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An Exploratory Examination of Families Engaged in an Adventure Running Kids Program

Heather Isnor

Wilfrid Laurier University, isno9130@mylaurier.ca

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An Exploratory Examination of Families Engaged in an Adventure Running Kids Program

Heather Isnor

WILFRID LAURIER UNIVERSITY | Waterloo, Ontario



Abstract

Academics and practitioners have only just begun to delve into the health benefits of outdoor activities in the last few years. In general, the forested settings of these activities have been documented to decrease stress levels, increase recovery rates from disease, and lessen the symptoms of mental illnesses (Kuo & Faber Taylor, 2004). It is believed that the natural environment acts as a setting where humans can engage in physical activity, aesthetic experiences, and social interactions that, in turn, release stress and lead to improved well-being (Bird, 2012). Currently, however, children are experiencing limited exposure to nature and which has been linked to lowered academic performance, ADHD, decreased mental health, and other adverse conditions (Louv, 2008a). The majority of current research on children and outdoor physical activity has occurred outside of Canada and North America (Casson, 2009).

The purpose of the present study was to qualitatively explore the experiences of children, and their parents, who participated in an adventure running program in Southern Ontario. Adventure running is a new and unique sport that combines navigation and running in a forested setting. Six parents (4 males, 2 females), five children (2 females, 3 males), and a program coach (male) were interviewed. Results indicated that parents and children chose to enroll in this program based primarily on past physical activity experiences and recommendations. Parents, children, and the coach perceived that the program benefited the families involved by changing their physical activity patterns and encouraging more participation in outdoor leisure activities. Parents also cited several societal, personal, and environmental factors that determined whether they would participate in outdoor physical activity. Findings are discussed with respect to larger societal issues, such as contemporary parenting ideologies, physical activity patterns of families and the community reception of such programs.

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Introduction

Today, where text messaging and video gaming are the preferred leisure activities, many children and youth have lost touch with the natural world around them. Nature is often only experienced by children through the latest virtual reality game or a window at the local zoo. Mucking around in the mud for worms or trekking through a forest for hours is an abstract and scary idea to numerous children in modernized countries; instead the safer, seated “Forest of Illusion” level in Super Mario is the ideal experience. Historically, outdoor play and physical activity have been synonymous with childhood, where young children, on average, had outdoor roaming ranges of over twelve kilometres at the beginning of the twentieth century (Bird, 2012). Presently, for children who do go outside, it is uncommon for a child to explore their natural environment beyond the end of their block.

The Effects of Diminished Access to Outdoor Physical Activity

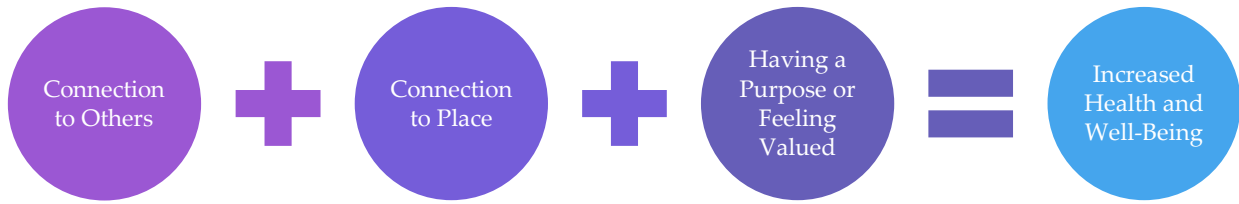
Humans have an innate need to feel connected to not only other human beings but also to other living systems (Wilson, 1984). For children, this connection is believed to be especially important in middle childhood and early adolescence for the formation of personality (Kellert, 2002). Direct encounters with nature, along with various indirect and vicarious experiences, have been linked to positive emotional, intellectual, and values-related development in children (Kellert, 2002). The stimulus-rich natural environment (Wilson, 1984) provides challenges for cognitive development, sources of imagination,

and creativity and opportunities for the shaping identity away from adults—all of which has a tendency to leave a legacy of memories into adulthood (Kellert, 2002).

Additionally, the attention restoration theory (ART) postulates that nature necessitates more “relaxed” attention from different sections of the brain, creating a break from the demanding directed attention humans must use to focus on work and academic tasks (Kaplan & Kaplan, 1989). This theory is particularly salient for children with behavioural disorders. For example, Kuo and Faber Taylor (2004) found that children with attention deficit/hyperactivity disorder (ADHD) experienced significant reductions in negative symptomology when participating in outdoor activities versus those in an indoor built environment. Similar results have been replicated where children with ADHD were found to concentrate significantly better after walking in a forest (Fabor Taylor & Kuo, 2009). Moreover, access to the natural environment acts a moderator to stressful events that helps to minimize health inequalities between children from high and low socio-economic families (Wells & Evans, 2003).

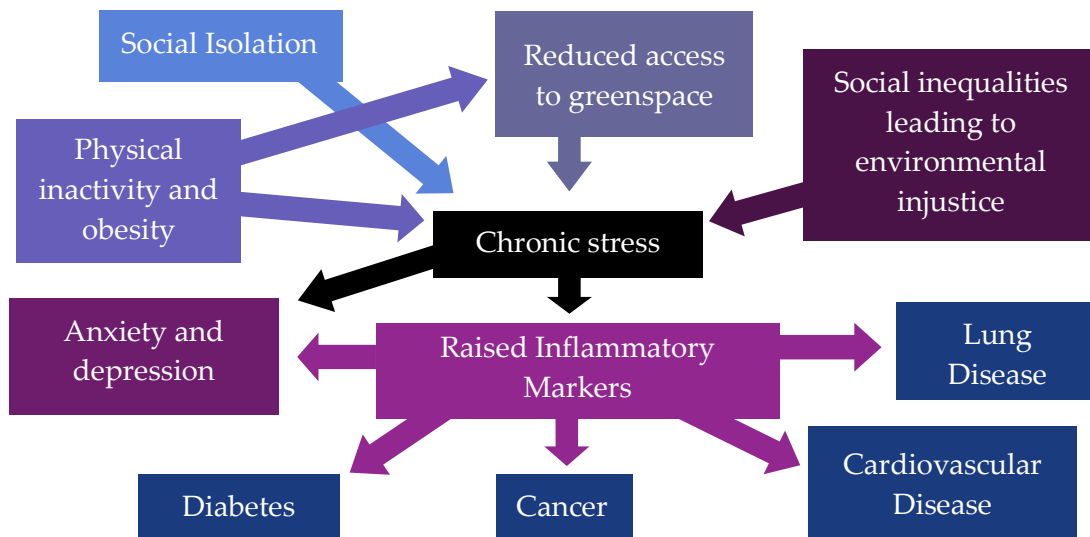
Dr. William Bird, a pioneer in combining the medical world with the natural environment, said at a recent conference (2012) that nature fosters a strong sense of place in humans; this is demonstrated by Bird in Figure 1. Bird highlighted that place, in this case nature, can provide a sense of purpose for humans, as it “promotes recreation, access, understanding and enjoyment of the natural environment” (p. 3). Nature as a

Figure 1: The people-place connection and how this influences overall health and well-being (Bird, 2012).



place creates a mechanism whereby there are increases in physical activity opportunities that decrease the amount of chronic stress and disease markers in humans. The reverse is true as well, as little exposure to the natural environment, coupled with create feelings of isolation can contribute to chronic stress in humans, as displayed in Figure 2 below.

Figure 2: The cascading effect that limited exposure to greenspace can create on human health and well-being (Bird, 2010).



Richard Louv (2008a) coined the condition “nature deficit disorder” that described limited exposure to nature as one of the possible causes of lowered school performance,

attention-deficit disorders, decreased mental health, and other physiological conditions in children. Louv (2008a) believes that this negative condition has risen as a result of overprotective parenting, reduced access to greenspace, and the increasing enticement of indoor electronics. Suggesting that this may lead to larger long-term problems for the global population, Louv stated in an interview that

A rapid disengagement between children and direct experiences in nature... has profound implications, not only for the health of future generations but for the health of the Earth itself...the effects from Nature Deficit Disorder could lead to the first generation being at risk of having a shorter lifespan than their parents (Louv, 2008b).

While some of the previously mentioned theories lack enough validated empirical research, these strong opinions by noted individuals are attracting the attention of large organizations around the globe. Recent initiatives, such as “forest schools” in Europe (Knight, 2009) and the “Bring Back Play” campaign by ParticipACTION in Canada (2013), are beginning to combat the current lack of outdoor play. Most research involving children and nature is limited to the therapeutic use of the outdoors to mitigate mental, social, and behavioural problems; little of such research involves Canadian children. Children who are not exposed to physical activities in nature are reported to be at a greater risk of developing physical and mental illnesses as a result of sedentary lifestyles

and escalated mental stress (Bird, 2012; Knight, 2009; Louv, 2008a; ParticipACTION, 2013).

These factors are capable of creating adverse physiological processes that can develop into serious, chronic lifestyle illnesses; all of which may contribute to increased hospital stays, use of healthcare resources, and a diminished quality of life as Canadian children become adults (Drench, Noonan, Sharby, & Hallenborg Ventura, 2007). Many of these diseases, such as type II diabetes, hypertension, some mental illnesses and heart disease, are almost entirely preventable through maintaining a healthy-active lifestyle, maintaining a connection to the natural world, and good nutrition practices (Bird, 2007; Stampfer, Hu, Manson, Rimm, & Willet, 2000). It is estimated that obesity and its comorbidities currently cost the Canadian health care system an upwards of \$4.1 to \$7.6 billion annually (Public Health Agency of Canada & Canadian Institute for Health Information, 2011). The cost of this indoor, sedentary burden on our health care system will only escalate in the years to come if children and youth continue on this inactive path. Currently, only 5% of Canadian children aged five to seventeen are meeting the minimum guidelines for physical activity of sixty minutes of moderate to vigorous physical activity per day (Active Healthy Kids Canada, 2013). A recent report by Statistics Canada (Tremblay, Shields, Laviolet, Craig, Janssen & Connor Gorber, 2010) also demonstrated that 31% of boys and 25% of girls are overweight or obese. In fact,

Tremblay et al. (2010) predicted that “the average 11- to 14-year-old Canadian of today will be overweight by age 36 years” (p. 9).

