept program can be use to inspire the creation of new programs or the improvement of older programs.

Résumé

Cette étude a examiné les composantes d'un programme d'activité physique adaptée perçu comme étant couronné de succès à partir de plusieurs points de vue, ceux-ci étant des adolescents, des instructeurs et des parents. Leurs expériences personnelles et interprétations ont été constatées par des interviews et des observations de terrain. La revue de la littérature a impliqué des sujets tels que les personnes handicapées et l'activité physique, la recherche dans les programmes de sport et de loisirs, les lacunes de la recherche dans l'étude des programmes d'APA, la réussite du programme et les composantes du programme, la formation, et des modèles d'intervention. La pratique fondée sur les preuves est le cadre théorique principal qui a guidé cette étude. Une analyse phénoménologique interprétative a confirmé que le programme Aqua Percept est un programme couronné de succès. Plus précisément, les éléments suivants ont été considérés par les trois groupes de participants comme jouant un rôle important dans le succès du programme: les instructeurs, les installations, l'atmosphère, et les résultats du programme. La structure / organisation du programme et la formation AP étaient des éléments importants selon les parents et les instructeurs seulement. De plus, un autre thème a émergé au cours de l'analyse: défis et recommandations. Le programme Aqua Percept est un programme couronné de succès au sein de sa communauté et qui a su, au fil des années, évoluer pour s'adapter aux besoins individuels de ses participants. Le modèle de la réussite du programme Aqua Percept peut être utilisé pour inspirer la création de nouveaux programmes ou l'amélioration de programmes plus anciens.

Preamble

This thesis is composed of two parts, the review of the literature and a manuscript. In the review of the literature topics such as individuals with disabilities and physical activity, research in sport and recreation programs, evidence-based practice, research gaps in the study of APA programs, program success and program components, instructors and training, and intervention models were covered in depth to provide a background for the research manuscript. The manuscript was prepared in a research article format for the purpose of potential publication.

Review of the literature

The purpose of this study was to understand why the Aqua Percept program is perceived to be successful from the multiple perspectives of those being, instructors, parents and participants. More specifically, two questions were posed. Why is the Aqua Percept program successful? What are the specific components of the Aqua Percept program that play a role in its success as perceived by participants, parents, and instructors? In order to provide a background for answering these questions a review was conducted of relevant knowledge related to individuals with disabilities and physical activity, research in sport and recreation programs, evidence-based practice and related issues, research gaps in the study of APA programs, program success and program components, instructors and training, "highly qualified" adapted physical educators, and intervention models. A short portrayal of the Aqua Percept program and its evolution, as well as the Malcolm-Knox Aquatic Centre is also presented, followed by a rationale for the study. Finally, a brief description of methodological aspects of this study is presented.

Individuals with disabilities and physical activity

Promoting moderate levels of physical activity among people with disabilities is an important goal for public health and public policy, as regular physical activity improves well-being and contributes to the prevention or delay of chronic disease (Rimmer, Riley, Wang, & Rauworth, 2004). Childhood and adolescence are important periods when youth with or without disabilities develop attitudes and behaviors that they will probably transfer into adulthood (Zick, Smith, Brown, Fan, & Kowaleski-Jones, 2007). Partaking in play, recreation and sport has an important impact on overall

growth and development and are crucial elements for a satisfying childhood and adolescence (Kemper, 1995; King, Law, King, Rosenbaum, Kertoy, & Young, 2003). In addition to the psychosocial benefits associated with sports and recreation, many physiological benefits ensue from regular participation in physical activity during youth. These include increased bone density and lean muscle tissue, better management of body weight, lower risk of high blood pressure in adulthood and reduced feelings of depression and social isolation (Burgeson, Wechsler, Brener, Young, & Spain, 2001). Regardless of these benefits, the rate of physical inactivity among youth with disabilities is much higher than in youth without disabilities and many experts believe this will lead to a greater number of health complications in adulthood such as overweight and obesity, which increase their risk for developing secondary health conditions (Murphy & Carbone, 2008; Grunbaum, Kann, Kinchen, Williams, Ross, Lowery, & Kolbe, 2001; Fernhall & Unnithan, 2002; Steele, Kalnins, Jutai, Stevens, Bortolussi, & Biggar, 1996).

The lack of physical activity among youth with disabilities was recently addressed by the Council on Children with Disabilities Executive Committee of the American Academy of Pediatrics (AAP; Murphy & Carbone, 2008). Amongst other recommendations, the Council urged pediatricians to stress to families of children with disabilities the need to become involved in competitive and recreational sports and physical activities throughout youth. Indeed, the importance of a physically active lifestyle for individuals with disabilities cannot likely be exaggerated.

It has also been mentioned that children and adolescents with disabilities enjoy physical activity and want to engage in the same activities as

theirs peers without disabilities (Goodwin, 2009). This is particularly true when programs promote social acceptance, a sense of belonging, provide instrumental support that encourages success and enable students to demonstrate their motor and social competence.

Research in sport and recreation programs

Physical activity benefits are especially important for individuals with various physical, mental, and developmental disabilities (Cooper & Quatrano, 1999). Most research has focused on examining the relationships between physical activity and various health outcomes (i.e. physiological, psychological, social, etc.). According to Cunningham and Beneforti (2005) there has been an increasing demand for the evaluation of sport and recreation programs. However, they suggest that the need to comprehensively evaluate programs is reduced when research evidence indicates health benefits from physical activity. In other words, when the product outcome is satisfactory, there is less interest in knowing why and how it occurred. This should not serve as an excuse to avoid the study of programs with positive outcomes because much can be learned from such studies. Actually, since there appear to be more and more opportunities for individuals with disabilities to be physically active, this should reflect the need for more research about 'why' and 'how'. These ideas are discussed more fully under Program success and program components. There is a pressing need to establish physical activity programs to know if and why they are successful (Rimmer, Braddock, & Pitetti, 1996).

Evidence-based practice and related issues

The growing movement of evidence-based practice (EBP) has influenced many fields in the last two decades, including adapted physical activity (Bouffard & Reid, 2012). Broadly defined, evidence-based practice is a process that involves "the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients" (Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996). The understanding of the term EBP can range on a spectrum from normative guidelines for groups of people to idiographic decision-making principles for individuals (Eddy, 2005). In public health and some areas of medicine, EBP is generally understood to mean best practices identified by research that are regulated by policy guidelines. Guidelines, usually issued by federal agencies or professional organizations, specify best practices for addressing a given problem or disorder. Importantly, practice guidelines frame treatment recommendations nomothetically. They indicate the best research-supported treatment for a disorder or life problem. The recommendation is, in a sense, "one-size-fits-all" and assumes different individuals have relatively homogeneous intervention needs. However, it has been suggested that this approach is insufficient to answer research questions or recommend interventions for individuals with different needs (Sackett et al., 1996; Bouffard & Reid, 2012; Spring, 2007; Kazdin, 2008). Spring suggested EBP should consist of integrating evidence from three data strands: best available research evidence, clinical expertise, and patient needs, values, and preferences. However, what constitutes best research evidence depends upon

the question needing to be addressed (Sackett & Wennberg, 1997) and the person who is asking the question.

Another issue in EBP is the different types of evidence that have been arranged in hierarchies by experts, often without clear justifications (Bouffard & Reid, 2012). Generally, randomized control trials (RCTs) are at the top and qualitative studies are at the bottom. The latter are seen as producing inferior knowledge. While some practices might be considered effective by RCT, more complex interventions might require further analysis of the process and circumstances to truly understand what is happening (Grypdonck, 2006). Knowing that a practice is effective can serve as one level of evidence, but discovering how, why, and for whom it is effective, refers to a different level of evidence.

Research gaps in the study of APA programs

Adapted physical activity (APA) programs have been deemed effective in producing desirable outcomes such as increased opportunities for friendships in youth (Smith, 2003), increased perceived competence and social acceptance in at-risk preschoolers (Goodway & Rudisill, 1996), increased quality of life in children and adolescents with congenital heart disease (Fredriksen, Kahrs, Blaasvaer, et al., 2000), improved motor proficiency in children with developmental language disorders (Rintala, Pienima⁻⁻ki, Ahonen, & Cantell, 1998), and improved cardiovascular fitness and muscular strength and endurance in adults with Down syndrome (Rimmer, Heller, Wang, & Valerio, 2004). However, there are research gaps when discussing APA programs such as the lack of focus on the process, only rarely do studies use multiple perspectives and the voice of individuals with disabilities too often forgotten. These gaps might simply be due to the fact that it is a new area of research and therefore, more research is needed. Nutbeam (1998) has described evaluation research as having two stages; first, to assess outcomes in order to determine the extent to which the intervention achieved what it was attempting to achieve. To do so, methodologies such as single-subject and group designs may be a better fit for some research contexts and participant characteristics. In fact, to determine what changes and to assess causality, powerful correlational methodologies may be used to address causal-like questions (Odom, Brantlinger, Gersten, Horner, Thompson, & Harris, 2005). The second stage is to understand the process in order to identify the basic conditions for successful implementation of an intervention, and allow for reproduction of the intervention and successful outcomes. Process-oriented research may require the use of qualitative methods (Brantlinger, Jimenez, Klingner, Pugach, & Richardson, 2004).

The first gap in the study of APA programs refers to the exploration of the process. Thus, as Kazdin (1997) noted, research studies should focus on understanding how, why, and for whom an intervention works. Studies which ask these questions in APA are rare. Beyond those issues of generalization are the questions of why and how the changes occurred.

Second, seldom has research explored program effectiveness from multiple perspectives, such as administrators, instructors, parents and participants. A multiple-perspective approach is needed in order to obtain a more detailed account of the phenomenon. Kelly, Hoehner, Baker, Ramirez, and Brownson (2006) suggest, in any settings, that the participants selected include individuals from four categories: implementers (those involved in program implementing), partners (those supporting the program, financial or other), participants (those served or affected by the program) and decision makers (those in a position to do or decide something about a program). The perceptions of participants may be very different than the perceptions of decision makers. For example, Rimmer and colleagues (2004) set out to identify various barriers and facilitators associated with participation in fitness and recreation programs/facilities among persons with disabilities. Focus groups were conducted with four types of participants: (a) consumers with disabilities, (b) architects, (c) fitness and recreation professionals, and (d) city planners and park district managers. Although there may be more than four groups of people, from which to obtain relevant information, these authors recognize the importance of multiple perspectives.

Furthermore, the voice of individuals with disabilities is often forgotten when investigating a phenomenon from different perspectives. For example, a review of inclusion studies in physical education (1995-2005) revealed only five of thirty-eight papers reported the actual experiences of students with a disability (Block & Obrusnikova, 2007). It is crucial to include their perspective in order to understand the individual reality of participants (Goodwin, 2009). Understanding the perspective of individuals with disabilities can provide a unique vantage point from which to view adapted physical activity programs and their outcomes. Their opinion is valuable and might be quite different from other individuals involved. Individuals with disabilities, especially children and adolescents, might comprehend the world differently, and this might have an effect on their experience.

Program success and program components

In order for programs to remain aligned with their mission, as well as continue to attract individuals, investigation of the programs is crucial. Russell and Morwen (2005) have described evaluation as the process of determining the efficacy and effectiveness of practices and plans. Efficacy is concerned with whether a treatment works and is related to internal validity (Shadish, Cook, & Campbell, 2002). Effectiveness studies, on the other hand, are designed to know whether the treatment works in a "real-world" situation. Effectiveness is similar to external validity (Shadish, Cook, & Campbell, 2002). It provides information on how a program is developing, what changes have been achieved, and what refinements are necessary. It also assesses the strengths and weaknesses of a program, as well as enables improvements to be made. Moreover, it is an essential component in documenting and disseminating evidence-based practices (Brownson, Baker, Leet, & Gillespie, 2003).

The investigation process allows researchers to determine the effectiveness of a program, but also why it is successful. Success can be attributed to a variety of factors from different perspectives. Clearly, it is necessary to determine the key components which play a role in the success of a program from the perspective of the individuals involved. Cunningham and Beneforti (2005) noted that the term success was loosely defined and reflected the views of service providers and recipients, rather than an explicit set of criteria. Indeed, the views of participants, instructors, and parents can significantly inform us about what success means without using a rigid list of criteria. A program or treatment might be successful due to a variety of

interacting components, such as staff, atmosphere, equipment, location, price, accessibility, structure, and organization. Cunningham and Beneforti (2005) further discussed that most key components of 'successful' sport and recreation programs were reflected by one of five main areas: quality, resources, community, opportunities, and access. Similarly, Durstine and colleagues (2000) suggest physical activity programs should maximize accessibility, safety and effectiveness, and be enjoyable. While being good starting points, additional and detailed opinions, straight from the people involved, would be more informative regarding components of APA programs. This would allow researchers to better understand how success takes place and endures.

Not only is it essential to identify the main components responsible, but also to discuss their relationship to one another. As Kazdin (1997) indicates, it is surprising how little attention has been devoted to treatment components and the combinations that optimize change. Unfortunately, more than a decade later, Kazdin (2007, 2008) notes again how the study of mediators (an intervening variable that may account for the relationship between the independent and dependent variable), moderators (a characteristic that influences the direction or magnitude of the relationship between and independent and dependent variable) and mechanisms (the reasons why change occurred or how change came about) have not received much attention. For example, within the abundance of psychotherapy research studies, there is no evidence-based explanation of how or why even the most thoroughly investigated interventions produce change, that is, the mechanisms through which treatments operate (Kazdin, 2009). Yet, understanding how things work is a more valuable investment for future clinical practice and patient care, than simply finding out if it works. He even advances the possibility that evidence-based mechanisms of change will become more interesting or important than evidence-based treatments (EBTs).