Barriers to Outdoor Physical Activity

Outdoor physical activity is closely linked to the built environment of regions and local neighbourhoods (Perotta, 2012; Prince et al., 2012). The functionality and perception of safety in neighbourhoods are often critical determinants of whether individuals, such as children and their families, will engage in physical activity within their immediate environment. With increasing urban sprawl, access to areas for physical activity are being greatly decreased and roads are becoming unsafe with intensified motor vehicle traffic. In many cases, in order to participate in physical activity, individuals require motorized transport to facilities and parks away from their local neighbourhoods. It has also been found that communities in rural and suburban environments, often have the highest rates of diabetes because of such increased reliance on vehicles to access physical activity, when compared to urban city dwellers (Leeming, 2012). Furthermore, many government policies and communities also have restrictions on the activities that can be conducted outdoors, on top of the environmental barriers. Such constraints create substantial obstacles for individuals to engage in physical activity in an outdoor environment. The Waterloo and Toronto Regions provide an example of a municipal government constraint restricting outdoor activity by not permitting sport equipment such as basketball or

hockey nets to be placed on municipally-maintained roads (Active Healthy Kids Canada, 2013).

In addition to the built environment, provincial government policies, particularly in Ontario, are also decreasing general physical activity opportunities for children. The loom of lawsuits, pre-occupation with order in society (Louv, 2008a) and the media-constructed “culture of fear” (Glassner, 2010) have created this restrictive world where children must be kept inside, “containerized” (Louv, 2008a, p. 35) and under the ever-watchful eyes of adults. While there are noted benefits to participating in structured sport and exercise (Weiss, 2007), these activities tend to prevail over free-play in the great outdoors. Cumulatively, through regional and neighbourhood policies, society is broadcasting the message to children that “their free-range play is unwelcome, that organized sports on manicured playing fields are the only official sanctioned form of outdoor recreation” (Louv, 2008a, p. 31).

Outside of schools, children generally rely on popular and costly structured sports such as soccer (38% of Canadian children), hockey (includes sledge-style, ball, field, and ringette) (24%), swimming (17%), basketball (13%), and baseball or softball (10%) to be physically active (CFLRI, 2013). Furthermore, these sports generally do not emphasize a connection to the natural world. As children grow into adulthood, they tend to decrease their overall physical activity participation rates, yet continue to rely on structured sports

(CFLRI, 2009; Active Healthy Kids Canada, 2014). Conversely, females are more likely than males to discontinue participation in structured sports and they do not supplement this with unstructured sports and activities (hiking, swimming) for their new physical activity participation (Active Healthy Kids Canada, 2013; Active Healthy Kids Canada, 2014). This gender disparity and heavy reliance on structured sports could lend itself to future inactivity for children.

Economic and environmental conditions produce some of the largest barriers to outdoor physical activity nationally throughout Canada and at the local neighbourhood level as well. With reductions in not only the availability of green space for physical activity, but also educational opportunities for learning physical skills, many individuals must turn to the often costly structured sport and fitness centre environments to engage in physical activity. As a result, this provides many temporal limitations for the availability of programs, as well as creating a significant impediment for individuals from lower socioeconomic-status (Gouvernement du Quebec, Kino-Quebec Scientific Committee, Secretariat au Loisir et au Sport, Ministere de l'Education, & du Loisir et du Sport, 2011).

Use of Socio-Ecological Models to Explain Physical Activity Behaviours in Children

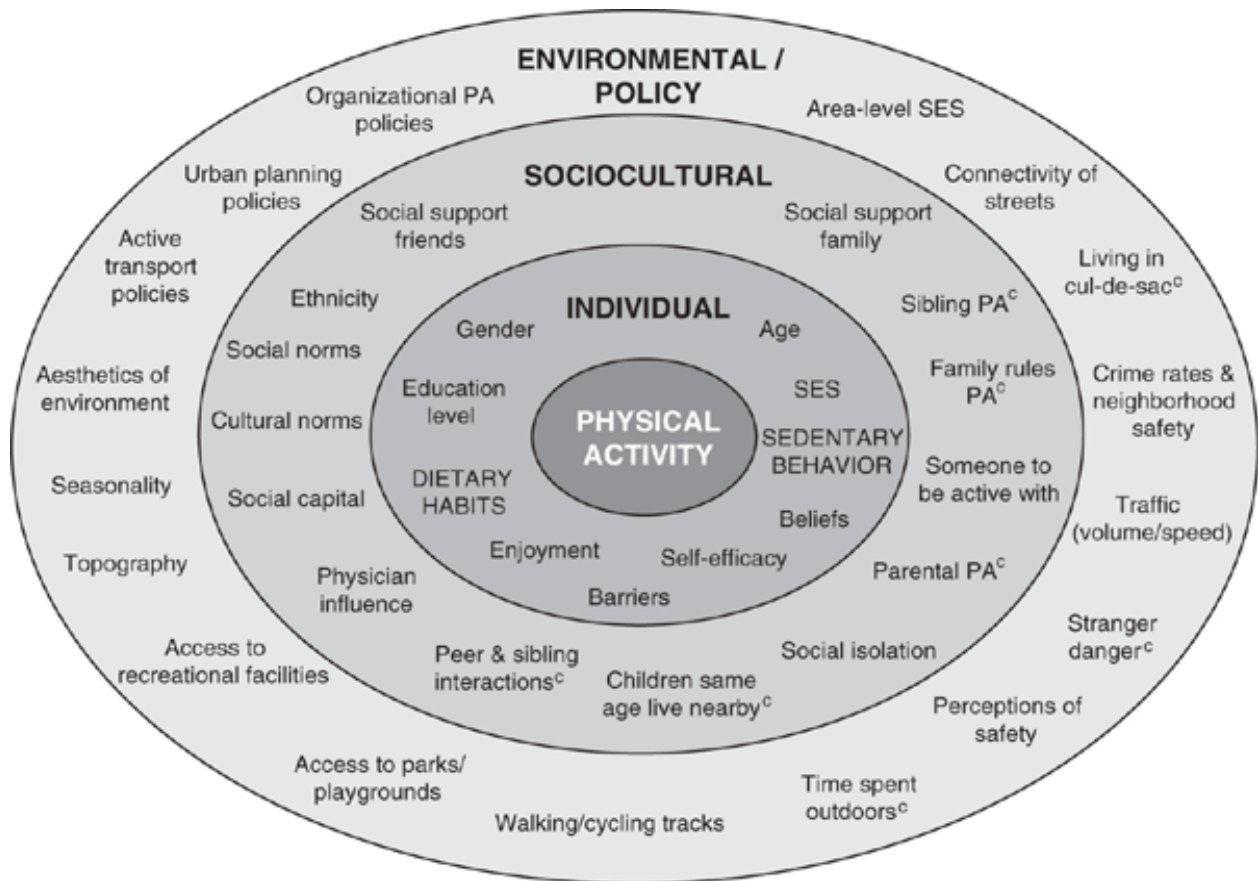
The challenges present in motivating children to be more physically active in the outdoors for the long-term can no longer be justified simply through individual-level

factors. Both social and built environments must be considered in the explanation of the intensification of this problem (Prince et al., 2012). Social ecological models rely heavily on both individual and community level factors by addressing both social and environmental determinants.

Environmental and societal determinants of physical activity can be broadly defined as the perceived influences that can support or hinder an individual's participation in physical activity (Prins, 2012). Such determinants are often influenced by the degree of knowledge an individual, community, institution, or government organisation has about a topic matter. In this case, the impact that exposure to nature can have on child development has only recently gained attention. The general lack of understanding about nature's importance and the safety of activities has led to many of the restrictions adults have imposed on outdoor physical activities in children.

In the field of exercise psychology, one proposed socio-ecological model by Davison and Birch (2001) (Figure 3) portrays the relationship between an individual and their environment. While individuals may intend to participate in physical activity, engaging in that behaviour is influenced by the larger society around them (Lox, Martin, & Petruzello, 2010; Prins, 2012). Davidson and Birch's model suggests that childhood physical activity is determined by an interplay between individual, socio-cultural, and environmental factors. Individual factors, at the inner-most level, include the child's

Figure 3: A socio-ecological model of the influences of physical activity behaviours in children (Davison & Birch, 2001).



feelings, skills, daily habits, and knowledge about physical activity. Beliefs, norms and modelling of physical activity by the child's family, culture, and significant others form the socio-cultural (second) level. These two levels are influenced by factors in the surrounding environment, such as government policies and neighbourhood characteristics. Socio-ecological models require involvement from society and community agencies in order to support individual motivations to commit and adhere to a long-term physically active lifestyle. Factors Influencing Physical Activity Patterns of Children

Many factors can affect the activity level of children and youth. Also, there are several obstacles undermining the efforts of childhood health promoters. A large-scale effort between the Government du Québec, Kino-Québec Scientific Committee and others (2011) described how the interactions of barriers, the lure of the electronic world, and individually-perceived social cultural factors influence children and youths' decision to partake in physical activity. Influential factors affecting physical activity based on the findings in Quebec (2011) and other relevant correlate research are described below.

Biological factors. Relatively unchangeable biological factors such as sex and developmental stages in children are key in determining participation rates, especially as children mature. Current trends suggest that as children develop, there is a steep increase in physical activity dropouts (Thompson, 2003). Such dropout rates attributed to age have a large variation in explanation, from societal limitations to psychological motivation changes (Thompson, 2003). Gender differences exist whereby female children tend to be less active, particularly into adolescence (Gouvernement du Quebec, Kino-Quebec Scientific Committee, Secretariat au Loisir et au Sport, Ministère de l'Éducation, & du Loisir et du Sport, 2011). It has been observed that pre-adolescent boys often participate in double the amount of moderate-vigorous physical activity than their female counterparts (Mota & Queiros, 1996; Trost et al., 1996). Female children are also suggested to have lower engagement in outdoor physical activity. Explanations for these gender variations in physical activity include faster rates of motor development in boys, differing

body composition during maturation, and general greater orientation toward sports and physical activity among male children (Kohl III & Hobbs, 1998). Other biological factors that influence physical activity participation include genetic tendencies towards a naturally higher physical fitness (i.e., cardiovascular capacity, muscular strength, and coordination) (Kohl III & Hobbs, 1998).

Accessibility of physical activity for children with special needs. Children with physical, behavioural and intellectual disabilities are generally less active than their typically-developing peers (Law et al., 2007). This is found to be exacerbated for children with special needs from lower socio-economic status, single parent or less-educated parents (Law et al., 2007). A recent Canadian study found that children with disabilities are less likely to be involved in organized, structured activities (e.g., team sports, dance lessons, music lessons etc.), but more involved in low-intensity informal activities (e.g., watching television, walking, playing computer games etc.) (Law et al., 2007). Furthermore, despite findings that children with disabilities benefit the most from low-to-moderate physical activities outside (e.g., hiking, outdoor free-play, fishing) (Furnham & Mutrie, 1997), these children are even less likely than their typically-developing peers to engage in such activities (Rimmer, Rowland, & Yamaki, 2007). Multiple studies have found that the built environment (e.g., lack of accessibility to community programs and outdoor recreation areas) and parental fears are frequently cited as barriers to both indoor

and outdoor physical activity participation for children with special needs (Rimmer et al., 2007).

Economic accessibility. Economic factors of physical activity are often key determinants in the quantity and nature of physical activity (Spinney & Millward, 2010). Children tend to require more instrumental support from adult caregivers in the form of registration fees, equipment purchases, and transportation in order to conduct sports and exercise (Lox et al., 2010). For example, children who come from families with access to more financial and temporal resources often participate in more organized sport and physical activity (Mo, Turner, Krewski, & Mo, 2005). Additionally, the socio-economic status of a community can play a role in the level of unstructured physical activity in which children participate. Families who live in impoverished neighbourhoods tend to participate in less outdoor physical activity (Prins, 2012), despite evidence that exposure to nature can moderate health discrepancies in children from low socio-economic families (Mitchell & Popham, 2008). Circumstances such as gang violence, low walkability in neighbourhoods as well as a lack of maintained green space and other recreational facilities associated with lower-income neighbourhoods can intensify the effects of family poverty on childhood physical activity.

Geography. Canada is a unique country in that it contains a diverse array of geographical features and experiences distinct seasonal changes throughout a year.

While this can present a diverse array of opportunities for different types of physical activities, particularly outside, Canadians often feel limited in winter months. Epidemiological data have shown that Canadians cut their engagement in leisure time physical activity almost in half during the winter months (Prince et al., 2012). It has also been found that individuals who are closer to parks and green space have a two-fold increase in likelihood to meet physical activity guidelines; this is significantly more pronounced in females (Prince et al., 2012). For children, it has been found that the community type has a strong correlation with physical activity levels. Not surprisingly, children from small towns and rural communities are often more physically active than children living in urban settings (Sandercock, Angus, & Barton, 2010). Rural children tend to participate in more outdoor, unstructured physical activity, which contributes to higher overall physical activity levels (Sandercock et al., 2010). Inadvertently, the increasing urbanization of communities has been shown to discourage physical activity through the increasing high-density traffic, poor air quality, violence and lack of recreation and green space for the population demand (World Health Organization, 2013).

Societal attitudes and norms. The individual perception of societal attitudes and norms greatly influence a youth's decision to engage in physical activity (Davison & Birch, 2001). Exposure to important role models (i.e., parents, coaches and teachers) who are physically active have been found to play a significant role in increasing children's

motivation to participate (Ferreira et al., 2007). Chi Ching Chow and colleagues (2009) established that children form their adult habits and attitudes towards physical activity by age sixteen. As such, it is imperative that children receive positive and highly educational physical activity experiences prior to entering adolescence if they are to choose a healthy, active life-style as adults. A society, setting, or culture that does not encourage or prioritize physical activity is associated with lower levels of participation that continues into adulthood (Gouvernement du Quebec, Kino-Quebec Scientific Committee, Secretariat au Loisir et au Sport, Ministere de l'Education, & du Loisir et du Sport, 2011).

School Setting. Outside of structured sport, the school culture acts as one of the main settings for children to develop the skills and positive attitudes towards physical activity (Chi Ching Chow et al., 2009; Ferreira et al., 2007; Gouvernement du Quebec et al., 2011; McKenzie, 2001; Trudeau & Shephard, 2008; Wechsler, Devereaux, Davis, & Collins, 2000; McKenzie et al., 1995). The school setting can also be a factor in providing equal opportunities for all children regardless of socio-economic status (Kristjansdottir & Vilhjalmsson, 2001). Despite growing evidence that children who receive physical education classes from physical education specialists tend to be more active (Dahlstrom et al., 1995), the number of these individuals in schools is decreasing dramatically (People for Education, 2011). Presently, it is noted that only five percent of Canadian schools meet the guidelines for quality physical education programs (PHE Canada, 2012). Immediate

implications of this situation include a lack of fundamental life skill development for health and well-being (Ferreira et al., 2007; PHE Canada, 2012).

A Conceptual Framework of Outdoor Activities

Historically, activities in the outdoors have focused on male expeditions into wilderness for scientific and leisure means (Morrow & Wamsley, 2010). This has evolved in the last several decades into adventure sport and activities and outdoor education (programming). An extensive classification system for understanding outdoor activities does not currently exist in the literature. Therefore, to aid in our understanding of outdoor pursuits and activities, a preliminary conceptual framework is proposed. This concept map, displayed in Figure 5, is based on an amalgamation of current definitions proposed by various researchers in the realm of outdoor activities. It is an attempt to find common definitions among individual descriptions in order to aid in the researcher's understanding and orientation of activities only.

At the broadest level, *outdoor activities* are any physical exertions that take place in a relatively natural environment setting. These can be then divided into two subcategories based on the intended purpose of the activities. From an educational perspective, *outdoor education* is an umbrella term that can be described as:

"...all learning, social development and the acquisition of skill associated with living and journeying in the outdoors...it embraces environmental and



ecological understanding...and integrated approach to learning” (Cumbria Education Authority, 1984, p. 8).

In the last twenty years, outdoor education has been re-defined into two branches of learning-directed movements, *environmental education* and *adventure programming*, as well as broader, *outdoor leisure activities for learning and exploration*. Environmental education strives to develop skills and attitudes towards the improvement and

maintenance of the natural environment (Boyes, 2000); it has roots in biology and environmental stewardship programs. Adventure programming, on the other hand, involves the use of outdoor activities that provide an individual or group with a purpose to attend to involving “problem solving and challenge...in order to achieve personal growth” (Boyes, 2000, p. 80). In this sense, *adventure therapy*, the practice of using the therapeutic benefits of adventure activities and wilderness settings in combination with traditional forms of therapy (Newes & Bandoroff, 2004), would be a subdivision of adventure programming.

Outdoor leisure activities for learning and exploration are purposeful leisure activities intended to specifically improve skills, learning, and/or for exploration purposes; there is no competitive motive behind these activities. Some of these activities can include any of the broad outdoor activities that include an skill-building, coaching, or exploration component such as bird watching, mountaineering, children’s adventure sport programming, and “learn to camp” programs (Ontario Parks, 2012). Sports and activities under this classification involve extensive problem solving challenges and opportunities for skill learning and personal development in the natural environment.

In a different sense, *adventure sports and activities* are any pursuits involving travel through the water, land, or air to achieve competitive or personal goals (Draper & Hodgson, 2008). Most adventure sports and activities have only recently experienced

interest from the public (Collins & Collins, 2012), with similar rate of understanding in the academic world (Kerr & Houge Mackenzie, 2012). These endeavours can be further classified under two subheadings. *Outdoor leisure activities* can be defined as recreational activities tend to be executed with the participant's having no competitive purpose, but is intended to satisfy physical health, social and/or achievement goals, such as risk-taking and independence, in the natural environment (Rolston, 1988). In addition to general activities such as hiking and canoe tripping, *extreme sports* would fall under this category. Extreme sports include activities such as sky diving, BASE jumping, free-solo climbing and waterfall kayaking (Brymer & Gray, 2009) where "the most likely outcome of a mismanaged mistake or accident is death" (p. 136).

Competitive adventure activities fall under the realm of *adventure racing* which involve a traversing of the natural features (air, water, and land), navigational elements, and competition in the form of timed events. Adventure racing can take on several forms, including one that encompasses several outdoor activities and skills into a race (i.e., canoeing, navigation, running, and rock climbing) or can be further subdivided into smaller combinations or singular activities. Examples of these sports include orienteering, oceanic racing, and endurance riding.

A relatively new sport that combines elements of trekking, orienteering, snowshoeing, and cross-country running, *adventure running* can be considered a

successor of the more well-known adventure racing sport (Golden Horseshoe Orienteering, 2013). In the last decade, adventure running developed a competitive nature in terms of racing series (i.e. the “dontgetlost adventure racing series” in Ontario) (Golden Horseshoe Orienteering, 2013). Both adventure running and racing have been adult-oriented; however, a children’s adventure running program was launched in 2010 in southern Ontario (Bowman, 2012).

Adventure Running Kids (ARK)

ARK is a unique program in southern Ontario that aims to “not only challenge and teach kids to be stronger, tougher and faster runners while having an appreciation of our environment but also coach kids on the problem solving skills that are valuable in training, racing and life” (Golden Horseshoe Orienteering, 2013). Program sessions (usually once a week for twelve weeks) focus mainly on improving overall running abilities, navigational skills, and overall fitness of children aged five to sixteen. Working in groups, young participants participate in various navigational and problem solving skill challenges while running (Golden Horseshoe Orienteering, 2013).