In 2002, a project was developed by the Australian Sports Commission to identify potential indicators of health and social outcomes from sport and recreation programs in Indigenous communities in Australia. The results from this project led Cunningham and Beneforti (2005) to further investigate those indicators. Their study consisted of three stages: (a) a literature review; (b) discussions with key members of Indigenous communities to identify community expectations and experiences of sport and recreation programs; and (c) consultation with relevant stakeholders to determine the potential usefulness and appropriateness of the indicators identified in the first two stages. The two authors found very little published work in the area of indicators specifically for the evaluation of sport and recreation programs. Nevertheless, their findings suggest that three types of indicators together provide the most informative overview of program achievements. These are: (a) program viability and sustainability indicators, (b) participation indicators, and (c) outcome indicators. Program viability and sustainability indicators measure aspects of program functioning, such as turnover of sport and recreation instructors; levels and stability of funding; involvement, employment and training of local people; and adequacy of and access to facilities and equipment. These indicators can help determine the processes through which positive outcomes emerge. Participation indicators provide a summary measure of community participation. Finally, outcome indicators are intended to provide insight into changes in health and other areas of social concern. The authors suggest that priority should be given to program viability and sustainability indicators, while the other indicators should undergo further research and development before being recommended for routine use.

Moola, Faulkner, Kirsh, and Kilburn (2007) explored perceptions toward physical activity and sport in the lives of youth with congenital heart disease. Thirteen cardiac participants were interviewed in the presence of their parents, and a process of inductive analysis was conducted. This study found that ongoing, affordable, and accessible programs are the conditions required for high quality segregated sports. They also suggested that the need for such accessible programs is essential, particularly in light of evidence that the psycho-social benefits of recreational camp programs are short lived (Epstein, Stinson, & Stevens, 2005). Similarly, adapted physical activity programs should aim for such conditions to offer high quality services.

Amongst the rare studies which have evaluated successful adapted programs, Wetzel, McNaboe, and McNaboe (1995) produced a mission-based ecological evaluation (ecological evaluation referenced to the organization's own mission) of a summer camp for youth with developmental disabilities. Camp Horizons, which had been present in its community for many years, was deemed a successful summer camp because of its high camper return rate, high staff retention, and expanding programs. Reasons were sought for Camp Horizons reputation as a successful summer camp. For their evaluation, investigators used natural indicators which included written materials, existing videotapes, and a site visit. Simplified paperwork supported individualized activities, training, and team work. Most ratings of videotaped exchanges

between campers and staff showed successful mission accomplishment. Results showed that Camp Horizons' reputation was justified, based on its success in translating mission elements for campers and their families. Investigators also discussed how the following mission-based practices might have implications for other similar services and programs: suitable physical setting and size, personalized and team coordinated programs for people, and creating a positive camp routine. Studies can help identify practices which can be useful for other similar organizations, as well as help the organization in question perpetuate its effectiveness. Indeed, it is as necessary to look at organizations or programs when they are successful as when they are failing. Much can be learned from the findings.

The Virginia Board for People with Disabilities identified promotion of recreation by individuals with disabilities as an objective in its Five Year State Plan, 2007-2011 (Hsing-Jung Chen, 2009). To assist planning potential activities on recreation services, the Board asked the 2008-2009 Disability Policy Fellow to conduct an exploratory study on recreation services provided to individuals with disabilities in Virginia, USA. A goal of this study was to determine the scope and degree of accessibility for local recreation services statewide, and to identify barriers affecting recreational agencies' attempts to provide programs/activities to individuals with disabilities. In contrast to the many barriers identified by the agencies, each agency was given the opportunity to identify their own success story through an open-ended question. The study found that these self-identified successful recreational programs had several characteristics in common: an increasing number of participants, a high ratio of staff-to-participants, an individualized services

approach, and promotion of social interaction among different participants. Having a high ratio of staff-to-participants is also more likely to assure that individuals' needs can be addressed in a timely manner.

Instructors and Training

One important component in sports and recreational programs are the instructors and various professionals involved in its functioning. These employees require initial training as well as ongoing tuition in order to provide the participants with the best possible experience. Some researchers have in fact investigated the issue of training within the field of physical activity promotion. Bull and Milton (2011) presented the Let's Get Moving (LGM) intervention, a structured approach to physical activity promotion in the primary care setting in the United Kingdom. LGM was developed by the Department of Health based on reviews on the effectiveness of different approaches to physical activity promotion. The recommendation of key strategies provided the basis for the program components, which were then analyzed by a group of health professionals. The case study highlighted the need for more training and adequate preparation of practitioners prior to the delivery of the intervention. When professionals lacked confidence in using a technique, it may result in inconsistencies in the delivery of the intervention. The results from this study, which drew attention to the importance of training staff, could be applied to the field of adapted physical activity.

Similarly, Wetzel, McNaboe, and McNaboe (1995) noted in their evaluation of Camp Horizons how staff training was helpful to the success of the camp throughout the summer. A week-long training session before camp allowed cabin counsellors and staff to learn more about topics such as teaching principles and practical management skills of working in teams while still attending to each camper's special talents and changing needs. Training allowed each instructor to be ready for service delivery.

Training instructors allows them to discover new strategies and techniques they can use during programs. One interesting strategy was suggested by Howell, Tucker, and Liburd (2011). They viewed three community interventions funded by the Centers for Disease Control and Prevention's (CDC) Racial and Ethnic Approaches to Community Health (REACH) program to increase physical activity and dissemination of information among African Americans. This case study used quantitative and qualitative data to assess physical activity and health promotion information provided to African Americans. It examined the interventions and the evidence-based recommendations from the CDC's Community Guide for Preventive Services. All three REACH communities culturally-tailored the evidence for their African American population. Going beyond the Community Guide, the REACH communities also successfully used strategies such as rotating class instructors to keep class participants interested and motivated. The findings from this study emphasized the need for service providers to remain informed and up-to-date with research and new strategies they can put forward with their employees. It also showed the importance of adapting and modifying strategies and techniques within a structured program and specific population to benefit its participants. Strategies such as "rotational instructors" could be very helpful especially in the field of APA.

The importance of providing instructors in APA with very thorough training is illustrated by the previous studies. The need for sufficient and topic-

specific trainings may be vital to the proper functioning of a program. Moreover, instructors need to have the knowledge and competencies to adapt strategies and techniques whenever necessary and possible.

"Highly qualified" adapted physical educators

After a position paper was published by NASPE (National Association for Sport and Physical Education, 2007) to describe the qualities and characteristics of a "highly qualified" physical education teacher, the Adapted Physical Activity Council (APAC) of the American Association for Physical Activity and Recreation (AAPAR) formed a committee to develop a position paper as it relates to the discipline of Adapted Physical Education (APE). The full version of this document is available on the AAPAR web site (AAPAR & National Consortium for Physical Education and Recreation for Individuals with Disabilities (NCPERID), 2007). The four minimum criteria for the training of a highly qualified adapted physical educator are: (a) Bachelor's degree in physical education teacher education and state license to teach physical education, (b) twelve semester hours specifically addressing the educational needs of students with disabilities, with a minimum of 9 semester hours specific to the area of adapted physical education, (c) a minimum of 150 hours of practicum experience, and (d) professional preparation programs must be based on standards for adapted physical education.

Essentially, adapted physical educators represent a select group of people from teacher preparation programs which have APE as an area of specialization. A highly qualified adapted physical educator (APE) must possess content knowledge (for example, in safety, assessment methods, adaptations and modifications, and behaviour management), demonstrate subject matter competence, and must have the personality to handle his or her students. Lytle, Lavay, and Rizzo (2010) suggested the development of the attributes of an APE is an ongoing and continuous process. As in other fields, APE professionals are also expected to stay up-to-date with new knowledge and technologies.

Similarly, professionals working in the field of APA require initial and ongoing training. They should possess some content knowledge and specific skills, but most importantly they should have a personality which is compatible with the values of APA. When investigating the components of an APA program, it appears important to take note of the training process the instructors receive and qualifications they already possess.

Intervention Models

There are a variety of frameworks and intervention models, each with different assumptions and emphases. These frameworks and models are often used to convey attitudes and perceptions regarding the term "disability". These beliefs provide the basis not only for understanding "disability", but also for providing services and directing programs. Some of these frameworks include the medical-therapeutic, educational, abilities, and social minority model which have been used in APA. These are now discussed in the context of adapted aquatics since the current case study deals with a 'case' of aquatic intervention.

Medical-Therapeutic Model

The medical model, also medical therapeutic model, is the oldest of the dominant views of disability, yet this model still influences teaching and professional practice today. In aquatics, this model has been in practice for centuries. From healing baths to hydrotherapy, this model has relied on a medical professional diagnosing a problem, and then prescribing treatment to cure the problem. Within this model, disability is perceived as a limitation of the individual. The model assumes the individual's deficiency is caused by a physiological or biological defect (Hahn, 1991). The medical model focuses solely on the limitation, disregarding environments that might intensify or adversely affect a person's functional abilities. This concept implies that the "problem" resides within the individual and that it is the individual who needs to change or be fixed, not the conditions of the environment (Hahn, 1988). Thus, programs and services are provided to diagnose, prescribe, and rehabilitate the individual rather than alter the environment.

Social Minority Model

In recent years, the disability movement has advocated a different way of looking at disability, which they call the social model or social minority model. The basic belief of this model is that individuals with disabilities are different from the majority and thus share a similar experience to those in other minority groups (Atkinson & Hackett, 1995; Hahn, 1991). The social model views disability as a consequence of environmental, social and attitudinal barriers that prevent people with impairments from maximum participation in society (Disabled People's International, 1981). Identification as a minority group also exposes individuals with disabilities to the low expectations of others and the belief that all individuals with disabilities need support or help to get by (Hahn, 1988). This argues from a socio-political viewpoint that disability stems from the failure of society to adjust to meet the needs and aspirations of a disabled minority. This starts from the standpoint of all disabled adults' and children's right to belong to and be valued in their local community.

The social minority model suggests disabled people's disadvantage is due to a complex form of institutional discrimination, as fundamental to society as sexism, racism or heterosexism. The disability movement believes the 'cure' to the problem of disability lies in changing society. This model implies that the removal of attitudinal, physical and institutional barriers will improve the lives of disabled people, giving them the same opportunities as others on an equitable basis. Taken to its logical conclusion, there would be no disability within a fully developed society. The strength of this model lies in its placing the burden upon society and not the individual. At the same time it focuses on the needs of the individual whereas the medical model uses diagnoses to produce categories of disability, and assumes that people with the same impairment have identical needs and abilities. In adapted aquatics, the social model represents society, such as service providers, instructors, and other parents changing to eliminate barriers for individuals with disabilities to fully participate in their community.

Abilities-based Model

Service delivery in adapted physical activity has evolved in the last 85 years from focusing on disability to focusing now on abilities (DePauw &

Doll-Tepper, 2000; Sherrill & DePauw, 1997). The abilities-based model is defined by its focus on the whole person as a participant, not the disability, not the activity, and not the environment (Emes, Longmuir & Downs, 2002). If all individuals are to have the same opportunities to be physically active, it is essential that practitioners focus first on the person and his/her abilities. Borrowing from ecological theory, the abilities-based model attends to the interaction of a person and the environment. It also acknowledges adaptation theory (Sherrill & DePauw, 1997) that speaks to the need for individualization and provision of optimal activity experiences for everyone. Factors that influence the success of an abilities-based intervention include the principles of (a) person-centeredness, (b) openness, and (c) compatibility (Emes, et al., 2002). The principle of person-centeredness places the person for who an activity or program is being planned at the centre of the planning process. Therefore, the professional moves from the role of an expert to a participant in the process. Slowly, the professional learns about who the person is. Indeed, in abilities-based approaches, an outcome of the process is shared learning. Next, the philosophy of openness goes beyond the current understanding of inclusion. Openness is a way of thinking that can be expressed in our attitudes towards service delivery. It is without restrictions, it is non-judgemental, it is all encompassing, and it is receptive to new ideas. Although it is usually a goal in all educational programs, openness appears particularly relevant to APA. Finally, the concept of compatibility is the ultimate key to the functioning of an abilities-based intervention. Oftentimes, it is the negative and the stereotyped attitudes that restrict the full involvement of people with disabilities in regular sport and recreation programs. A compatible

environment is welcoming and supportive. In sum, the quality of an aquatic intervention should be viewed with those principles in mind.

Educational Model

The educational model of adapted aquatics instruction is the result of several factors, including the ARC (American Red Cross) and YMCA (Young Men's Christian Association) progressive swim models, the APE service delivery model that came from the Individuals with Disabilities Educational Act (IDEA), and the social minority model of viewing individuals with disability (Lepore, Gayle & Stevens, 2007). The educational model is different than the medical-therapeutic model in the sense that it focuses on education rather than treatment, on strengths rather than problems, and on water safety and swimming skills rather than facilitation of movement. The social minority model has influenced the educational model as it promotes the philosophy that individuals with disabilities are different, not defective or inferior, but simply different (Lepore, Gayle & Stevens, 2007). This perspective provides a more positive approach to any issue surrounding individuals with disabilities. Moreover, the type of assessment used with this model usually relies on individualized data, and therefore the goal becomes educating to empower. Empowering individuals with disabilities is certainly one of the goals in adaptive aquatics as well as in all other adapted physical activity programs. Yet, the main goal of any aquatics program following the educational model is to teach an individual with a disability how to safely enjoy the aquatic environment.

The distinct components of the educational model include (a) the focus on learning theory and its application to teaching aquatic skills, (b) the notion

that an individual has unique strengths and weaknesses, (c) the concept of using the least-restrictive environment (LRE) for the acquisition of skills, (d) the development of an individualized plan focusing on improving skills rather than on solving problems, and (e) the content of each session, which focuses on swimming and water safety rather than therapy (Lepore, Gayle & Stevens, 2007). The second component of the educational model is particularly significant in adapted physical activity programs as it gives the instructors, the parents, and the participants a say in what strengths and weaknesses they want to address. With this model, instructors examine functional abilities and limitations rather than accepting a medical diagnosis. The third component addresses the milieu in the sense that children with disabilities should be placed in the environment that best meets their needs, provides appropriate socialization and instructional opportunities, and encourages full potential while receiving education alongside individuals with disabilities. Adapted physical activity programs should follow the LRE concept to ensure their participants' needs are being met as much as possible.