All sessions include the participant-popular ‘mud run’, involving “a three- to five-kilometre romp through muddy trails and murky rivers, which often leaves [participants] in desperate need of a shower” (Bowman, 2012). With its non-competitive atmosphere, the programs have received positive reception from various communities for its

accessibility, variety in delivery, and ability to “get kids off the couch” (Bowman, 2012). With the program costing \$99.00 for a twelve-week session (\$8.25 per session) (DONTGETLOST, 2014) and little required equipment, the program fee is competitive with other recreational children’s programming, such as swimming lessons (\$64.00 for eight weeks, or \$8.00 per session (City of Waterloo, 2014)) and soccer (\$200 for approximately twelve weeks, or \$16.67 per session (Waterloo Minor Soccer, 2014)).

The *Adventure Running Kids* program presents an ideal setting to initiate research involving, children, outdoor physical activity and motivation to participate. While *ARK* is a structured physical activity program, many of the cultivated skills and motivational aspects could be transferable to both unstructured physical activities and other areas.

The purpose of the present study was to evaluate the experiences of children, parents and coaches in this structured outdoor physical activity (*ARK*). The specific objectives were to evaluate the children’s and parents’ perceptions of:

- a) their reasons for enrollment in the program;
- b) their experience with *ARK* and how this compares to other activities they do;
- and,
- c) changes in their indoor and outdoor physical activity behaviours after their child has participated in *ARK*.

And, to evaluate the parents’ perceptions of:

- d) internal and external factors that affect how they and their children participate in outdoor physical activity.

An additional objective of the study was to evaluate the coaches' perceptions of:

- a) the program's reception in the Kitchener-Waterloo and greater community;
and,
- b) the experiences of the program by parents and children.



Methods

This study utilized a qualitative descriptive phenomenological approach. Descriptive phenomenology usually begins with the experimenter identifying the phenomenon to study and separating out their own experiences of phenomenon (Creswell, 2013); in this study, the phenomena was adventure running. The researcher collected data from individuals who have experienced the phenomena (Creswell, 2013). Data were generated through interviews with the children who participated in adventure running, as well as from their parents and an *ARK* coach. The collected data were reduced to significant statements and combined into themes (Creswell, 2013). Qualitative phenomenology develops descriptions of what the individuals are experiencing and how certain conditions or contexts influence that experience (Creswell, 2013). These themes and descriptions formed the core of the phenomenon that explains the underlying structure of the experience, in this case, the experience of adventure running in families. Using purposeful sampling, this exploratory approach provides insights into the meaning of a child's involvement in the *ARK* program from the perspectives of the child, parent, and a program coach.

Participants

Parents were approached at the first and second *ARK* sessions and asked to complete a background questionnaire while they waited for their children to participate in the program. They were given the opportunity to provide their willingness to

participate in a future interview session for both themselves and their child(ren) at the end of the questionnaire. The *ARK* coaching staff was recruited through electronic communication prior to the initial weeks of the program and subsequent consent forms (see Appendix A) were provided in-person at the initial *ARK* practice.

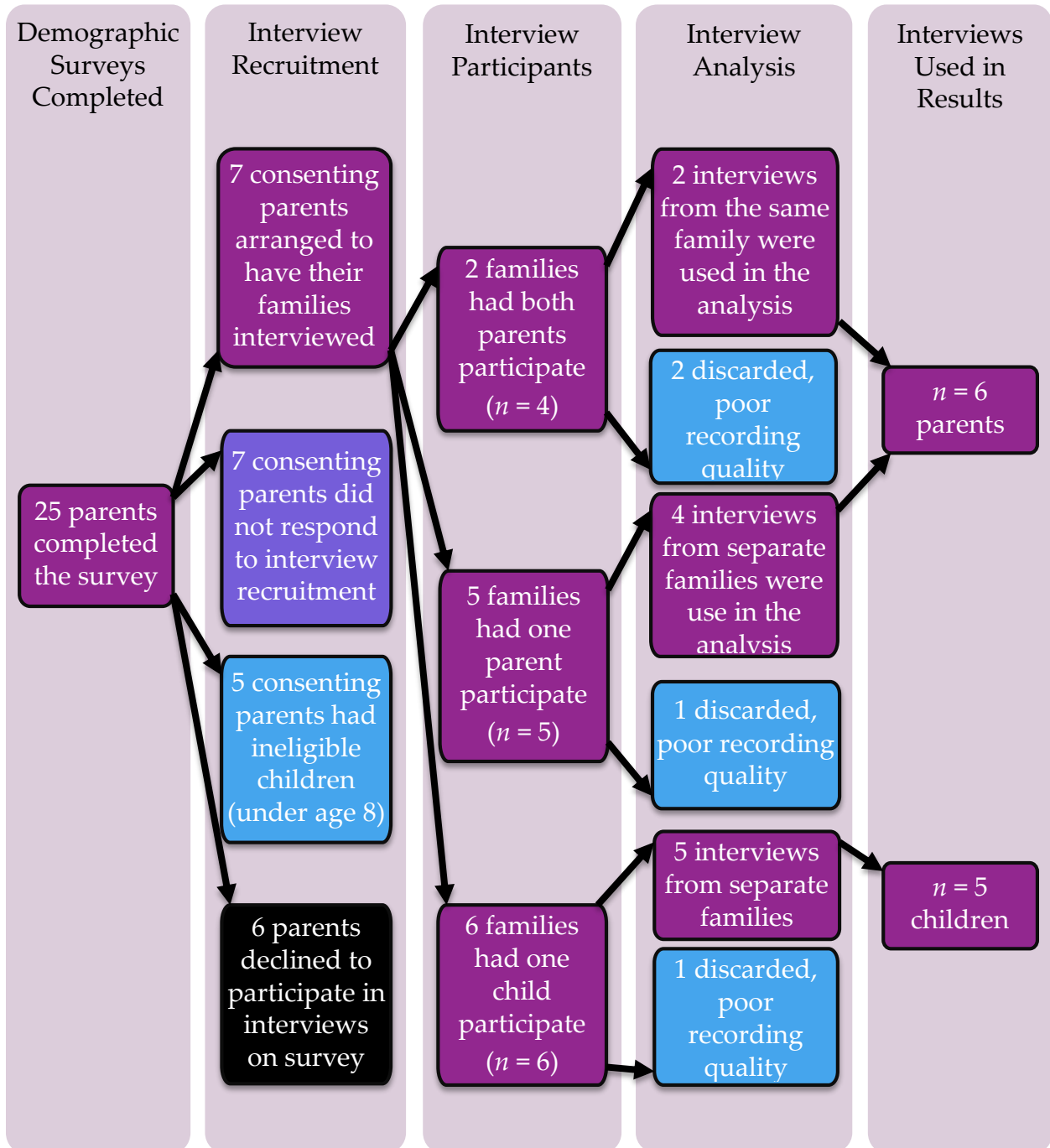
Twenty-five parents completed the demographic background questionnaire. Six children (from six different families), nine parents (with four being from two family dyads) and a member of the coaching staff (male) were recruited for the interview component of the study. Male ($n = 4$) and female ($n = 2$) child participants ranged in age from eight to twelve years at the time of the study and participated in the fall sessions of *Adventure Running Kids*.

While it was originally intended to engage our purposive sampling and select children above the age of ten, as these children tend to be more articulate than younger children in describing their lived experiences (Fargas-Malet, McSherry, Larkin, & Robinson, 2010; Morgan, Gibbs, Maxwell, & Britten, 2002), there was an initial low respondent rate to interview invitations. As such, the age criterion was extended to include eight and nine-year-olds as well. Purposive sampling was also expanded to accept all parents who were willing to volunteer their time for a future interview. The adult participants (five male, four female) ranged in age from mid-thirties and to late-forties. Four interview recordings failed to sufficiently record all the audio information

and, as a result, were not further transcribed or used in the data analysis. The demographic data for these four participants are not reported on in the results section.

Figure 5 displays a visual representation of the parent and child participants in the study.

Figure 5: A visual representation of the study participants.



Measures

Family Demographic Questionnaire for Parents/Caregivers. Consenting parents of the *ARK* children were directed to complete a brief forced-choice paper survey at the initial two recruitment sessions. The purpose of this survey was to capture demographic background data about the families participating in *ARK* and to recruit participants for future interviews. Example items included family status (dual-parent, single parent, foster family etc.), education level (less than high school diploma, high school diploma, post-secondary degree etc.) and age of children and parents. Several additional questions inquired about the leisure-time and physical activity habits of the parents, the children and them as a family. The survey is provided in Appendix B.

Structured Interview Questions for Children, Parents and Coaches. In one-on-one structured interviews, the child participants were asked about their experiences in *ARK*. Interviews took place after the midpoint of the fall season. The interview questions for the parents and children focused on their direct experiences of *ARK*, their physical activity and leisure-time choices outside of *ARK*, and changes they may have perceived after participating in the program. Interview questions for the child participants are provided in Appendix C. Parents were also asked questions about their family's activity habits, their own physical activity choices, why they chose to enroll their child in *ARK*, their perceptions of their child's experiences through *ARK* and what factors they feel influence their family's participation in outdoor physical activity. Interview

questions for the parents are provided in Appendix C. Interview questions for the *ARK* coaching staff member included why they initiated this program, their goals for the children in the program and what they felt were factors behind why not all children and their families choose to participate in outdoor physical activity. Interview questions for the program coach are provided in Appendix C.