Of course, there exist other intervention models for APA programs to follow. When investigating a program's functioning and components, one should look at how it exemplifies a given model. The educational model offers similar views to the field of APA, with regards to setting, instruction delivery, and people-first thinking.

The Aqua Percept program

The Malcolm-Knox Aquatic Centre (MKAC) in Pointe-Claire, Quebec, offers a variety of recreational gym and swim programs for children with special needs. They offer three different programs (Aqua Percept, Adapted Gym and Swim and Adaptive Aquatics), each targeting different children. Aqua Percept (AP) is a non-competitive gym and swim program for children who might not otherwise participate in regular physical activities. They claim this may be due to poor coordination, perceptual motor difficulties or attention deficit/ hyperactivity disorder (Campbell, 1993). A ratio of 3 children to 1 instructor along with positive reinforcement is a crucial part of the program. It is considered to be a resounding success according to the City of Pointe-Claire (City of Pointe-Claire, 2010). As it is noted in the Instructor's Manual (Campbell, 1993, p.2), Aqua Percept is a "program designed for the nonparticipating youngster; the child who requires additional body management exercises, in order to reach an acceptable level of motor performance." The goals of the program are three-fold: (a) to build self-confidence, (b) to bridge developmental gaps, and (c) to teach each child to swim (Campbell, 1993). Therefore, what sets apart this particular program from other types of gym and swim programs is its small ratio of participants to instructors, its individualized approach and adaptations, and its mission to serve individuals with a broad range of special needs.

The Malcolm-Knox Aquatic Centre itself underwent some renovations in the past few years which culminated in July 2011 with the inauguration of a new 50m Olympic size pool as well as the renaming of pools. The complex offers four pools (a wading pool, one 25-yard shallow pool, one 6-lane 50 m shallow pool, and one 10-lane 50 m pool), a 10m diving tower, a weight room, three multi-purpose rooms, a gymnasium, two saunas, a large selection of changing rooms including facilities for women, men, boys as well as families, a lounge area, and bleachers.

Rationale for study: a program with apparent success

The Aqua Percept program started in 1973 under the leadership of Wendy Campbell. The program can be considered successful from several criteria. It has seen significant growth since 1973; however, the number of participants has declined in the last decade at Pointe-Claire since the centre offers a wider variety of adapted programs than were available 40 years ago. Yet, from a registration perspective, the AP program in Pointe-Claire remains very successful attracting children and parents across Montreal and its suburbs every session. In addition, for every session, there is a waiting list. Other similar programs are being offered in the area, yet the Aqua Percept program continues not only to survive but to remain attractive to many. Arguably, these external criteria can define the AP program as successful, but it is crucial to explore how the more internal components play a role in its success. The program may be successful because of the following internal components: instructors, equipment, facilities, price, or access. Many children take part in the program for most of their childhood years. (J. Stowe, personal communication, 28 July, 2010). The author was an instructor in the program for six years and saw many children enrol from one year to the next.

The AP program has also inspired other similar programs to be created such as the Swim and Gym program at the Renfrew Community Centre in Vancouver (Learning Disabilities Association Vancouver, 2009). The AP program is also cited in *the* major textbook of adapted aquatics as successful because it combines land-based activities with swimming activities (Lepore, et al., 2007). Therefore, it appears that the AP program is successful from the viewpoint of several factors. Nevertheless, to date, there has been no formal or systematic research conducted to confirm this proposition. The assumption for this study is that the AP program is a successful program.

Methodological considerations

Case Study

Amongst the various types of evaluation methods that exist, qualitative methods are often used to assess individual perceptions. Numerous researchers suggest qualitative methods can offer depth and insight into people's experiences, while also providing essential knowledge and insight in explaining success or failure in any given program (Nutbeam, 1998; Kazdin, 2008; Grypdonck, 2006). Case studies are commonly used in qualitative inquiry (but can be used in quantitative inquiry as well) to focus on one case. The 'case' can be one person or a group of people (Stake, 2005). The case study relies on in-depth data collection, consisting of multiple sources of information such as interviews, observations, rating scales, and documents (Creswell, 2009; Greig, Taylor, & Mackay, 2007). Many data sources are important for achieving triangulation, the process of clarifying meaning or interpretation. A case study seeks to provide in-depth exploration of a phenomenon rather than generalize to other situations (Stake, 2005). Due to its lack of highly structured methodology, the case study approach is suitable for investigating in real life settings, making it appropriate for conducting research with children and adolescents. Therefore, it can be combined with other approaches for data analysis such as interpretative phenomenological analysis (Greig et al., 2007). Considering the different aspects of this investigation, a case study approach is appropriate.

Interpretative phenomenological analysis (IPA)

Interpretative Phenomenological Analysis (IPA) is emerging as a distinctive qualitative approach to conducting empirical research in psychology (Chapman & Smith, 2002). IPA stems from phenomenology, attempting to capture participants' experience of a phenomenon (Giorgi & Giorgi, 2008) and combines symbolic interactionism by considering meanings that emerge during or as a result of social interaction (Smith, 1996). IPA is particularly appropriate for investigation of 'unexplored territory' where there may be a lack of theoretical pretext (Reid, Flowers, & Larkin, 2005). IPA is suitable for this research project because it addresses rarely asked questions and unfamiliar themes such as why an APA program is successful or failing and which components are responsible for the success or failure of a program. In addition, researchers applying IPA usually recruit small homogeneous samples (Smith & Osborn, 2008). While using multiples groups of participants in this study, a small number of participants were chosen for each group (i.e. n = 5). Sources from which IPA derives its data differ and include semistructured interviews, focus groups, diaries, and e-mail dialogues (Brocki & Wearden, 2006; Larkin, Watts, & Clifton, 2006; Reid, Flowers, & Larkin, 2005). This investigation will make use of semi-structured interviews to uncover the participants' experiences.

IPA aims to explore ways in which participants make sense of their experiences in a particular setting (Chapman & Smith, 2002; Smith, 2004; Smith & Osborn, 2008). For this reason, IPA is ideal to get more insights into the AP program from its participants' point of view. IPA emphasizes the experiential accounts of the participants; those accounts are then situated in relation to a broader social, cultural, or theoretical context in a process of developing an interpretative analysis (Larkin, Watts, & Clifton, 2006). The research process of IPA is dynamic and involves a double hermeneutic. In other words, participants try to make sense of their world, and then the researcher tries to interpret the participants' attempts at making sense of their world (Larkin et al., 2006; Smith, 2004; Smith & Osborn, 2008). The process of conducting IPA is flexible and allows one to choose a direction that is most appropriate based on their individual way of working and the explored topic (Smith & Osborn, 2008). This analysis method is paramount when considering the research questions, the participants, and the investigator.

Interviews

There are many qualitative methods; however, for evaluation purposes, in-depth, open-ended interviews are often used (Kelly, Hoehner, Baker, Ramirez, & Brownson, 2006). Interviews allow the researcher to discover what the program means to the participants, how they benefitted from it, what they found to be positive or negative, and especially their observations of what actually takes place (Grypdonck, 2006). This information can be difficult or even impossible to capture in quantitative research and RCTs. For those reasons and for the purpose of this research, open-ended semi-structured interviews are a salient source of data.

Observation field notes

Field notes provide the researcher with the opportunity to describe certain aspects of the occurrences in the process of the program in further
detail, as well as the chance to reflect on various aspects of the study in progress. Moreover, field notes can potentially contribute to formative evaluation of the program, allowing the possibility of making changes as necessary to improve the overall quality of the program (Bogdan & Biklen, 2003). For this investigation, the observation sessions allow the primary researcher to confirm and clarify some details and aspects of the AP program mentioned during the interviews. It also allows the investigator to update their knowledge of the present program offered.

Summary

Adolescents with disabilities enjoy participating in various forms of sports and recreational physical activity. They gain multiple physiological, psychological, and social benefits. Yet, the lack of participation in physical activity from this population has been an important issue in the field of APA. Research in sports and physical activity is scarce when considering the many questions and issues still unanswered. The general consensus appears to suggest that evaluation and investigation of different APA programs, especially the ones which appear to be successful is warranted.

Moreover, studies which asked questions about the process rather than the outcome can considerably contribute to the growing movement of EBP. Quickly becoming an important part of APA, the EBM is concerned with discovering the best way to provide intervention for people and why they are successful. However, what constitutes best research evidence and best practices is very relative. Moreover, there are research gaps within APA when it comes to the investigation of the process behind the development and maintenance of APA programs. Studies which investigate existing programs can learn a considerable amount on the various processes related to running such programs. It also allows the researcher to determine why the program is successful or failing. More research is needed in this area in order to answer the many questions that remain.

Another gap in previous APA studies is the exploration of a question from multiple perspectives. This aspect is particularly important when dealing with issues in APA. Finally, and most important to the field of APA is the fact that many studies investigating issues regarding individuals with disabilities ignore their voices. Generally, being the ones at the centre of the issue, they have the most insight and details to share. Their voices need to be heard.

Discovering the process behind an intervention is just as significant as gaining knowledge on the various components involved in the intervention. Different components can explain the success or failure of an intervention. Some researchers have found components which are reflective of success (Cunningham & Beneforti, 2005; Durstine et al., 2000; Moola, Faulkner, Kirsh, & Kilburn, 2007; Wetzel, McNaboe, & McNaboe, 1995). However, a more comprehensive study is necessary to discover the relationship between these components and the success of the program.

Amongst the different components that can explain and be part of the success of a program are the instructors and the training they receive. Although most instructors and professionals working in APA appear to receive some form of training, research studies suggest that there is often a lack of training and preparation prior to service delivery.

There exist a variety of frameworks and intervention models relevant to adapted aquatics. They are often used to convey attitudes and perceptions regarding the term "disability". The medical model relies on medical professionals, programs and services to diagnose a problem, prescribe treatment to cure the problem, and rehabilitate the individual rather than alter the environment. Within this model, disability is perceived as a limitation of the individual (Hahn, 1988). The social model or social minority model's basic belief is that individuals with disabilities are different from the majority and thus share a similar experience to those in other minority groups (Atkinson & Hackett, 1995; Hahn, 1991). The social model views disability as a consequence of environmental, social and attitudinal barriers that prevent people with impairments from maximum participation in society (Disabled People's International, 1981). In adapted aquatics, the social model represents society, such as service providers, instructors, and other parents changing to eliminate barriers for individuals with disabilities to fully participate in their community. The abilities-based model is defined by its focus on the whole person as a participant, not the disability, not the activity, and not the environment (Emes, Longmuir & Downs, 2002). Borrowing from ecological theory, the abilities-based model attends to the interaction of a person and the environment. Its philosophy centres on principles such as person-centeredness, openness, and compatibility. When discussing interventions for individuals with disabilities, the educational model presents a philosophy consistent with the field of APA with regards to setting, instruction delivery, and people-first thinking. Such a viewpoint allows for greater advancement, more openness, and added positivism in a growing field like APA. The quality of an adapted

physical activity program, such as adapted aquatics, should be viewed with all those principles in mind.

In sum, this study will investigate the components of an adapted physical activity program perceived to be successful. This program is the Aqua Percept (AP) program at the Malcolm-Knox Aquatic Centre in Pointe-Claire, Quebec. Almost 40 years old, this recreational program began and appears to have established an extraordinary reputation amongst various groups of people. The purpose of this study is therefore to better understand why the AP program is perceived to be successful from multiple perspectives, those being, instructors, parents and participants. The findings are not intended to be generalizable across many communities or settings.

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Aqua Percept: A successful program from multiple perspectives

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Abstract

This study investigated the components of an adapted physical activity program perceived to be successful from multiple perspectives, those being the adolescents, the instructors, and the parents. Their personal experiences and interpretations were ascertained by interviews, and field observations. Evidence-based practice was the main theoretical framework that guided this study. An interpretative phenomenological analysis (IPA) confirmed that the Aqua Percept program is a successful program. Specifically, the following components were considered to play a significant role in the success of the program by all three groups: instructors, facilities, atmosphere, and program outcomes. The structure/organization of the AP program and training were important components according to the parents and the instructors only. In addition, another theme emerged for all three groups during the analysis: Challenges and Recommendations. The Aqua Percept program is a successful program within its community and over the years has evolved to adapt to the individual needs of its participants. The model of success of the Aqua Percept program can be use to inspire the creation of new programs or the improvement of older programs.

Résumé

Cette étude a examiné les composantes d'un programme d'activité physique adaptée perçu comme étant couronné de succès à partir de plusieurs points de vue, ceux-ci étant des adolescents, des instructeurs et des parents. Leurs expériences personnelles et interprétations ont été constatées par des interviews et des observations de terrain. La pratique fondée sur les preuves est le cadre théorique principal qui a guidé cette étude. Une analyse phénoménologique interprétative a confirmé que le programme Aqua Percept est un programme couronné de succès. Plus précisément, les éléments suivants ont été considérés comme jouant un rôle important dans le succès du programme selon les trois groupes: les instructeurs, les installations, l'atmosphère, et les résultats du programme. La structure / l'organisation du programme et la formation AP pour instructeurs étaient des éléments importants selon les parents et que les instructeurs. En outre, un autre thème a émergé pour les trois groupes au cours de l'analyse: défis et recommandations. Le programme Aqua Percept est un programme couronné de succès au sein de sa communauté et qui a su, au fil des années, évoluer pour s'adapter aux besoins individuels de ses participants. Le modèle de la réussite du programme Aqua Percept peut être utilisé pour inspirer la création de nouveaux programmes ou l'amélioration de programmes plus anciens.

Aqua Percept: A successful program from multiple perspectives

Promoting moderate levels of physical activity among people with disabilities is an important goal for public health and public policy, as regular physical activity improves well-being and contributes to the prevention or delay of chronic disease (Rimmer, Riley, Wang, & Rauworth, 2004). Childhood and adolescence are important periods when youth with or without disabilities develop attitudes and behaviors that they will probably transfer into adulthood (Zick, Smith, Brown, Fan, & Kowaleski-Jones, 2007). Partaking in play, recreation and sport has an important impact on overall growth and development and are crucial elements for a satisfying childhood and adolescence (Kemper, 1995; King, Law, King, Rosenbaum, Kertoy, & Young, 2003). In addition to the psychosocial benefits associated with sports and recreation, many physiological benefits ensue from regular participation in physical activity during youth. These include increased bone density and lean muscle tissue, better management of body weight, lower risk of high blood pressure in adulthood and reduced feelings of depression and social isolation (Burgeson, Wechsler, Brener, Young, & Spain, 2001). Regardless of these benefits, the rate of physical inactivity among youth with disabilities is much higher than in youth without disabilities and many experts believe this will lead to a greater number of health complications in adulthood such as overweight and obesity, which increase their risk for developing secondary health conditions (Murphy & Carbone, 2008; Grunbaum, Kann, Kinchen, Williams, Ross, Lowery, & Kolbe, 2001; Fernhall & Unnithan, 2002; Steele, Kalnins, Jutai, Stevens, Bortolussi, & Biggar, 1996).

The lack of physical activity among youth with disabilities was recently addressed by the Council on Children with Disabilities Executive Committee of the American Academy of Pediatrics (AAP; Murphy & Carbone, 2008). Amongst other recommendations, the Council urged pediatricians to stress to families of children with disabilities the need to become involved in competitive and recreational sports and physical activities throughout youth. Indeed, the importance of a physically active lifestyle for individuals with disabilities cannot likely be exaggerated. It has also been mentioned that children and adolescents with disabilities enjoy physical activity and want to engage in the same activities as theirs peers without disabilities (Goodwin, 2009).

Physical activity benefits are especially important for individuals with various physical, mental, and developmental disabilities (Cooper & Quatrano, 1999). Most research has focused on examining the relationships between physical activity and various health outcomes (i.e. physiological, psychological, social, etc.). According to Cunningham and Beneforti (2005) there has been an increasing demand for the evaluation of sport and recreation programs. However, they suggest that when the product outcome is satisfactory, there is less interest in knowing why and how it occurred. This should not serve as an excuse to avoid the study of programs with positive outcomes but should reflect the need for more research about 'why' and 'how' physical activity programs are successful (Rimmer, Braddock, & Pitetti, 1996).

The growing movement of evidence-based practice (EBP) has influenced many fields in the last two decades, including adapted physical

activity (Bouffard & Reid, 2012). Broadly defined, evidence-based practice is a process that involves "the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients" (Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996). The understanding of the term EBP can range on a spectrum from normative guidelines for groups of people to idiographic decision-making principles for individuals (Eddy, 2005). EBP is generally understood to mean best practices identified by research. Importantly, these practices frame treatment recommendations nomothetically. It is, in a sense, "one-size-fits-all" and assumes different individuals have relatively homogeneous intervention needs. However, it has been suggested that this approach is insufficient to answer research questions or recommend interventions for individuals with different needs (Sackett et al., 1996; Bouffard & Reid, 2012; Spring, 2007; Kazdin, 2008). Spring suggested EBP should consist of integrating evidence from three data strands: best available research evidence, clinical expertise, and patient needs, values, and preferences. However, what constitutes best research evidence can be relative (Sackett & Wennberg, 1997).

Another issue in EBP is the different types of evidence that have been arranged in hierarchies by experts, often without clear justifications (Bouffard & Reid, 2010). While some practices might be considered effective by randomized control trials (RCTs), more complex interventions might require further analysis of the process and circumstances to truly understand what is happening (Grypdonck, 2006). Knowing that a practice is effective can serve as one level of evidence, but discovering how, why, and for whom it is effective, refers to a different level of evidence. Adapted physical activity (APA) programs have been deemed effective in producing various desirable outcomes. However, there are research gaps when discussing APA programs such as the lack of focus on the process, the rare occasions studies use multiple perspectives and the voice of individuals with disabilities too often forgotten. These gaps might simply be due to the fact that it is a new area of research and therefore, more research is needed. Nutbeam (1998) has described evaluation research as having two stages; first, to assess outcomes in order to determine the extent to which the intervention achieved what it was attempting to achieve. The second stage is to understand the process in order to identify the basic conditions for successful implementation of an intervention, and allow for reproduction of the intervention and successful outcomes. Process-oriented research may require the use of qualitative methods (Brantlinger, Jimenez, Klingner, Pugach, & Richardson, 2004).

The first gap in the study of APA programs refers to the exploration of the process. As Kazdin (1997) noted, research studies should focus on understanding how and why changes occurred, and for whom an intervention works. Second, seldom has research explored program effectiveness from multiple perspectives, such as administrators, instructors, parents and participants. A multiple-perspective approach is needed in order to obtain a more detailed account of the phenomenon. Kelly, Hoehner, Baker, Ramirez, and Brownson (2006) suggest, in any settings, that the participants selected include individuals from four categories as the perceptions of participants may be very different than the perceptions of decision makers. Furthermore, the voice of individuals with disabilities is often forgotten when investigating a phenomenon from different perspectives. For example, a review of inclusion studies in physical education (1995-2005) revealed only five of thirty-eight papers reported the actual experiences of students with a disability (Block & Obrusnikova, 2007). It is crucial to include their perspective in order to understand the individual reality of participants (Goodwin, 2009). Understanding the perspective of individuals with disabilities can provide a unique vantage point from which to view adapted physical activity programs and their outcomes.

In order for programs to remain aligned with their mission, as well as continue to attract individuals, investigation of the programs is crucial. It provides information on how a program is developing, what changes have been achieved, and what refinements are necessary. It also assesses the strengths and weaknesses of a program, as well as enables improvements to be made. Moreover, it is an essential component in documenting and disseminating evidence-based practices (Brownson, Baker, Leet, & Gillespie, 2003).

The investigation process allows researchers to determine the effectiveness of a program, but also why it is successful. Success can be attributed to a variety of factors from different perspectives. Clearly, it is necessary to determine the key components which play a role in the success of a program from the perspective of the individuals involved. A program or treatment might be successful due to a variety of interacting components, such as staff, atmosphere, equipment, location, price, accessibility, structure, and organization. Cunningham and Beneforti (2005) discussed that most key

components of 'successful' sport and recreation programs were reflected by one of five main areas: quality, resources, community, opportunities, and access. Similarly, Durstine and colleagues (2000) suggest physical activity programs should maximize accessibility, safety and effectiveness, and be enjoyable. While being good starting points, additional and detailed opinions, straight from the people involved, would be more informative regarding components of APA programs and to better understand how success takes place and endures.

Not only is it essential to identify the main components responsible, but also to discuss their relationship to one another. As Kazdin (1997, 2007, 2008) repeatedly indicates, it is surprising how little attention has been devoted to treatment components and the combinations that optimize change. For example, within the abundance of psychotherapy research studies, there is no evidence-based explanation of how or why even the most thoroughly investigated interventions produce change, that is, the mechanisms through which treatments operate (Kazdin, 2009). Yet, understanding how things work is a more valuable investment for future clinical practice and patient care, than simply finding out if it works. He even advances the possibility that evidencebased mechanisms of change will become more interesting or important than evidence-based treatments (EBTs).

In 2002, a project was developed by the Australian Sports Commission to identify potential indicators of health and social outcomes from sport and recreation programs in Indigenous communities in Australia. The results from this project led Cunningham and Beneforti (2005) to further investigate those indicators. The two authors found very little published work in the area of

The Aqua Percept program

indicators specifically for the evaluation of sport and recreation programs. Nevertheless, their findings suggest that three types of indicators together provide the most informative overview of program achievements. These are: (a) program viability and sustainability indicators, (b) participation indicators, and (c) outcome indicators. These indicators can help determine the processes through which positive outcomes emerge.

Moola, Faulkner, Kirsh, and Kilburn (2007) explored perceptions toward physical activity and sport in the lives of youth with congenital heart disease. Thirteen cardiac participants were interviewed and a process of inductive analysis was conducted. This study found that ongoing, affordable, and accessible programs are the conditions required for high quality sports. They also suggested that the need for such accessible programs is essential, particularly in light of evidence that the psycho-social benefits of recreational camp programs are short lived (Epstein, Stinson, & Stevens, 2005).

Amongst the rare studies which have evaluated successful adapted programs, Wetzel, McNaboe, and McNaboe (1995) produced a mission-based ecological evaluation (ecological evaluation referenced to the organization's own mission) of a summer camp for youth with developmental disabilities. Camp Horizons, which had been present in its community for many years, was deemed a successful summer camp because of its high camper return rate, high staff retention, and expanding programs. Reasons were sought for Camp Horizons reputation as a successful summer camp. Results showed that Camp Horizons' reputation was justified, based on its success in translating mission elements for campers and their families. Investigators also discussed how the following mission-based practices might have implications for other similar

services and programs: suitable physical setting and size, personalized and team coordinated programs for people, and creating a positive camp routine. Studies can help identify practices which can be useful for other similar organizations, as well as help the organization in question perpetuate its effectiveness.

The Virginia Board for People with Disabilities identified promotion of recreation by individuals with disabilities as an objective in its Five Year State Plan, 2007-2011 (Hsing-Jung Chen, 2009). To assist planning potential activities on recreation services, the Board asked the 2008-2009 Disability Policy Fellow to conduct an exploratory study on recreation services provided to individuals with disabilities in Virginia, USA. A goal of this study was to determine the scope and degree of accessibility for local recreation services statewide, and to identify barriers affecting recreational agencies' attempts to provide programs/activities to individuals with disabilities. In contrast to the many barriers identified by the agencies, the study found, through an open-ended question, that these self-identified successful recreational programs had several characteristics in common: an increasing number of participants, a high ratio of staff-to-participants, an individualized services approach, and promotion of social interaction among different participants.

One important component in sports and recreational programs are the instructors and other professionals involved in its functioning. These employees require initial training as well as ongoing tuition in order to provide the participants with the best possible experience. Some researchers have in fact investigated the issue of training within the field of physical activity and recreation (Bull and Milton, 2011; Wetzel, McNaboe, & McNaboe, 1995;

Howell, Tucker, & Liburd, 2011). While staff trainings were found to be helpful to the success of interventions, findings also highlighted the need for more training and adequate preparation of practitioners prior to the delivery of interventions. When professionals lack confidence in using a technique, it may result in inconsistencies in the delivery of the intervention. Trainings allows staff to learn more about topics such as teaching principles and practical management skills and discover new strategies and techniques they can use. One interesting strategy, suggested by Howell, Tucker, and Liburd (2011), is to rotate class instructors to keep class participants interested and motivated. While the findings from these studies emphasized the need for service providers to remain informed and up-to-date with research and new strategies, it also showed the importance of adapting and modifying strategies and techniques within a structured program to benefit its participants. The importance of providing instructors in APA with very thorough training may be vital to the proper functioning of a program.

After a position paper was published by NASPE (National Association for Sport and Physical Education, 2007) to describe the qualities and characteristics of a "highly qualified" physical education teacher, the Adapted Physical Activity Council (APAC) of the American Association for Physical Activity and Recreation (AAPAR) formed a committee to develop a position paper as it relates to the discipline of Adapted Physical Education (APE). The four minimum criteria for the training of a highly qualified adapted physical educator are: (a) Bachelor's degree in physical education teacher education and state license to teach physical education, (b) twelve semester hours specifically addressing the educational needs of students with disabilities, with a minimum of 9 semester hours specific to the area of adapted physical education, (c) a minimum of 150 hours of practicum experience, and (d) professional preparation programs must be based on standards for adapted physical education. Essentially, adapted physical educators represent a select group of people from teacher preparation programs which have APE as an area of specialization. Lytle, Lavay, and Rizzo (2010) suggested the development of the attributes of an APE is an ongoing and continuous processs. Similarly, professionals working in the field of APA require initial and ongoing training.

There exist a number of frameworks and intervention models used to convey attitudes and perceptions regarding the term "disability", each with different assumptions and emphases. These beliefs provide the basis not only for understanding "disability", but also for providing services and directing programs. Some of these frameworks include the medical-therapeutic, educational, abilities, and social minority model which have been used in APA. These are now discussed in the context of adapted aquatics since the current case study deals with a 'case' of aquatic intervention. The medical model relies on medical professionals, programs and services to diagnose a problem, prescribe treatment, such as hydrotherapy, to cure the problem, and rehabilitate the individual rather than alter the environment. Within this model, disability is perceived as a limitation of the individual (Hahn, 1988). The social model or social minority model's basic belief is that individuals with disabilities are different from the majority and thus share a similar experience to those in other minority groups (Atkinson & Hackett, 1995; Hahn, 1991). The social model views disability as a consequence of environmental, social

and attitudinal barriers that prevent people with impairments from maximum participation in society (Disabled People's International, 1981). In adapted aquatics, the social model represents society, such as service providers, instructors, and other parents changing to eliminate barriers for individuals with disabilities to fully participate in their community. The abilities-based model is defined by its focus on the whole person as a participant, not the disability, not the activity, and not the environment (Emes, Longmuir & Downs, 2002). Borrowing from ecological theory, the abilities-based model attends to the interaction of a person and the environment. Its philosophy centres on principles such as person-centeredness, openness, and compatibility. The educational model of adapted aquatics instruction is the result of several factors, including the ARC (American Red Cross) and YMCA (Young Men's Christian Association) progressive swim models, the APE service delivery model that came from the Individuals with Disabilities Educational Act (IDEA), and the social minority model of viewing individuals with disability (Lepore, Gayle & Stevens, 2007). The educational model is different than the medical-therapeutic model in the sense that it focuses on education rather than treatment, on strengths rather than problems, and on water safety and swimming skills rather than facilitation of movement. When discussing interventions for individuals with disabilities, the educational model presents a philosophy consistent with the field of APA with regards to setting, instruction delivery, and people-first thinking.