Patton (2003) suggested that open-ended interviews be used to encapsulate participant's experiences and perspectives. As such, interview questions must attempt to understand the beliefs, personal stories, and viewpoints of participants. Patton (2003) also described several types of interviews that can be utilized to gather data, depending on the participants and subject matter. In this study, the researcher aimed to follow Patton's suggestions for structured, open-ended interviews, whereby a standardized set of questions was administered to each participant. At times, however, the researcher adapted her interview style to more of a conversational interview approach when speaking with the children and some of the parents in the interviews, sometimes to provide clarification and to further probe participant experiences. Questions were ordered to reflect the participants' experiences in *ARK*, their general activity patterns, and, finally, for the parents, broader opinions on the influence of perceived factors on outdoor physical activity.

Procedure

Recruitment and the completion of demographic questionnaires were conducted during the second and third week of the fall *ARK* sessions, which ran for twelve weeks on Tuesday evenings from September to December 2013. Each session (two per night) ran for an hour in length and was led by a combination of two adult coaches and multiple parent volunteers.

Qualitative interviews were conducted in secure office space at Wilfrid Laurier University's Waterloo campus during weekday evenings. These hours were selected to accommodate the intended participants' work and school schedules. The researcher further adapted the interview setting to two families' homes, at their request, to align with their schedules more optimally. Table 1, below, illustrates the timeline for this project.

Table 1: Thesis project timeline.

Late August 2013	Waterloo ARK coaches contacted, advised them of the study and ask for their permission to be interviewed later on in the year.
Week of September 17th & 24th, 2013	Introduced study to parents and caregivers of the ARK participants at the second weekly ARK practice. Provided contact information for study registration and recruited parents to complete demographic survey.
October 8th, 2013 to January 29th, 2014	Structured interviews conducted with the children, parents/caregivers and coaches at Wilfrid Laurier University or the participants' homes (when requested by participant). Subsequent transcription of interviews.

All parent participants signed an informed consent form for the demographic survey and then an additional consent form at the time of the interview. For the interview consent forms, adults were asked to consent to their own involvement in the study, parents were required to agree to their child's participation in the study and, finally, the child must have consented to their understanding of what will be asked of them and involvement. The consent form for the children was orated to these young participants, with the researcher asking the children to initialed section when it was understood. At both the interviews and survey, participants were assured that their information and responses were to be kept confidential. Ethics approval was granted from the Wilfrid Laurier University Research Ethics Board (REB# 3724) before any data were collected.

Data Analysis

Utilizing the principles of phenomenological research and inductive data analysis, the researcher aimed to determine patterns of statements, meanings, themes, and general descriptions of the experiences that explored the research questions stated earlier. Interview responses were collected through the Windows 8.1 Sound Recorder program (Microsoft Corporation, 2013) and transcribed verbatim through a transcription service¹; field notes were maintained by the researcher for all interviews. In field notes, the

¹ The researcher experienced a mild-traumatic head injury (concussion) during the data collection period and was unable to perform the transcriptions. As a result, a secure transcription service was utilized to complete the transcriptions of the interviews. All identifying data from the audio recordings were removed prior to the transfer of the data to the service, in order to protect participant privacy. The use of the transcription service was approved by the WLU Research Ethics Board (REB).

researcher generally noted any particular emotional, body language, and changes in tone of voice that a participant elicited while being interviewed. For example, it was noted during one interview with a child that he became excited and spoke faster when discussing his favourite video game.

After the transcription of the interview recordings, transcripts were sent to the participants in order to perform member checks of the interview transcripts. Member checks were used to enhance the trustworthiness of the data. Interview transcripts were summarized by the researcher to provide a concise description of the experiences of each child, parent, and coach participant during the *ARK* programming, as well as creating a general experience description of children and their parents participating in the structured outdoor physical activity.

Data were first classified into three domains that aligned with the objectives of the research project for the children and parents: (a) reasons for enrollment, (b) reviews of the *ARK* program, and (c) perceived behaviour changes from program. An additional domain was established for the parents that discussed the perceived factors that influenced their outdoor physical activity participation. A secondary level of analysis evaluated specific common themes (e.g., positive and negative program features, perceived changes to parents' behaviours etc.) that arose during the process. The third level of analysis utilized individual quotations to support the domains and themes that

were identified for children and parents. A comparison occurred between the parents' perceptions of the child's experiences and the child's experiences to denote if any similarities or differences occurred. A final analysis was done of the coach's interview where their reflections on the program produced three domains that were supported by individual quotations.

Credibility of the data was assured through the use of triangulation when themes identified by the primary researcher were confirmed by the secondary researcher. Through deliberation and a deductive analysis between the two researchers, statements were either confirmed as being under the correct theme or if a new theme was needed. At times, phenomenological research may require the researcher to bring in their own personal understandings of an experience in order to aid in interpretation, however, the researcher must know when this is appropriate (Creswell, 2013). In this sense, the researcher aimed to separate her own assumptions on the program, from the data analysis, although at times the researcher needed to bring those experiences into the analysis to help with comparisons in participant experiences, clarification and to establish interpretive validity (Maxwell, 1992). As well, member checks were conducted with the participants after the transcription of interviews. The children's transcripts were sent electronically to the parents and it was requested that the parent review the transcript with the child to ensure that the researcher had accurately captured the child's experiences. During the member checks, participants were given the opportunity to

clarify, edit or omit data from their transcripts. Parents were asked to review their own transcripts, noting any changes they would like to have made, as well as confirm if the themes the researcher identified were interpreted correctly. The use of field notes to record changes in participants' mannerisms during the interview process also enhanced descriptive validity (Maxwell, 1992), as it allowed for the participants' statements to be contrasted with their actions.



Results

Results are presented in the following order: (a) demographic commonalities between participating families, (b) interview participant profiles, (c) an examination of children's responses, (d) an examination of parents' responses, and (e) an evaluation of the coach's reflections on the *ARK* program

Demographic Commonalities between Participating Families

The demographic surveys showed that 96% of parent respondents had completed post-secondary education, with 35% having one or more graduate-level degrees. As such, it was assumed that most of these individuals came from middle to upper socio-economic status families based on previous evidence that individuals with more education are more likely to earn higher incomes, and thus more likely to participate in organized activities that require a registration fee and equipment (Prins, 2012).

Three of the families interviewed had participated in *ARK* sessions prior to the fall 2013 session. It was interesting to note that most families had at least one parent that ran regularly for exercise and/or competitive purposes. Outside of *ARK*, the majority of the children took music lessons and swimming lessons. Four of these children had at least one sibling; however, the sibling(s) did not participate in *ARK*. Almost all the participants stated that when they were active together as a family, they were often outside. The backyard and local neighbourhood were frequent settings for such activities.

Interview Participant Profiles

Child participant profiles.

Aiden. This energetic eight-year-old male enjoyed playing tag-based games with his family and friends. He was new to *ARK* in the fall and also participates in recreational hockey and soccer. He has an older sister who participates in competitive sports year-round.

Brianne. This busy child was a ten-year-old female who is active in competitive sports and other organized activities. She is an only child. This participant has been involved with *ARK* since its initiation in the Waterloo area and now participates in the “*ARK-ATTACK*” program, which is directed towards older children. She is an avid reader, often reading on her way to and from activities.

Chloe. A shy eight-year-old female who participates in several outdoor organized activities. She has been involved with *ARK* since its initiation in the Waterloo area and is looking to be involved in the “*ARK-ATTACK*” program when she is older. She can often be found playing with her family’s dogs at their local park.

Declan. An intelligent twelve-year-old male who enjoys running to stay active; however, wishes he was taller, so he could be better at football. He joined *ARK* this year and also competes in children’s robotics competitions. He is interested in pursuing electronics in post-secondary education.

Ethan. This child was an eight-year-old male who plays recreational and competitive hockey. He joined *ARK* this year and is looking to join the program again. His family's trampoline in their backyard is central to most of his unstructured physical activity.

Parent Participant Profiles.

Angela. Angela was a forty-three-year-old female with a university degree. She and her husband have two daughters, with her youngest participating in *ARK* (Chloe). She took up running within the last year and is working towards completing a ten kilometre road race. In her family, they have a rule that each child can only participate in one organized activity at a time, to ensure they maintain a balanced family schedule. Their dogs seem to be central in helping to provide physical activity to each family member.

Bernadette. This parent was a forty-year-old female with a university degree. She and her husband have two children, a son and a daughter, with the son participating in *ARK* (Aiden). She is a busy mother, who tries to balance her work demands with her family's needs, often at the expense of her own physical activity time. In her family, they are often busy throughout the year with their older daughter's competitive sports. However, they enjoy being active together, often within their own home or neighbourhood.

Colin. Colin was a forty-year-old male with a university degree. He and his wife (Bernadette) both participated in the interviews, along with their son, Aiden. He is an active individual as a runner and plays hockey throughout the year.

Darryl. This parent was a forty-three-year-old male with a university degree. He and his wife have one daughter (Brianne) who participates in *ARK* and a variety of other activities. In the last three years, he has taken up running, particularly on the trails. The family is very involved in the *ARK* program and both parents are on the program's "board of governors" and also volunteer as coaches at the sessions. The family members are all avid readers.

Eric. This parent participant was a forty-nine-year-old male with both a college diploma and university degree. He and his wife have three children, two sons and a daughter. Their oldest son (Declan) participated in the *ARK* program. He is an avid runner and enjoys training for both triathlons and marathons.

Felix. The parent was a fifty-year-old male university professor with a PhD, who specializes in the area of environment and culture. He and his wife have two sons, with the youngest participating in *ARK* (Ethan). He is very involved with both of his sons' hockey and soccer teams as a parent-coach and plays hockey himself.

Coach participant profile.

Adam. This *ARK* coach was a thirty-six-year-old male who runs competitively. He joined *ARK* as a coach during its initiation year and has been with the program for three years. He and his wife have an infant daughter.

Evaluation of Children's Perspectives

Three domains of interest are highlighted in Figure 6. A second level of data analysis produced themes in each domain, which is also illustrated in the figure below. Direct quotations from the third level of analysis are not displayed in the figure, but will be utilized to support the identified domains and themes.