The Malcolm-Knox Aquatic Centre (MKAC) in Pointe-Claire, Quebec, offers a variety of recreational gym and swim programs for children with special needs. Aqua Percept (AP) is a non-competitive gym and swim program for children who might not otherwise participate in regular physical activities. They claim this may be due to poor coordination, perceptual motor difficulties or attention deficit/ hyperactivity disorder (Campbell, 1993). A ratio of maximum 3 children to 1 instructor along with positive reinforcement is a crucial part of the program. It is considered to be a resounding success according to the City of Pointe-Claire (City of Pointe-Claire, 2010). As it is noted in the *Instructor's Manual* (Campbell, 1993, p.2), Aqua Percept is a "program designed for the non-participating youngster; the child who requires additional body management exercises, in order to reach an acceptable level of motor performance." The goals of the program are three-fold: (a) to build self-confidence, (b) to bridge developmental gaps, and (c) to teach each child to swim (Campbell, 1993). The Malcolm-Knox Aquatic Centre underwent some renovations in the past few years which culminated in July 2011 with the inauguration of a new 50m Olympic size pool as well as the renaming of pools.

The Aqua Percept program started in 1973 under the leadership of Wendy Campbell. The program can be considered successful from several criteria. It has seen significant growth since 1973; however, the number of participants has declined in the last decade at Pointe-Claire since the centre offers a wider variety of adapted programs than were available 40 years ago. Yet, from a registration perspective, the AP program in Pointe-Claire remains very successful attracting children and parents across Montreal and its suburbs every session. In addition, for every session, there is a waiting list. Other similar programs are being offered in the area, yet the Aqua Percept program continues not only to survive but to remain attractive to many. Arguably, these external criteria can define the AP program as successful, but it is crucial to explore how the more internal components play a role in its success. The program may be successful because of the following internal components: instructors, equipment, facilities, price, or access. Many children take part in the program for most of their childhood years. (J. Stowe, personal communication, 28 July, 2010). The author was an instructor in the program for six years and saw many children enrol from one year to the next.

The AP program has also inspired other similar programs to be created such as the Swim and Gym program at the Renfrew Community Centre in Vancouver (Learning Disabilities Association Vancouver, 2009). The AP program is also cited in *the* major textbook of adapted aquatics as successful because it combines land-based activities with swimming activities (Lepore, et al., 2007). Therefore, it appears that the AP program is successful from the viewpoint of several factors. Nevertheless, to date, there has been no formal or systematic research conducted to confirm this proposition. The assumption for this study is that the AP program is a successful program.

Methodological considerations

Case Study

Amongst the various types of evaluation methods that exist, qualitative methods are often used to assess individual perceptions. Numerous researchers suggest qualitative methods can offer depth and insight into people's experiences, while also providing essential knowledge and insight in explaining success or failure in any given program (Nutbeam, 1998; Kazdin, 2008; Grypdonck, 2006). Case studies are commonly used in qualitative inquiry and rely on in-depth data collection, consisting of multiple sources of information such as interviews, observations, rating scales, and documents (Creswell, 2009; Greig, Taylor, & Mackay, 2007). A case study seeks to provide in-depth exploration of a phenomenon rather than generalize to other situations (Stake, 2005). Due to its lack of highly structured methodology, the case study approach is suitable for investigating in real life settings, making it appropriate for conducting research with children and adolescents. Therefore, it can be combined with other approaches for data analysis such as interpretative phenomenological analysis (Greig et al., 2007).

Interpretative phenomenological analysis (IPA)

Interpretative Phenomenological Analysis (IPA) is emerging as a distinctive qualitative approach to conducting empirical research in psychology (Chapman & Smith, 2002). IPA stems from phenomenology, attempting to capture participants' experience of a phenomenon (Giorgi & Giorgi, 2008). IPA is particularly appropriate for investigation of 'unexplored territory' where there may be a lack of theoretical pretext (Reid, Flowers, & Larkin, 2005). IPA is suitable for this research project because it addresses rarely asked questions and unfamiliar themes such as why an APA program is successful or failing and which components are responsible for the success or failure of a program. IPA aims to explore ways in which participants make sense of their experiences in a particular setting (Chapman & Smith, 2002; Smith, 2004; Smith & Osborn, 2008). For this reason, IPA is ideal to get more insights into the AP program from its participants' point of view. The research process of IPA is dynamic and involves a double hermeneutic. In other words,

participants try to make sense of their world, and then the researcher tries to interpret the participants' attempts at making sense of their world (Larkin et al., 2006; Smith, 2004; Smith & Osborn, 2008). This analysis method is paramount when considering the research questions, the participants, and the investigator.

Interviews and field notes

There are many qualitative methods; however, for evaluation purposes, in-depth, open-ended interviews are often used (Kelly, Hoehner, Baker, Ramirez, & Brownson, 2006). Interviews allow the researcher to discover what the program means to the participants, how they benefitted from it, what they found to be positive or negative, and especially their observations of what actually takes place (Grypdonck, 2006). This information can be difficult or even impossible to capture in quantitative research and RCTs. For those reasons and for the purpose of this research, open-ended semi-structured interviews are a salient source of data.

Field notes provide the researcher with the opportunity to describe certain aspects of the occurrences in the process of the program in further detail. For this investigation, the observation sessions allow the primary researcher to confirm and clarify some details and aspects of the AP program mentioned during the interviews. It also allows the investigator to update their knowledge of the present program offered. The purpose of the current study is to better understand why the Aqua Percept program is perceived to be successful from multiple perspectives, those being, instructors, parents and participants. Their reported experiences should lead to a better understanding of the process of running and maintaining a successful adapted physical activity program. The research question is: Why is the Aqua Percept program successful? More specifically: What are the specific components of the Aqua Percept program that play a role in its success as perceived by the participants, the parents, and the instructors?

Methods

Participants

Participants were chosen from three different groups: parents, instructors, and young adolescents. Participants were chosen using a convenience sample. There were six adolescents, five instructors, and six parents for a total of 17 participants in the study (see Table 1 in Appendix A). Selection was based on four criteria: (1) current participation/involvement in the Aqua Percept program; (2) at least three years of participation/involvement in the program; (3) the adolescents were between 10 to 15 years of age (Stowe 2011, personal communication, 1 February), which is a similar range of ages reported by a review of the literature on inclusive physical education practices by Goodwin (2009), and (4) cognitive and language capabilities necessary to respond to questions, convey facts and opinions, and recall past experiences. In their study, Malik, Aston-Shaeffer, and Kleiber (1991) found the use of interviews with young adults with mental retardation to be a viable method of data collection for research and evaluation. However, they recommend adding

the fourth criterion in the selection of the respondents to warrant interview reliability and validity. To ensure the communication skills of the young adolescents were satisfactory, the researcher asked both parents and instructors for their opinion regarding the adolescent's communication skills, as well as their opinion regarding the comprehension of the specific interviews questions prior to the interview. There were 2 male and 3 female adolescents, 2 male and 3 female instructors, and 2 male and 3 female parents. The instructors ranged in age from 23 to 33 years old. Fifteen participants was deemed a reasonable number, consistent with the IPA adopted (Smith 1995, 2004; Smith & Osborn, 2008). The precise diagnostic/disability of the adolescents was chosen not to be mentioned as the investigator deemed that it did not affect the results of the present study. In fact, the diagnostic/disability of the AP participants is not formal information required during registration either. Since, the principal investigator worked in the AP program for 6 years, she can verify the informal diagnostics of various disabilities. Finally, in order to assure participant confidentiality, participant's names were replaced with a pseudonym.

Data Collection

Ethical approval was obtained from a university ethics board. Informed consent from parents and instructors as well as written assent from adolescents was obtained. A case study approach guided this study since it permits in depth exploration and description of a program (Creswell, 2009; Greig, Taylorand & Mackay, 2007). This approach is suitable for investigations in real life settings, making it appropriate for conducting research with children (Greig, et al., 2007). Multiple data collection sources are recommended to
enhance validity of responses, especially when participants are have special needs, such as students with intellectual disabilities for example (Mactavish, Mahon, & Lutfiyya, 2000). There were two methods of data collection in the present study: observation field notes, and individual semi-structured interviews. Field observations occurred on three occasions during the AP program. These observations provided insight into the culture and social structure of the participants' experience, including organization, atmosphere, setting, social interactions, and verbal and non-verbal communication skills. Consistent with IPA, a semi-structured interview was conducted with each participant. Semi-structured interviews allow the researcher to establish rapport with the participant, provide opportunities to ask questions beyond the scope of the interview schedule, use probes when necessary, and follow interests and concerns originating from the participant. Interviewing is an appropriate way of collecting data for individuals with an intellectual disability (Dattilo, Hoge, & Malley, 1996), although rarely used (Mactavish, Mahon, & Lutfiyya, 2000). It is challenging to interview them but their point of view should be heard (Lloyd, Gatherer, & Kalsy, 2006). Despite acknowledged concerns (e.g., unresponsiveness, acquiescence, and comprehension) researchers have used face-to-face interviews to gain personfirst perspectives on social integration (Myers, et al., 1998), leisure (Rogers, Hawkins, & Eklund, 1998), and self-identity (Meadan, & Halle, 2004). All the interviews took place at the Malcolm-Know Aquatic Centre in a quiet conference room.

Interview schedule

The semi-structured interview was constructed using guidelines from Smith and Osborn (2008) with the following sequence: (1) introduction; (2) opening questions; (3) key questions and probes; (4) summary question; and (5) conclusion. The key questions addressed the basic topics (reasons for participation, success of the program, key components). Open-ended questions were chosen because they allowed the same questions to be asked using different formats, which contributes to response validity (Mactavish, Mahon & Lutfiyya, 2000). Additionally, the parent of each adolescent reviewed the interview schedule and modifications were made to accommodate for appropriate vocabulary and language comprehension. Interview guides were pilot tested with one parent and one adolescent. This allowed the researcher to determine the appropriateness of the questions and bring modifications as needed. The interviews lasted between 10 minutes 46 seconds and 42 minutes 22 seconds, and were audiotaped.

Researcher's Perspective

The primary researcher should reflect on her role within the interpretative and collaborative nature of IPA (Smith & Osborn, 2008; Reid, Flowers & Larkin, 2005). She has an undergraduate degree in kinesiology, and worked as an instructor in the Aqua Percept program. The fact that the researcher was previously an instructor in the program provided her with the opportunity to build rapport with the participants. This should have facilitated their comfort to express themselves during the interviews, thereby allowing the researcher to gain an insider's perspective (Smith & Osborn, 2008). Finally, she is a Master's student in adapted physical activity focusing on understanding the complex organization and various components involved in the creation and maintenance of adapted physical activity programs.

Trustworthiness

Critical to any study using qualitative methods is the establishment of trustworthiness which reduces the possibility of misinterpreting or misleading the data. Law (2002) suggests that establishing the trustworthiness of research 'increases the readers' confidence that the findings are worthy of attention' (p. 337). In this case, the concept of trustworthiness refers to the extent to which the findings are an authentic reflection of the personal and lived experiences of the AP program (Barbour, 1998). To ensure trustworthiness, this study followed suggestions proposed by a number of researchers (Patton, 2002; Merriam, 1998; Maxwell, 2005) including triangulation, peer review, and pilot testing of the interviews.

Patton (2002) advocates the use of triangulation by stating that "triangulation strengthens a study by combining methods". Triangulation in this study will result from the use of multiple sources of information such as interviews from three perspectives (participants, parents, and instructors), and field observations.

Peer review was also used to enhance trustworthiness. Peer review incorporates a neutral party in assessing the data analysis (Côté, Salmela, & Russell, 1995). The thesis supervisor's help and objectivity was requested throughout the project, from the review of interview transcripts to the

discussion of the emerging themes (Merriam, 1998). This process also allowed for reflection and discussion.

Finally, pilot testing of the interviews was conducted prior to data collection. Pilot interviews provide an opportunity for the researcher to practice interview skills (Maxwell, 2005). Specifically, this process allows the interviewer to rehearse and to receive feedback and suggestions regarding interaction style, probes, time management, and audio recording. Moreover, it helps resolve problems with regard to the effectiveness of the interview guide in terms of comprehension of questions and probes, order of questions, and effectiveness of questions in eliciting in-depth responses (Maxwell, 2005). The pilot interviews were audio recorded and reviewed with the researcher's supervisor for feedback. In addition, the primary researcher has completed courses in qualitative research methods.

Data analysis

The audio taped interviews were transcribed verbatim. Inductive data analysis was employed to identify, code, and organize data into themes that arose from the transcripts. Data analysis followed IPA procedures (Smith 1995; Smith 2004; Smith & Osborn, 2008). The steps included: (1) reading the transcript and annotating interesting or significant responses; (2) documenting the emerging themes; (3) listing the themes and looking for connections, first chronologically, then using theoretical components; (4) producing a final table of themes, subordinate themes and identifiers to facilitate data retrieval for each individual; when all transcripts had a completed table of themes; (5) themes were contrasted for convergence and divergence; and (6) emerging themes and subordinate themes were organised into the final table.

Results and Discussion

The purpose of the current study was to explore the reasons why the Aqua Percept program is successful by exploring specific components which play a role in its success from the multiple perspectives of adolescents, parents, and instructors. First, the researcher examined the indicators of success to confirm the assumption of success of the AP program. Then, she investigated the components of the AP program which explain the success of the AP program.

Indicators of success

To begin the interview, all participants were asked a general question regarding the success of the AP program to validate the researcher's assumption of success. According to the adolescents, parents, and instructors, the Aqua Percept program was indeed a successful program for various reasons such as its reputation that is confirmed by word of mouth, the many years that it has functioned, and the repeated participation of so many individuals. While the instructors overall felt the program was successful, some added that it was perhaps not ideal for everyone. For instance, Shanna explained that "It's targeted to a lot of kids, which is great, but I don't think that it's a successful program for every kid that comes to the program necessarily." She further explained that this was due to children lacking independence or the environment being very loud. Such situations would trigger more stress for the children and therefore make them uncomfortable.

Participants explained the success of AP from the number and variety of participants involved. Indeed, the accessibility of the program allows for a large population to attend. When a wide range of individuals can access a program, there is a greater chance that the program will be busier and probably, more successful. It is common for the idea of general accessibility to influence the success of a program (e.g., Cunningham & Beneforti, 2005; Durstine et al., 2000; Moola, Faulkner, Kirsh, & Kilburn, 2007).

Some instructors and parents viewed the AP program as successful because it has a great reputation. When discussing how he had heard of the program, Paul remembered "they told us great things about Pointe-Claire". As for Melissa, she thought "it's a program that has gained recognition throughout the city". As Laurie put it, "They're (the Malcolm-Knox Aquatic Centre) a pretty significant player on the national and international stage, so I think being attached to such a major player probably assists with that." In other words, the program receives much exposure. Some instructors and parents also attributed the success of the program to word of mouth. Mary said "I'm sure that with each parent that has a child with special needs that if they know someone else that has special needs ... then they'll pass on the word". Word of mouth was mentioned on many occasions as the only publicity the program ever had and will ever need.

Interestingly, part of the answers regarding the initial question were complimentary as participants either believed the AP program was successful because of its longevity or, vice-versa, the program has been there a long time because it was successful. Either way, it appears success and time of existence are closely related according to participants. The AP program can be compared to Camp Horizons (Wetzel, McNaboe, & McNaboe, 1995) on the basis that it has been present in its community for many years and found to be successful. Camp Horizons like the AP program had a very positive reputation in and beyond its community.

Instructors and parents also noticed how many people, themselves included, talk about and recommend the program to others. The program is often recommended or suggested by doctors and therapists in the area, which contributes to its popularity. Melissa, a parent, recognized how "there are therapists around the city, there's the MacKay, there's other people who recommend this program." John, for example, said he would "definitely, definitely, definitely, definitely" recommend it. However, some instructors would only recommend it to other possible instructors who, according to them, have the right character, one compatible with the values of the AP program. As Kyle explained, he would "pick and choose" since "some people's personalities, you can see would work really well with the program".

When asked about the success of the program, some instructors also mentioned retention rates being very high, the number of new people registering being significant, and waiting lists being created every session. Finally, some instructors thought the program was a success since it was a great program for the parents as well. Previous research has also tried to explain the success of particular programs. Indeed, Camp Horizons was deemed a successful summer camp because of its high camper return rate, high staff retention, and expanding programs (Wetzel, McNaboe, & McNaboe, 1995). Although some participants in this study did mention return rate as a sign of success, it was not a recurrent theme amongst all groups.

In summary, the researcher's assumption that AP is a successful program was validated. All participants deemed the AP program successful for various reasons. Thus, following questions regarding the components which play a role in the success were justified.

Components of success

All participants were asked a number of different questions to answer the main query of this study. The results will be presented through the different themes/components that emerged. Instructors, facilities, atmosphere, and program outcomes were deemed important according to all groups; adolescents, instructors, and parents. The structure/organization of the AP program and training were important components according to the parents and the instructors only. Each theme will be followed by a relevant discussion.

Instructors

The instructors were an essential component of the program according to all participants, including the instructors themselves. Their genuine care and enthusiasm for the adolescents was felt by many parents, adolescents and other instructors. All three groups recognized the instructors as individuals who adapt and individualize the program to each participant. According to the adolescents, the instructors are nice, friendly, and funny. For Layla, it was because "they give good instructions". Barry stated that the instructors "make the course more fun and not boring". All of them said they would miss the instructors if they would stop coming to the program. As Spring (2007) suggests, in EBP, the best intervention should include the needs, values, and preferences. It appears this was achieved in AP.

All the instructors had a background in education or recreational therapy, and demonstrated a passion for adapted sports and activities. As Laurie said "I'm really interested in accessible sport...I do it because I love it!" Some instructors enjoyed the work so much, they mentioned the possibility of being involved as a volunteer if it was not a salaried position. Their dedication and passion was strongly recognized by the participants. Melissa, a parent, said "they look like genuine kids who really care about the students". In the field of education, many have been interested in the attributes of effective teachers. In *Qualities of Effective Teachers*, Stronge (2007) sheds light on the elusive concept of teacher effectiveness. In his opinion, an important facet of professionalism and of effectiveness in the classroom is a teacher's dedication to students and to the job of teaching. Similarly, dedicated instructors feed the success of the AP program.

Each instructor described their peer instructors as being motivated, fun, having a passion for the program, and working as a team. "People are always willing to help out" said Kyle. Laurie believed other instructors "are there because they love it". Stronge (2007) also discussed those characteristics as reflecting effective teachers in the classroom. Initially, AP instructors are chosen for their ability to teach swimming and their empathy for children with disabilities. Over the years however, it appears AP instructors become more than empathetic swimming teachers. As Stronge suggests, teachers who are

both experienced and effective are experts who know the content and the students they teach, use efficient planning strategies, practice interactive decision making, and embody effective classroom management skills. Instructors also underscored the support, the encouragement and the skill training based on individual needs as part of the fine work of their peers. The researcher also noted how positive reinforcement was the main tool used by AP instructors. Every success, no matter how small, was praised and reinforced by the instructors.

Parents used the following adjectives and terms to describe the instructors: caring, patient, enthusiastic, unbelievable, encouraging, motivated, and enjoy being with the children. Speaking about the instructors, a parent, Tina believed "something touches them about these kids". Some observed the consistency with the instructors and organizers over time, while others observed how there is sometimes a lack of consistency with keeping the same instructor with the same child.

The instructors in AP, as in many other fields, are great role models for the participants, with an array of merits. Recent studies have looked at the qualities of great teachers, for example in the field of medicine (Wright & Carrese, 2002; Azer, 2005). Amongst many qualities, findings indicated that good teachers are enthusiastic, friendly, easy-going, able to develop rapport with learners, committed to the growth of their students, approachable, interested in learners as people, always conscious of their status as role models, committed to their work, respectful, motivated, skilled and talented leaders, and providing positive feedback. Therefore, the terms used by the participants in this study revealed the profile of great instructors.

It was interesting to notice how the relationship between the instructors and the adolescents was repeatedly characterized as reflecting great compatibility. In education, student-teacher compatibility has been defined as the degree to which the capacities, motivations, and style of behaving of a student are compatible with the expectations, demands, and other characteristics of his or her teacher (Greene, Abidin, & Kmetz, 1997). In this study, both parents and instructors used the term "right fit" to describe the compatible relationship that emerged as an important sub-theme. The program director was recognized as having a major role setting up and monitoring this fit. The right fit appeared to revolve around matching personalities, interests, and energy level between instructors and adolescents.

During her observation sessions, the researcher noted the strong sense of leadership from the instructors present. They acted as role models for the adolescents, gave out clear instructions, provided reminder cues when needed and much encouragement and praise. The instructors were very patient, alert, and offered great supervision during the lesson to ensure a safe environment. At times, however, some instructors lacked focus. For example, some instructors were discussing their personal lives with other instructors while watching the adolescents. The fact that some instructors were being distracted was mentioned by some adolescents. For example, Chanelle disliked when there are events such as swim meets at the pool. She suggested each one take place in separate pools to eliminate distractions. The researcher also remarked

how instructors made an effort to stimulate conversation with the adolescents. Occasionally, they would initiate dialogue with basic questions such as "How was school this week?" In fact, Stronge (2007) noted how a teacher's ability to relate to students and to make positive, caring connections with them plays a significant role in cultivating a positive learning environment and promoting student achievement. At last, although uncommon, behaviour problems were dealt with in a professional and calm way.

Facilities

The facilities are the material aspect of the program. It is what people see at first glance. Not surprisingly, all participants mentioned the facilities as being an important component in the success of this program. They qualified the existing equipment and general facilities as good, appropriate, safe, and accessible. Moola, Faulkner, Kirsh, and Kilburn (2007) found that accessible programs are one of the conditions required for high quality sports. Annie, an adolescent, said "they're well-maintained". Paul, a parent, said "the installation here is fantastic". Some adolescents and parents, however, mentioned that certain pieces could use an upgrade or just a good cleaning such as in the exercise room according to Sylvie. Moreover, the renovations and addition of the new pool added much satisfaction to all three groups. Laurie indicated that it was a "big bonus" and Kellie called the renovations "mind-blowing". Cunningham and Beneforti (2005) discussed how resources were a key component of 'successful' sport and recreation programs. Furthermore, they explained how program viability and sustainability indicators measure aspects of program functioning, such as adequacy of and

access to facilities and equipment. The quality of the facilities, safety and accessibility are all significant components in the success of AP, consistent with previous research.

During her observations, the researcher noticed the instructors making appropriate and safe use of all the equipment. Durstine and colleagues (2000) suggested physical activity programs should maximize safety, amongst other aspects. The new pool was very clean and furnished with up-to-date technologies and equipment. For example, the latest platforms which reduced the depth of the new pool seemed to be well appreciated by both adolescents and instructors. The researcher noticed how the addition of the new pool made it more spacious for the adaptive programs than in previous years when she had been an instructor.

Atmosphere

In order to describe the atmosphere present in the AP program, many adolescents compared it to the atmosphere in their physical education classroom. It is not unusual to refer to another known setting to describe the current one. Their feelings all expressed comfort, ease, and relaxation in AP. Inversely, many felt anxious, stressed, bullied and inadequate in their physical education class. In a previous study exploring the experiences of teasing and bullying of 11 years old children, such experiences were found to be more likely among children who had a disability such as a sight, hearing or speech problem, and performed poorly at school (Sweeting & West, 2001). Annie showed a preference for the AP program when she said, "Kids don't pick on you when you don't do something good" (in AP). Similarly, Chanelle explained the difference between AP and PE in the following way "Here (in AP), we have more choices than at school. At school, really, you can't do any mistakes hardly, or else you'll either get bullied for that mistake you made, or the teachers will mark that if you keep on making that same mistake". Barry prefers swimming (in AP) over the sports in PE as he can "talk more to the instructor than in physical education". Therefore, it seems the AP program offers a more relaxed atmosphere where individuals can make mistakes without feeling uneasy. Perhaps Layla summarized the adolescents' feelings by stating simply "It's fun!" when asked what she liked about the program.

Without necessarily comparing the AP program to physical education, most instructors and parents also felt as though the general atmosphere was good, positive, fun, and relaxed. Shanna, an instructor, shared her appreciation of the atmosphere by indicating that she never gets bored at work and that AP is probably more enjoyable for the adolescents than other interventions in which they engaged. In addition, it appeared as though the atmosphere present in AP provides its participants and employees with a sense of community and family. Many parents were grateful to have found a place where their child is accepted just the way s/he is. The feelings of acceptance can explain why many return to the program each session. As McMillan (1996) said, "When one is accepted by the community one is more strongly attracted to that community" (p. 317). This atmosphere was also highlighted by the parents as being very comforting. Providing a comfortable life for their child is certainly an important goal for most parents. John explained how the AP program was "another comfortable place" for his son. Tina felt like "here you feel a sort of acceptance, a comfort". And Paul found "it's like a close community for the

kids". Many authors have discussed the importance of comfort, along with maintenance of quality of life, dignity and safety, in other populations such as in individuals with dementia, veterans, and older adults in general (Struthers, 2004; Volicer, 2007). During her observations, the researcher noted how the relaxed atmosphere during games and activities allowed the teenagers to be creative and free to express themselves. The games and activities were accompanied by a great deal of music and much participation and interaction by both the adolescents and the instructors. However, she also noted how, at times, there was noise and distractions, especially in the pool, which negatively affected the adolescents and the instructors. In fact, it is known that individuals with intellectual disabilities appear often to have problems in attending to the relevant aspects of a learning situation due to distractions (McLaughlin, Dyson, Nagle, et al., 2006). As much as possible, it is critical to eliminate or reduce potential distractions for the program to remain successful and for participants to remain satisfied.

Program Outcomes

Most participants linked the success of the program to the adolescents' physical, social and emotional progress over the years, as well as their overall enjoyment. One instructor specified how the success of the program for each participant depended on individual goals pursued. Parents keep returning as they see their child improve every session. Paul explained, "I see my kids every time we come here, they go a bit more and a bit more." The development and delight of each adolescent assumes, to a certain extent, the effectiveness of the program. This idea was conveyed by Durstine and

colleagues (2000) who suggested a program should maximize effectiveness and enjoyment to be successful. Cunningham and Beneforti (2005) also expressed the idea that outcome indicators which offer insight into changes in health and other areas of social concern provide the most informative overview of program achievements.

The notion of success is, as anticipated, synonymous to the notion of effectiveness in many fields. In EBP, the best research evidence usually indicates the most effective intervention for a particular individual (Eddy, 2005). While this can be quite vague in certain situations or for some people, in this case, the voice of participants clearly shows how the AP program is an effective intervention. Consequently, it is not unexpected for participants to discuss program outcomes as a measure of success.