Figure 6: Interview results from the children summarized into domains and themes.



Reasons for enrollment.

Past activity experiences. The children believed that their past activity experiences influenced their decision to join the program. For example, the majority of the children felt that their enjoyment of running activities influenced their decision to join the program:

“I am good at running and I have done a few 5k’s and runs. So I figured it is going to be fun.” – DECLAN

“Because I like running outside. I don’t like running on the road.” – CHLOE

“I like to run, so I thought it would be fun.” – BRIANNE

“Because I really like to run. I play tag and manhunt a lot in school and I usually win.” – AIDEN

One child also commented that he felt that other “traditional sports” were not his “thing”:

“Well I did football but well [chuckles] since I am a little bit smaller, I wasn’t, it didn’t really even out, cause most of the kids on the team be like six foot four [laughs], and I would be sitting at the bottom staring up at them. Really wouldn’t be my thing, I played at school but...I like soccer, it just, I didn’t

really think of it as my thing. I tried it, I loved it, but I didn't really think it was my thing. I wasn't good at it." –DECLAN

Program recommendations. All of the children stated that the program was recommended to them, either through a friend or family member. The majority of the children felt that their parents made the final decision to enroll them in the program, although one older child describes how he, not his parents, made the decision to participate in ARK:

"Well I was actually told about it by one of my parents' friends, they did a mud running-event, there was a lot of obstacles, so I thought that would be cool, so I was looking up children's versions of that... It was pretty much me [who made the decision to sign myself up], then I asked my parents, "Is it ok that I do this?" and they said, "Go ahead"." –DECLAN

Program Evaluation.

New skills and learning environment. All of the children interviewed had at least two comments pertaining to the skills and learning environment of the ARK program, with the vast majority of comments being positive. For example, most of the children felt that the program was more than just about running:

"...I love the running aspect of it, I like the way they always have little activities to add on to it." –DECLAN

"I really like how they really test like endurance and it has something else.

And it was new every day." – AIDEN

"I really like the things we do there, like the navigation. Cause I know that

some of the other running camps they don't do navigation and stuff" –

BRIANNE

It was interesting that all of the children enjoyed the interactive learning environment provided at the program. As one child stated:

"I like the fact that it is really hands-on, it is not one of those kind of things

that you sit back and watch. It is not really you are sitting down and watching

and do what you do the entire time, they just explain it and you just do it

[chuckles]." – DECLAN

A frequent comment was on the use of games to practice or learn skills in this interactive environment, as highlighted by these two children:

"...we get to play Capture the Flag and fun stuff like that." – ETHAN

"Well, we do sometimes play games and, it's all running-related, we like to

go through the bushes, we crossed rivers, and we have gone in a lot of mud

[chuckles]." – BRIANNE

The children also liked aspects of the mastery environment created in the program. For example, one child liked how they were able to be responsible for tracking their improvements each week:

"[I like] the way that there's different groups... sometimes you have a partners and you try to time yourself and then you get little slips to see what your times are." – CHLOE

Nature setting. Children also described their enjoyment of the use of nature in the program:

"My favorite thing was the first day as we ran in the lake." – AIDEN

"...the mud is, it really adds to it." – DECLAN

"... there is like a change of scenery [outside]. If I was just on a treadmill I would probably get bored after a while." – BRIANNE

Perceived gains or behaviour changes.

Confidence building. New feelings of confidence in abilities were felt by the children. For instance, this child spoke to the feelings of sureness that she now experiences when in a forested setting:

"I used to not like going into the woods but now I feel confident now that like I know that like some animals that I used to think that like might come out like let's say rabbits will come out and I wouldn't know what they are when

it's darker but now I actually know that rabbits are actually afraid of me." –

CHLOE

These new feelings of assertion in the forest also translated to several children becoming more interested in going outside, exploring more, or using their new skills:

Well it has [changed the way I feel about physical activity]. I didn't like running as much before I started, but now it's like a lot more fun. 'Cause there is a lot of different things you could do. So some of them I didn't know about but now that I have done ARK, I do that sometimes." – BRIANNE

New social connections. Children also described the increased social connections they felt from the program:

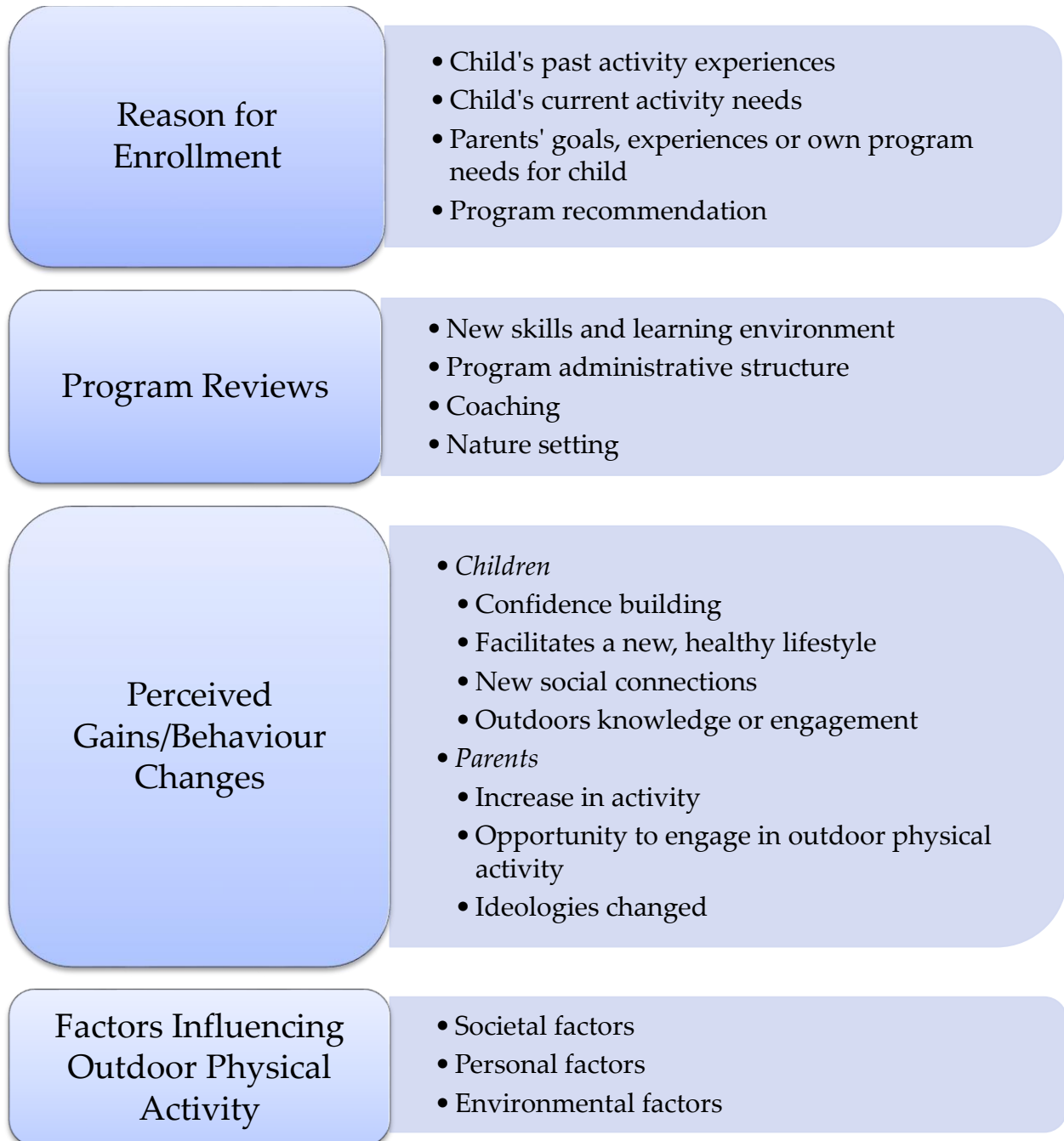
"Well I have made some friends there, so I like to see them again, cause, I don't know if I see them other than [at the program]." – CHLOE

Evaluation of Parents' Perspectives

In this section, parental interview findings will describe the three domains that represent the objectives of this study and were analyzed based on the children's responses as well. An additional domain that was not distinguished in the children's responses will also be addressed (factors affecting outdoor physical activity). The domains are highlighted in Figure 7. Once again, a second level of data analysis yielded themes in each domain, also illustrated in the figure. For the third level of analysis, which

is not displayed in the figure, direct quotations will be utilized to support the identified domains and themes. Some themes from the children were confirmed by the parents,

Figure 7: Results from parent interviews were grouped into four domains: reasons for enrollment, program reviews, perceived gains or behaviour changes and factors influencing outdoor physical activity. A second level of analysis categorized the data into themes.



while some differences were displayed between the two generational groups.

Reason for enrollment.