The adolescents were quite clear as to what they gained from their participation in the program. The social aspect, meeting new people and/or making friends, seemed to be significant for them. When asked if he had a lot of friends in the AP program, Barry simply explained "I know a lot of people. I wouldn't say they're my friends exactly, but I know them." Further in the interview, he also mentioned how the AP program "helps you integrate yourself into a group". Most of the adolescents revealed how being able to exercise through the AP program was truly appreciated and important to them. When asked why the program was fun, Greg simply replied "Well it's because we get exercise!" Moreover, most adolescents agreed that the AP program has improved their overall participation in PE at school. Swimming was another skill the adolescents gained from the AP program. It emerged as the favourite activity for all. Most mentioned they had improved their swimming strokes over the years. "Not being afraid of water" was one of the things Annie gained from participating in the AP program. As for Greg, he was very proud to say that he did not need a lifejacket anymore to swim.

The personal benefits perceived by the instructors for the adolescents noted in the previous paragraph were consistent with perceptions of the parents who saw positive changes in their children in socialization, selfconfidence, physical activity, swimming skills, and independence as in preparing for *real* life (bridge the gaps). In line with previous studies, parents also saw improvements in the following: manners, gross motor skills, motor planning, sense of comfort, improved physical education participation and group play, and friendships (Burgeson, Wechsler, Brener, Young, & Spain, 2001; Rimmer, Riley, Wang, & Rauworth, 2004). As Dave put it, "going to the gym and doing all the ladder stuff for the younger kids is really good!" Every week, for the younger participants in AP, there is a different activity circuit with ladders, mats, and balance beams organized by the instructors and supervisor. Paul said he's been coming here year after year "to teach them things and make sure eventually they can take care of themselves" and also for them "to get through challenges a lot better". Kellie underlined "the purpose now is first of all physical activity". Physical activity benefits are especially important for individuals with various physical, mental, and developmental disabilities (Cooper & Quatrano, 1999). John pointed out how his son "is physically able to swim better than ever before". Kellie realized how it gives her son "confidence when he goes into regular physical education at school". She actually referred to the program as the physical education "top-up". For

her child, Sylvie believed "he's becoming much more independent... he's very comfortable... and the socializing has increased a lot more". Various studies have discussed how physical activity and recreation help develop an enhanced sense of control, increase confidence to pursue new physical activities, expand social interactions and experiences, and positively affect most psychological constructs (Blinde & McClung, 1997; Hutzler & Bar-Eli, 1993).

The instructors and parents also believed that there is some transfer of skills occurring within various settings. Regarding transfer of skills, Sylvie said "I'm sure this had an effect on him. I'm sure of it!" On the other hand, Melissa explained how it was hard for her "to tell whether it was AP or the intervention of everybody else" which helped her daughter. Beyond the transfer of skills between settings, the skills gained during this period can transfer into adulthood. Indeed, childhood and adolescence are important periods when youth with or without disabilities develop attitudes and behaviors that they will probably transfer into adulthood (Zick, Smith, Brown, Fan, & Kowaleski-Jones, 2007).

On the other hand, most parents stated that they benefited from the program through free time for themselves (to run errands, relax or exercise), and feelings of enjoyment, fulfilment, achievement, and happiness. John explained how "it's just part of our routine, Dad and son... it's something that belongs to him and I". It also gives him (dad) time to do his workout. Kellie claimed that it gives her "confidence and reassurance" that she's doing a good job as a parent. Recently, researchers have begun to focus on the effect of service-provision on parents' sense of empowerment. Increased sense of empowerment has been found in studies which investigate parents of special needs children (Ainbinder, Blanchard, & Singer, 1998; Nachshen, 2005). Generally, the more support they receive, the better they feel about their parenting skills. As services attempt to become more family-centered in their approach, their role in family empowerment becomes increasingly relevant. As well, more empowering professional-parent relationships predict more effective service delivery (Van Ryn & Heaney, 1997). The AP program is a form of support for these parents who have to deal with the challenges of parenthood which are intensified by the experience of having a child with special needs.

While observing sessions in the gym, the researcher noted that, through various games, the youngsters learned fair play, sports rules, proper gym etiquette, and social rules, such as raising one's hand to speak. It is commonly accepted that through sport one learns to persevere, to sacrifice, and to be self-disciplined, to work hard, to follow orders, to be a leader, and to work with others (Corbett, 1999). In general, there was also good social interaction between the teenagers. The exercise sessions were very flexible and adapted to individual needs. That being said, the researcher found that sometimes teenagers were not pushed to work harder. For example, in the exercise room, the pace set on the treadmill remained the same throughout the workout and the adolescents barely broke a sweat.

Recreation is acknowledged to be one of the most basic and essential of human needs for maintaining and improving health, making friends with different backgrounds, and engaging in community life (Dattilo, 2002; U.S. Office of Surgeon General, 2009). The current results reflected these positive recreation outcomes. Specifically, swimming emerged as the favourite activity for all the adolescents. The aquatic environment has the amazing ability to accommodate physical activity for participants with diverse levels of physical fitness and motor skills (Cocchio, 2009). The flexibility of the aquatic environment provides diverse programming options to participants with a wide range of skills. Moreover, most adolescents agreed that the AP program improved their overall participation in physical education at school. Indirectly, some adolescents expressed how they had gained confidence in sports, physical activities and group situations. Partaking in play, recreation and sport has an important impact on overall growth and development and are crucial elements for a satisfying childhood and adolescence (Kemper, 1995; King, Law, King, Rosenbaum, Kertoy, & Young, 2003). It was encouraging that these benefits were perceived to be emerging. It has also been mentioned that adolescents with disabilities enjoy physical activity and want to engage in the same activities as theirs peers without disabilities (Goodwin, 2009). This may occur when programs, such as the AP program, promote social acceptance, a sense of belonging, provide instrumental support that encourages success and enable students to demonstrate their motor and social competence.

Quality of the structure and organization of the program

The quality of the structure and organization behind the AP program is central to its smooth functioning according to all three groups. Cunningham and Beneforti (2005) did recognize program quality as one of the five main areas which can contribute to a program's success. Therefore, it is not surprising that participants associated program structure with quality of the program.

All three groups agreed that the small ratio of adolescents-toinstructors was a key aspect of the program. During all of her observations, the researcher noticed how the small ratio of adolescents-to-instructors, especially during the swimming lesson, was an important factor. As the 2008-2009 Disability Policy Fellow study (Hsing-Jung Chen, 2009) found, successful recreational programs have a high ratio of staff-to-participants. This ratio is also more likely to assure that individual needs can be addressed in a timely manner. In the field of education, the ratio of children-to-instructors has also been researched. Findings indicate there are educational advantages to smaller classes, as well as instructional benefits for general education and special education students alike (McCrea, 1996). There is no magical student to teacher ratio for either type of classroom. It is also apparent that it is not merely the size of the class which is important, but what teachers do with smaller groups. McCrea (1996) found that smaller classes provide better environments for learning, especially at the elementary level and student achievement and behavior are affected by class size. It is not surprising that participants, especially parents, pointed out the small ratio as being a determinant component in the success of the AP program.

The instructors indicated how the combination of gym and swim was a great attribute of the program. The combination of movement and swimming exercise program was also found to be more beneficial for children with cerebral palsy than a physical therapy routine (Hutzler, Chacham, Bergman, &

Szeinberg, 2008). Parents from the AP program also indicated the noncompetitive aspect of the program as being essential. A study by Allender, Cowburn, and Foster (2006) examined children and adult reasons for participation in sport and physical activity. Participation for young children was found to be more enjoyable when children were not being forced to compete and win, but encouraged to experiment with different activities. The AP program's focus on participation rather than competition can explain why adolescents enjoy it and therefore why it is successful.

Most parents agreed that the price for a session in the AP program was more than fair. "It's gotta be such a relief for people that don't have the means" according to Kellie. She also added that "you feel like a regular family when you're not paying three times the price!" In line with the study by Moola, Faulkner, Kirsh, and Kilburn (2007), the affordability of physical activity and sport is required for successful interventions.

Parents referred to the AP program as a well-organized and safe program. Paul opined there's "very few places I feel that safe to leave my kids around". While the adolescents did not have many comments for this theme, one of them, Chanelle, associated the quality of the program to a number on a scale from one to ten: "I think 8". She explained that the points she took off were due to her being bored of the instructors pushing her to do things she disliked, such as running in the gym.

Instructors also attributed the success of the program to its strong leadership and support to its staff. Success often depends on the strength of a single quality: leadership (Caldwell & Hayward, 1998). Dave acknowledged the support by saying "we're all here for each other, all the instructors." And Kyle said "People are always willing to help out". Indeed, previous researchers have observed how leaders are thought to be essential for highquality education (Leithwood & Riehl, 2003). Both instructors and parents mentioned the director's name, Erin, as being the key leader of the program and the reason for its more recent success. Many parents were very grateful to her. "I have high regards for Erin" said Tina. She is the one who insures the "right fit" between the instructors and the adolescents, while also supervising the remainder of the AP operations. The researcher observed how the program director Erin was very present each session to oversee the activities, offer guidance and help when needed. Although leadership is often expected of persons in positions of formal authority, leadership encompasses a set of functions that may be performed by many different persons in different roles throughout a program (Leithwood & Riehl, 2003). The program director, as well as the instructors, presented strong leadership qualities.

Adaptation was a very prominent theme in all parent and instructor discussions regarding the structure of the program. The instructors acknowledged the adaptability and flexibility of the activities and games, while observing the repetitive nature of the activities. Regarding the repetition of the activities, some adolescents expressed the need for change. For example, Greg mentioned how he "would like to do something different a little bit...Play different games and learn different sports!" As Shanna described it, "you have the structure that remains the same every week, but then within that structure, there's variability and adaptations that are done". "Every kid is unique...and every kid I've seen there, they enjoy it...so it means the program has adapted to every kid" indicated Paul. While the investigator noticed a great

deal of adaptations, she also observed how some activities and games lacked planning and preparation. For example, at the end of one swimming class, a group game took place. The researcher deemed it was not well-organized, it did not include everyone, it lacked supervision, and it was not special or memorable to conclude the class. There is a need to more critically selfanalyse game selection and execution. It may seem obvious to say that instructors should plan ahead. However, Jacobson and Reddick (2005) found that instructors often think of teaching and participating as something that occurs spontaneously during class. But the range of possibilities to consider when planning ahead makes it clear that class participation can be planned in many ways, for many purposes. They also point out that making these decisions in advance, and making them explicit to students, can contribute toward aligning student expectations with instructor goals for more equitable class participation. Especially when dealing with individuals with special needs, AP instructors must rely on planning rather than spontaneity.

Training

Most instructors believed the training to be an AP instructor was basic but helpful. The lack of practical information and resources when instructors begin working in AP was noted by both Laurie and Kyle. Wanting to learn more, they recommended more training for the instructors, especially with regards to practical information on how to handle specific behaviours and situations. Shanna would appreciate "just some more information about the kids, and about different ways that we can work with them." In some contrast, most parents believed that the instructors were very qualified. John thought

"the instructors are well trained for their age". While recognizing how the instructors were thoroughly trained, Tina encouraged more training "to continue along these lines to not only bring out the best, but to enhance this program for future years to come." Similarly, Lytle et al. (2010) suggested regular in-service training is an ongoing and continuous process.

Beyond recognizing the instructors as an essential component of the AP program, the parents and instructors themselves added how the training was vital to the success of the program. This aligns with previous studies which recognize the importance of staff training prior and during an intervention (Bull & Milton, 2011; Howell, Tucker, & Liburd, 2011; Wetzel, McNaboe, & McNaboe, 1995). The training for an AP instructor resembles the training of a highly qualified adapted physical educator (APE). An APE must possess content knowledge (for example, in safety, assessment methods, adaptations and modifications, and behaviour management), demonstrate subject matter competence, and must have the personality to handle his or her students (Lytle, Lavay, & Rizzo, 2010).

Challenges and Recommendations

Following the formal interviews, the participants were invited to discuss other issues such as weaknesses or challenges of the program, as well as changes and recommendations for the improvement of the program.

A few adolescents would appreciate more participants of similar age. As Barry pointed out, "There could be more kids my age here." The investigator did observe how there appeared to be more children than adolescents. This might be due to the fact that the AP program caters to children 3 years and older, but the majority of participants are younger than 12 years old. The program director has created a separate program for older participants, yet, on a social aspect it appears there is still a lack of opportunities. Participating in adapted physical activity can increase opportunities for friendships in youth (Smith, 2003). Therefore, there should be an effort made by the organization to include more participants of the same age to help promote the development of friendships. This might require making available more classes or more spaces for adolescents.

The instructors noted the lack of information on the child prior to starting the session. The instructors would like to know more about the children prior to starting the session in order to better respond to individual needs and interests. Dave's reasoning was "so that instructors could have more of a background on their children". He would like to know "what the kid's done, if he's ever played any sports, where his interests are at". On a different note, Shanna believed the report card they give at the end of each session should be specific to AP as she felt "like AP is so much more than just a swimming program". Finally, the need for more communication between instructors when an instructor requires a substitute instructor was addressed by Mary. One instructor, Dave, recommended a bigger gym, and suggested a "better Parents Lounge Area".

Most of the parents mentioned registration problems. They appeared disappointed with the organization and procedures regarding re-registration. As Paul explained "the only thing is when you register every September, you have to wait in line or know somebody, and it's a pain in the ass to go in line and wait to register the kids". One suggestion to remedy this situation was "automatic re-registration" for previous participants. For other parents, the one disappointment was that there wasn't enough of the program! Melissa would like "a summer camp...a full day! ... Like a daycare". Sylvie also said "the only thing I would like, it's to be more!"

Amongst the other various recommendations, Paul proposed a swimming program for the parents (while they are waiting). As for John, he advised "slowly reintegrating some of the kids" towards regular programs. "Moving them in, moving them out" as he said. Other suggestions from parents included a buzzer system or improved communication between instructors and parents when children are entering/leaving the program, more gymnastics, and a program for young adults.

To sum up, while there was not a great deal of negative feedback, what was mentioned by the participants mainly revolved around bringing slight changes to the structure of the program and its administrative features, as well as adding more related services.

In summary, the perceived components of success of the AP program were the instructors, the facilities, the atmosphere, the program outcomes, the quality of the structure and organization of the program, and the training of instructors. This study found these components to play a significant role in the continued success of the AP program.

Conclusions

This study sought to explore the following question: Why is the Aqua Percept program successful? More specifically, what are the specific components of the Aqua Percept program that play a role in its success as perceived by the participants, the parents, and the instructors? Perceptions were investigated with the use of semi-structured interviews with three different groups (parents, adolescents, and instructors). Additional information regarding the program was derived from observation field notes.

The present study demonstrated that, according to the adolescents, the parents, and the instructors, the Aqua Percept program is a successful program due to various reasons. The following components were considered to play a significant role in the success of the program by all three groups: instructors, facilities, atmosphere, program outcomes, quality of the structure and organization of the program, and training. Some components provided partial support to the findings from previous research such as the instructors (Wright & Carrese, 2002; Azer, 2005), the facilities (Cunningham & Beneforti, 2005), and program outcomes (Durstine & colleagues, 2000; Cunningham & Beneforti, 2005) while other components revealed to play novel and essential roles in the success of an adapted physical activity program. Noteworthy is the "Right fit' factor from the instructor component. While having been investigated in other field such as education, the compatibility between instructor and adolescent has not yet been explored within APA. Also worth mentioning is the community and family aspect of the program which is synonymous to comfort for many participants. The sense of community and

acceptance has been studied in other settings but has not yet been attributed a significant role in the success of APA programs. This study suggests that awareness about this characteristic should be considered to create a successful program. Finally, the leadership of the program director is of striking importance in the success of the AP program. Leadership has been explored in many fields for decades whereas it has not received the attention it deserves in APA programs. Obviously, this study indicates that the leadership role of a program director can seriously affect the success of an APA program.

The relationship between the components that explain the success of a particular program is a strange combination. Each component affects the others in a manner to increase or decrease success. For example, when the facilities and program outcomes are significant, it is only natural for word of mouth and recommendations to also be significant. While this study did not explore details about the relationship between these components, the findings demonstrate how all the components are intricately related and each play a considerable part in the overall success of the program.

While this study confirmed the success of the AP program due to specific components, it did not conclude that it is perfect. As with other interventions, there is always space for improvement in certain areas.

Limitations of this study

Participants were asked to express their perceptions of the components which play a role in the success of the AP program based on a questionnaire devised by the principal investigator. It is possible that these questions limited the extent to which the participants expressed their insight into the topic. Another potential limitation was that first time participants of the program and participants under 10 years old were not selected for this study. This was due to the researcher's concern regarding the knowledge of the program and experience in the program. While the researcher does not suspect the inclusion of newer and younger participants would have yielded significantly different results, it may have uncovered subtle distinctions.

Furthermore, while this study included the voice of young participants from the AP program, their contribution was insightful but not extensive in comparison to that of the parents and the instructors. The challenge of conducting interviews with individuals with special needs has been reported by various authors (Booth & Booth, 1996; Lewis & Porter, 2004; Nind, 2008). While efforts were made to ensure the highest level of response prior to conducting the interviews with the adolescents, their answers did not yield sufficient depth. Future studies which include the voice of individuals with special needs should focus on better adapting the questionnaire and repeating the interview session on different occasions to uncover new responses.

Given that this study was a case study, findings from this study cannot be generalised to other situations. However, results from this study can provide insight for future studies of adapted programs.

This study did not explore in full details the intricate relationship between the components which produce a successful intervention. Therefore it did not provide sufficient evidence to fully understand the phenomenon of success in APA programs. Interviews with the participants demonstrated how the components were interrelated to produce success, but it is difficult to determine which component influences another and to what extent each component shapes success, or if one or more components were most critical for success.

Recommendations for future research

Given the limited extent of empirical studies of successful adapted physical activity programs and that this study may be the first empirical exploration of the components responsible for the success of an APA program, research in this area could take a variety of directions. Questions that have been investigated in education such as the compatibility between teachers and students should also be explored in APA. Similar to the study of coaches of successful sports teams, the role of program director should also be further investigated in successful APA programs. Based on the findings of this study, it would be interesting for future studies to investigate deeper these components to discover whether each play an equal role in the overall success of an intervention. It would also be valuable to explore how each component affects success over time.

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Appendices

Appendix A

	Pseudonyme	Group	Age	Gender	Years in AP
1	Greg	adolescent	10	male	6
2	Annie	adolescent	14	female	7-8
3	Chanelle	adolescent	11	female	6-7
4	Kris	adolescent	14	male	10-11
5	Layla	adolescent	12	female	5
6	Barry	adolescent	14	male	11-12
7	Laurie	instructor	33	female	10
8	Dave	instructor	23	male	5-6
9	Shanna	instructor	23	female	6-7
10	Kyle	instructor	25	male	10
11	Mary	instructor	23	female	5
12	Tina	parent	N/A	female	2
13	Paul	parent	N/A	male	7
14	John	parent	N/A	male	10-11
15	Melissa	parent	N/A	female	7
16	Kellie	parent	N/A	female	11-12
17	Sylvie	parent	N/A	female	6

Table 1.Participant Information.

Appendix B

Interview Guide - Adolescent

Pre-Interview Routine

Introduction of investigator and research study

Thank you very much participating in the study. I'll obviously be very careful not to write up any of what is said during the interview in a way by which you can be identified. However, if there is anything you tell me which I should be particularly careful about, or anything I should check with you first before I use it, please feel free to tell me.

Do you have any questions before we start?

Opening Questions

- How long have you been participating in AP?
- Tell me all about the Aqua Percept program.
 - What do you do there?
- Do you play in any sports outside the pool?

Key Questions – Questions about participants' perceptions of the Aqua Percept program

- Why do you participate in the AP program?
 - What makes you want to come back every week and every session?
 - How successful do you think the AP program is?
- What are the strengths of the program?
 - What do you like about it?
 - What are your favourite activities/games?
 - How would you describe your instructor, the atmosphere, the equipment, the pool?
 - How is Aqua Percept different from physical education in school?
 - If you would stop coming to Aqua Percept, what would you miss most about the program?
- What have you gained from participating in AP?
 - What new things have you learned?
 - Are there things you can do better now that you had difficulty doing before?
 - Do you participate more in physical education/sports in school than before?
- What are the weaknesses of the program?
 - Is there anything you would like to change in the program to make it better?
 - What don't you like about the program?
 - Do you have any suggestions to make this program better?

Summary Question

• In your opinion, what are the most important parts of the Aqua Percept program?

Concluding Questions

- Is there anything else you would like to add?
- Do you have any final questions or concerns?

Thank you!

Appendix C

Interview Guide - Parent

Pre-Interview Routine

Introduction of investigator and research study

Thank you very much for your participation in the study. I'll obviously be very careful not to write up any of what is said during the interview in a manner by which you can be identified. However, if there is anything you tell me which I should be particularly careful about, or anything I should check with you first before I use it, please feel free to tell me.

Do you have any questions before we start?

Opening Questions

- How did you hear about the Aqua Percept program?
 O What attracted you to the program in the first place?
 - How many years has your child been involved in the program?
- Has your child participated in other similar programs in the past?
 - How does Aqua Percept compare with other programs?

Key Questions – Questions about participants' perceptions of the Aqua Percept program

- What do you think about the Aqua Percept program?
 - Why do you think people keep coming back every session?
 - How successful do you think the Aqua Percept program is?
- What is the purpose of having your child participate in the AP program?
 - What do you expect your child to gain from participating in this program?
 - What are the benefits of the program for you? For your child?
- What are the strengths of the program?
 - What do you like about it?
 - Which aspects of the program are "key" for you?
 - How would you describe the location, the price, the instructors, the equipment, and the activities?
 - What does it bring to you as a parent?
- What has your child gain from participating in AP?
 - What skills have s/he learn?
 - What do you think s/he can now do outside the program that they probably had difficulty doing before participating in the program?
- Would you recommend the program to other parents? If so, why?
 - How would you describe the program to other parents?
 - What is unique about the program?
- What are the weaknesses\challenges of the program?
 - Is there anything you would like to change in the program to make it better?
 - What don't you like about the program?

Summary Question

• In your opinion, what are the key components of the Aqua Percept program?

Concluding Questions

- Is there anything else you would like to add?
- Do you have any final questions or concerns?
- Thank you!

Appendix D

Interview Guide - Instructor

Pre-Interview Routine

Introduction of investigator and research study

Thank you very much for your participation in the study. I'll obviously be very careful not to write up any of what is said during the interview in a manner by which you can be identified. However, if there is anything you tell me which I should be particularly careful about, or anything I should check with you first before I use it, please feel free to tell me.

Do you have any questions before we start?

Opening Questions

- How did you get involved in the Aqua Percept program?
- How many years have you been involved in the program?
- What training and/or qualifications relevant to Aqua Percept do you possess?
- Have you ever taught in another similar program?

Key Questions – Questions about participants' perceptions of the Aqua Percept program

- What do you think about the Aqua Percept program?
 - Why do you think people keep coming back every session?
 - How successful do you think the Aqua Percept program is?
- What are the strengths of the program?
 - What do you like about it?
 - Which aspects of the program are "key" for you?
 - How are the working conditions?
 - How would you describe the activities, the atmosphere, the structure, the organization, the training?
- What do you think children gain from participating in AP?
 - What skills do they learn?
 - What do you think they can now do outside the program that they
 - probably had difficulty doing before participating in the program?
- Would you recommend the program to other instructors? If so, why?
 - Why would you recommend it to other parents\ lifeguards?
 - What is unique about the program?
- What are the weaknesses\challenges of the program?
 - Is there anything you would like to change in the program to make it better?
 - What don't you like about the program?

Summary Question

• In your opinion, what are the key components of the Aqua Percept program?

Concluding Questions

- Is there anything else you would like to add?
- Do you have any final questions or concerns?

Thank you!

Appendix E

Instructor/Parent Consent Form

I am a graduate student in the Department of Kinesiology and Physical Education at McGill University. As a requirement for achieving a Master's Degree, I am conducting a research project at The Malcolm-Knox Aquatic Center. I have worked as an instructor in the adaptive programs for over six years. Consequently, I am familiar with the programs, the facility, the staff, and some of the children who participate. McGill requires a letter of consent whenever research is conducted involving humans. This letter must state the purpose, the procedures, and conditions of the research. This <u>does not imply</u> that the project involves any risk; the intention is simply to assure the respect and confidentiality of the individuals concerned.

The purpose of the study is to evaluate the Aqua Percept program to determine why it is perceived to be successful from multiple perspectives, those being, instructors, parents and participants. Participation in the study only requires you to participate in an interview of approximately 45 minutes. The interview will take place at the Malcolm-Knox Aquatic Center in a conference room, unless you prefer another location. During this time, you will answer questions and engage in a conversation with the interviewer regarding the Aqua Percept program. There are no right or wrong answers. The interview will be audio recorded to facilitate interview transcription and interpretation. You will be given a copy of the transcription to see if you would like to change something you said.

Your participation in this study is strictly voluntary. You may refuse to participate or discontinue participation at any time without explanation. Whether you participate or not will have no effect on your work conditions/the service your child receives.

All information obtained during this study will be kept strictly confidential, identified by an ID number, and the interview transcripts will be locked in a filing cabinet for the investigator's sole use. The results from this study may be published; however, your identity will not be revealed in the results. Monitors from the Research Ethics Board at McGill may review the research files in order to verify the research study data and its compliance with institutional research regulations.

Following the study, should it be published, the data will be made available to other potential researchers, however, participant anonymity will be maintained and names will remain confidential.

If you have any questions or concerns regarding your rights or welfare as a participant in this research study, please contact the McGill Ethics Officer at 514-398-6831 or lynda.mcneil@mcgill.ca.

By signing below, you are indicating consent for you to participate in the study and for the interview to be audio recorded. As well, you are confirming that you have read the above information and that you are aware of the nature and demands of the study. Instructor's name:

Instructor's signature:

Date:

Please feel free to contact me or my supervisor at any time:

Mylène Boudreau Master's Candidate, Adapted Physical Activity Dept. of Kinesiology & Phys. Ed. McGill University, Montreal, Qc. mylene.boudreau@mail.mcgill.ca

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Appendix F

Participant Consent Form

I am a student at McGill University and I study Adapted Physical Activity. As a requirement for completing my degree, I am going to be conducting a research project at the pool. I used to be an instructor for the adapted programs such as Aqua Percept a few years ago. I am really interested in learning what you think of the Aqua Percept program.

If you agree to participate, I will interview you at the pool. The interview will last about 45 minutes, and I will ask you questions about the Aqua Percept program. The interview will be audio recorded so that it is easier for me to review what you have talked about in the interview. I will also send you a copy of what you said so that you can change anything you said.

Agreeing to be in this project cannot harm you. You will not receive any gifts from doing it either. You do not have to participate if you don't want to. If you say "yes" now but change your mind before the interview, you can let me know at any time by just telling me. Also, you will not be graded on the interview. There are no right or wrong answers. The reason I want to interview you is so that I can learn more about the Aqua Percept program from your point of view. I want to know what you think about it. Another reason for doing the study is that the results will help us improve the Aqua Percept program as well as other similar programs.

I will also ask your parents if it is OK that you do this. If you want to participate in the interview, sign your name and write today's date on the line below.

Student:	Investigator:	
	-	

Date:_____ Date: _____

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If you have any questions or concerns regarding your rights or welfare as a participant in this research study, please contact the McGill Ethics Officer at 514-398-6831 or lynda.mcneil@mcgill.ca.