Child's past activity experiences. Parents often chose to enroll their child in the ARK program based on their child's past activity experiences. One of the participants reflected on a general trend that he had observed among the families that participated in the program. He noted that many of the families had been unsatisfied with traditional structured sports for their children:

"...it seems that though, there are fair number of them have tried out traditional routes and it kind of had their children not fit great for that. So they've been looking for different things as well." –ERIC

Parents who participated in the interviews often cited the latter trend in Eric's quote as reason behind their decision to enroll their child in the program. One parent commented on her daughter's dislike for traditional "ball-sports":

"She's been trying lots of different little activities and she's not big on the ball sports. She likes the running part. So, we had looked into the Kitchener-Waterloo track club, but they have age-starts and all that stuff and she was a little bit younger than that at the time. So we found out about this and we thought we'll give it a shot." –ANGELA

Similarly, parents also enrolled their child because their child enjoyed running or playing unstructured games that involved running. As one parent describes:

"[My child stated] "I just want to play tag" [laughter]. So, this was the closest things we could find I guess. And it worked out." – COLIN

Child's current activity needs. A majority of the parents chose to enroll their child in the ARK program based on certain needs that they believed their child wanted from an organized activity. One parent suggested that the ARK program would provide his child with more outdoor navigational skills:

"It's something that a lot of kids don't get these days. They are much more sedentary, they tend to be navigate by GPS before they navigate by stars or by compasses." – FELIX

Another parent commented on what he perceived as his child's need for a more interactive activity:

"We've had him in soccer and hockey...he just loses interest. He just wants to just go and he will go. He doesn't want structure and stuff as much. So he didn't do well in that stuff, but the ARK, where it's, he could go run and stuff, he enjoyed it." – COLIN

Parents' goals, experiences or own program needs for child. Several of the parents stated that their own interests or programming needs were also reasons behind enrolling their child in the ARK program. It was felt that the ARK program could help with their desire to have their child be more active outside:

"We know that it is a good thing for him to do, we want him to be active, we want him to enjoy being outdoors and being physically active." – FELIX

Similarly, another parent suggested that enrolling his child in ARK would help him be exposed to more outdoor physical activity:

"It's pretty bad if you have play dates and the kids all they want to do is come over and play video games and stuff. That is not what it used to be, it used to be going outside and playing ball hockey or grabbing a mitt and playing catch or something. So, enrolling him in those activities is almost the way to go nowadays cause that they just don't do it on their own anymore." – COLIN

Another parent described how he and his wife's current involvement in certain activities influenced their decision to enroll their daughter in the program:

"My wife and I sort of started trail running a little bit more, so we were outdoors and we thought that would be kind of a neat thing for her to do that's similar but kid-focused." – DARRYL

Program recommendation. A final theme that emerged in the parents' reasons to enroll their child in the ARK program was that the program was recommended to them in some way. Three of the parents cited that these recommendations were through "word-of-mouth" or when their child joined a friend in the program during the program's "Friends and Family" nights:

"...a doctor at my work suggested the ARK program, where it is more interactive and we tried and he loves it." – BERNADETTE

"He was a guest because he came over with a friend and he just really enjoyed it and seemed to respond, we didn't think he would be a kid that liked to run but he did." – FELIX

"It was a friend at work who runs as well who mentioned that there was this thing that used to be I guess they were doing it in Niagara and Hamilton and that they were going to be piloting it in Waterloo." – ANGELA

Program evaluation.

New skills and learning environment. Positive comments about the skills and learning environment cultivated at the program reflected the parents' satisfaction with the program. Parents highlighted that the ARK program did not only provide running practice and skills, but also lent their child other areas of knowledge. Parents also

commented on the different skill sets they believed that their child was gaining from the program:

"...with the outdoor component of it, and because there's also the orienteering and it's just not a focus on running. It is core and things to make you stronger so you can run better. She's really picked up on that and she really enjoys that." – ANGELA

"I like the fact that they are learning about navigation and stuff, like, how to use a compass, how to use maps. There's the physical education kind of component. So they're kind of getting in shape..." – DARRYL

"...this is just the very idea of the modern day orienteering activity, learning a little bit about navigation. Learning a little bit about move through a space, get from point A to Point B, think about how you are getting there, notice things in your surroundings." – FELIX

Another parent highlighted that the diversity in the program delivery provided a "game-like" environment that engaged her child:

"I like that it's diverse, he's not just running. [Aiden] loves to play tag. So it is almost like tag is incorporated in it [laughter]... I think it engages him. There's a lot of stimulation, there's lots of, he gets to find flags; he gets to chase people." – BERNADETTE

Parents also provided comments regarding the mastery learning environment of the program where their children were able to compete against themselves to achieve their personal best:

“He liked testing himself, he could run against himself, or he can run against the other kids and stuff. And he really enjoyed that...in ARK he was always focused and he liked to run against himself and he kept all the time sheets and stuff. He was just, he saw how well he was doing and that really motivated him.” – COLIN

One parent distinguished the difference between the mastery environment at ARK and the other organized sports his child participated in:

“So that is nice, so everyone is out there having a good time, and there is less pressure to be the fastest guy or quickest guy. And from time to time he will brag about what he is able to do but he gets a good different sort of the non-competitive nature of it...Which can happen in team sports, but sometimes again there is a little more, you know, if you are playing hockey, “How come I didn’t get my shift? It is too short.” or “Why do I have to play defense?” you know [laughs]. There doesn’t seem to be that kind of thing.” – FELIX

Another subtheme that emerged among parents was their positive comments on the opportunities for interactive learning that the ARK programming provided:

“...they kind of go off in teams and they’re off through the forest, sort of with their team trying to find their checkpoints. And so, they’re actually a fair bit independent that way...Like, skiing they get there and you know they kind of, they do their certain number of their runs, and they work on certain techniques in skiing and this is kind of, you know, kind of out in the woods, and they’re running through the mud sometimes. So it is kind of more, they try to make it a little bit more fun I think, so the learning kind of comes as they’re doing the fun stuff, so at least that, I think that is cool. So they try to keep it more game-oriented, like more fun.” – DARRYL

Program administrative structure. The next major theme that emerged related to the delivery of aspects of the program, including overall organization. Parents generally commented that they felt the program was well-structured, such as in the quotation below:

“I thought it was set-up really well.” – COLIN

Parents also positively remarked that they felt that ARK had a less-structured feel to the program, when compared to other organized activities their children participated in:

“It was more, like it was, you know, organized but not, I guess in quotes, ‘organized’, so to speak, you know. There’s more of a of looser feel to it, a

feeling that there's more common sense involved in it as oppose to strict guidelines that you would have for a track meet type-of-thing. And for the age that she's at right now, it's kind of a better feel as well, because you're really just, you know, getting your physical bearings at this point." – ANGELA

One parent, however, did differ with the other parents' trend in that he felt that it was a highly-structured activity, but did praise the program for having the potential to generate his child's interest in running and the outdoors:

"...if he can generate that interest in himself, I mean we would rather he do this than force himself to go outside and run around. It is very structured activity." – FELIX

Almost all of the negative comments or program suggestions were with regard to the program administrative structure:

"It's a little bit chaotic at the start and at the end. So, I'm one of the coaches there as well. So, I always worry, that, you know, some of the kids kind of disappear and because there's like, there's like two sessions to 5:30-6:30, there is a lot of kids in each. And that cross-over time, especially, there's all kinds of kids around, parents and cars in the parking lot. So, you get a little nervous there, but what else? That's probably it, actually..." – DARRYL

“Perhaps having a greater linkage with more competitive runs. I know that it is on the website, I guess, but perhaps even trying to encourage the children into particular event, you know, on a given weekend. And you know, arranging let’s say for a meeting time, you know, kind of creating more of a network for the families maybe?” – ERIC

“...if there is anything else that could bother me with the exercises, I can’t really remember what it is. It is probably one or two things exercises I didn’t like that particular day. I didn’t feel like... they didn’t end up being fun.” – DARRYL

“And yeah I always found it is almost there’s not enough time to sort of do anything....especially with navigation, where it is a bit time consuming to try to teach kids to read a map and what to look for on a map and to get to checkpoints. So, I don’t know if a lot of them are really picking up that navigation stuff, they’re just kind of following coaches a lot of times through point to point, without really sort of looking through the map. Whereas, in the hour-long ARK-Attack [program for older children his daughter was involved in] where they are doing a single activity, they have a bit more time to focus on particular task where they learn, you know, can make mistakes,

cause they have the time to make mistakes and correct them and things like that.” – DARRYL

“...my only criticism from having been there since they started that is the size of the group, has really changed the dynamic of the learning for the kids...so when the groups get larger, it gets more unruly. When they started out the groups were I would say probably between a dozen and 18 each week, and now you just got this blossoming, a number of kids. Which is hard to keep control of.” – ANGELA

Coaching. Several parents highlighted the high-level of parental coaching involvement in the program:

“ARK seems to encourage, you know, anyone that comes along to do the run, to be involved in it too. All the families, I think, are definitely are very focused on involvement for their kids.” – ERIC

“I like that they have definitely enough volunteers there that keeps everyone in line and safe, and so, that is good.” – COLIN

Generally, comments about coaching seemed to praise the high-quality of leadership from the program coaches, who also coordinated the parent volunteers:

“And then as soon as we met [the coaches], it’s like “These guys are great!”. They were really, you know, pushing the kids I guess to really push their own limits... they are fantastic, I really like the ability to let the kids to get out there and do it.” – ANGELA

“My wife and I both like the seriousness of the guy who runs it. He seems to have got it down to a science in terms of how to keep the kids interested and come up with ways to vary the pace and have different things going on each week.” – FELIX

It was suggested, however, by some parents that program delivery could be lacking when it came from a parent volunteer-coach:

“And with any organized sport you are going to have discipline that needs to be...you need to be firm but kind, (laughter)...I would say it is heavier with boys. And I noticed when there are male leaders there, the male leaders tend to pull it together. Like they are able to be like “Hey! Quit jacking around and let’s focus”...And they are depending on parent volunteers to help with those numbers, right?” – ANGELA

“...the only thing we don’t like about it is just the reliance occasionally on other parents for leadership and handling the groups. Most of the time, the people who volunteer are great. The ones who do volunteer are obviously into

it but occasionally you get people who don't seem to really realize that they've got 5, 6 or more kids. They are running, they don't seem... if they lost one of them out there, they might not notice. That is what happened a couple of times. So it is true in anything where you have your kids and you are relying on other people. It is the quality of coaching that you are usually concerned with. In most cases it is great, occasionally there has been a few instances where we were like "ok"..." – FELIX

Nature setting. Most of the parents cited that the outdoor setting was one of the main aspects they liked about the program:

"It was fresh air." – ANGELA

"...I like all kinds of things. They are outside first of all..." – DARRYL

"We like the particular places that they have gone to, Bechtel Park, Waterloo Park, in Kitchener. There are very interesting areas to explore, woodland areas that maybe you wouldn't see if you were just an urban dweller. And we had the occasion to go up there ourselves, so I liked that." – FELIX

Perceived gains or behaviour changes seen in children.

Confidence building. The strongest theme that emerged in this domain was that almost all of the parents believed that their child gained confidence in their abilities in some way from being involved in the program. These new feelings of confidence were

perceived to be demonstrated in their child through several different behaviours. For example, parents felt that the program helped their child become more willing to try new activities:

"...her confidence has really grown. I would say as well, the change in her behaviour that has been positive in that she is more willing to try things that she wouldn't have before..." – ANGELA

"...[Aiden would] typically respond to anything that's a challenge with, "no thank you, no thank you". So that's been really exciting for us [that he is wanting to try an adventure race]... he has never shown an aptitude towards something that he really enjoys, but now he's willing to try other things." –

BERNADETTE

Likewise, parents felt that the ARK helped their child become more interested in other activities that they were already in such as physical education class or piano lessons:

"...he has taken more initiative in his gym at school. So I keep asking him "how is gym going?" he would say "Oh it's great Dad!", whereas he didn't care about it before." – COLIN

"...he has been in piano lessons twice and has quit. And he actually started piano again after ARK and he is doing very well." – BERNADETTE

Parents also commented on their child's new level of independence after participating in the program:

"...just a lot more confidence and competence in being on her own and being able to figure things out is the most positive aspect." – ANGELA

This new-found confidence seemed to also trigger some motivation for the child to further develop their skills, such as described by this parent:

"I think it kind of boosts his confidence a little bit. Not that he is not good with any other sports, he just lost interest and I think when he loses interest he just doesn't focus and he doesn't come with the outcomes that he wants. But in ARK, he was always focused and he liked to run against himself and he kept all the time sheets and stuff. He was just, he saw how well he was doing and that really motivated him." – COLIN

Another parent also remarked that he felt that his child gain a feeling of physical mastery over himself:

"I think he is gaining a sense of his own capacity to move quickly through those spaces." – FELIX

Facilitated a healthier lifestyle. Another theme that emerged, was the parents' feelings that their child began to lead a healthier lifestyle. This was discussed in terms of

finding a program that fit their child's physical activity needs and which led to additional benefits:

"It's her thing. And it doesn't matter if it's raining or snowing, it doesn't matter if it's minus 8 or 28, she wants to go." – ANGELA

"...we are just so ecstatic that he has found something he enjoys and that he wants to do...we have tried him in multitude of activities and there's never been that spark, that interest. So I think we are just ecstatic we want to bring him, we want to challenge him, so that is exciting too." - BERNADETTE

"...I think they're all good in their own way, certain kids go to certain sports or activities and this was just his thing." - COLIN

Further comments were made by parents who felt that the program educated their children about how to lead a physically-active lifestyle, such as:

"[I think my child is gaining knowledge] that fitness is part of lifestyle. It's not something you do in gym, it is kind of taking things out of context..." – ERIC

Parents also felt that the program helped their children be more active, both during and after the conclusion of the program:

"...I think he does seem to run a little bit more. I noticed just when we are doing stuff outside, or maybe going to school, he will break into running. I think he is a little more... confident in his running. I get the sense that he probably feels himself to be a runner than he did before." - FELIX

"Actually [Aiden] wants to run! He runs in the treadmill now, which he has never done before. He goes to the track with his sister and dad, and then will run laps. Not for long period of time. But before ARK, he would not do it." -

BERNADETTE

"When he was in ARK he was, I think, more active overall. Like he enjoyed it so, he would come jogging with me. My daughter does dry land at Activa once a week, so last night he and I went for a jog, which wouldn't have happened before but now he's enjoying it more." - COLIN

New social connections. ARK provided a social outlet for the children as perceived by the parents. One parent described how the structure of the program created social opportunities for the children throughout the sessions:

"Yeah, I mean in that sense even though it is not a team sport, there is a lot of room for social activities, socializing and collaborative work, I suppose you might say, out in the trail." - FELIX

Consequently, several of the parents cited new social connections or benefits to their child's current friendships from the program:

"It is brought him a little bit closer to a friend that has moved out of town, so initially that is kind of, you know, a bit of an appeal too, for him to do it with a friend who is not particularly active. So it sort of got them away from video games as well, and it is given them an hour together, it probably spurred on activities that they do together too. So a greater link of friendship. They did the, what do you call it, the Spooky Run at Bingeman's Park the one weekend together. And I think probably that wouldn't have happened had it not been for, you know, ARK as well." - ERIC

*"He actually met a friend in ARK and they want to run a race together..." -
BERNADETTE*

Outdoor knowledge or engagement. As highlighted previously by parents, the ARK program facilitated knowledge beyond strictly running abilities. The ability to understand traditional navigational systems sparked further interest in several children:

"[It was] a positive thing for her, especially being able to, okay, here, here are my guide points, what do I do now? Okay, I'll look it up on this map, and try to suss it out with a friend, right? You've got a partner that's like "no we should go..., no, no, we should go this way [laughs]. And so there's kind of

like that team aspect, but also that skill aspect of that too, that I was shocked that she could actually do that.” – ANGELA

“I think she’s definitely gained the ability to read maps, which is, I mean, she is still only 10 so it’s obviously not perfect. And maps are sort of an abstract thing for kids to grasp. She’s actually pretty good with it. And I think, so I think with that navigation, sort of, I think it does help with her confidence.”

– DARRYL

Many parents felt that their child gained more of an overall appreciation of nature after the conclusion of the program. This was sometimes expressed as a greater engagement in the outdoors or through their child choosing to be outdoors more:

“...he seems to be interested in going outside and poking around in the woods. I mean, we have a cottage up in Michigan and we would like to go around and look around and stuff you can do in trails. And he’ll complain if its long distance but he is sort of engaged in a way that might not have been before so much... I think he is getting an appreciation for being outside in wild spaces, which urban kids don’t often get.” – FELIX

“She wants to be outside more. She wants to be outside more, regardless of the weather...” – ANGELA

Personal gains or behaviour changes perceived in themselves.

Increase in activity. Many of the parents identified behaviour changes in their physical activity after they enrolled their child in the ARK program. One parent described how the program influenced her to be more active after her daughter had become involved with the program:

"I would say that when we were starting to get into the ARK thing, my husband was encouraging her to do some road races...I was the photographer and the cow-bell and that was great. But at the end of it, my husband mentioned it, she was having problems with and I had to give her a poke. I could tell from her non-verbal that she doesn't want to disappoint my husband...I am looking at more from the aspect of his form of encouragement is a little different than what I would do. Then I thought, children model themselves against the same sex parent and I am the one taking photos. So I said to her, he wants her to do a 5k and I said to her "Would you do 5k if I did it with you?" and she said "Yeah!" and I thought "Oh I have committed (laughter) crap!". Not that I am not an active person, it is just that the whole idea of the kilometers idea and all of that stuff was a change for me, but positive. I started just before last Christmas and was able to do the 3k in the spring, 5k in the summer and I'm doing 8k in February. And looking at 10 plus now..." – ANGELA

Other parents used the time that their child participating in ARK was in to conduct their own physical activity:

"I just drive him [to the sessions]. That is the thing that motivated me to run, it was far for me to go there, come home and go pick him, so I stay there and run. It is good." – COLIN

Parent's or the family's involvement in outdoor physical activity. Parents had the opportunity to become volunteer coaches, where they would lead the children through the forest and other activities. One parent described how he and his wife's involvement with the program affected their own outdoor physical activity behaviours:

"...both my wife and I kind of act as volunteer as coaches for it. And we're on, I don't know what they call it, the board of governors, or whatever. So, we have meetings and discuss how to improve the program. Yeah, just going to sort of the different events, kind of mingling with people that have similar interests more. Which we hadn't really been exposed to other people with those similar interests. I think for us, we've kind of noticed a bit of a change. So, we're generally that more apt to go to spend time outside than we would have been." – DARRYL

One parent described how the program facilitated more outdoor physical activity participation for the whole family:

“We’ve become a little more outdoorsy since we’ve kind of gotten involved in it. And so, kind of all three of us as a family, we’re doing more outdoor stuff. Like, we got snowshoes now in the winter. Now we go out snowshoeing. You know, kind of just getting out into the forest, and things like that, which we all really quite enjoy.” - DARRYL

Ideologies changed. Interestingly, many parents described how the program changed their ideologies about traditional organized childhood activities:

“It sort of forced me to look a little bit outside the traditional activities thinking that there is something...I think that probably there is a greater opportunity to link things. Like to find unnatural links rather than traditional links. Like there’s always skills to develop for skating, but to try to find other, more interesting ways to improve their agility, their speed, their stamina, you know...” – ERIC

One parent felt that her daughter’s new confidence after being in the program, made her feel differently about letting her daughter conduct activities in their neighbourhood by herself:

“We are very close to our school that she goes to and there is a big park and all that stuff. And she is like “Can I take the dog to the school park?”. And we have a Lab, so I’m thinking, well, she is fairly slender build and what if

the dog were to chase a squirrel, whatever, that type of thing. I used to be "should I let her do that?" but now she is looking at...her confidence has really grown." – ANGELA

Factors influencing outdoor physical activity.

Parents were asked about where, when and how they and their family members tended to participate in outdoor physical activity. They were then asked to reflect on what factors they thought influenced their own and family's participation outside.

Societal factors. Most of the parents cited overall time constraints as the main deterrent participating in outdoor leisure activities. A parent described their children's organized activity demands a factor that lessens the amount of time they have available to be outside:

"I think it is time. And it's activities, whether we are off somewhere. Often, I find as the kids get older, we are often pulled in different directions. So it used to be easier when they were younger, 'cause we would have that free time in the evenings. But, unfortunately, the summer sports, my daughter's activities tend to be Tuesday, Wednesday, Thursday, so we are not able to do that. That is a big deterrent too. And in the winter, we're gone for ringette usually out Saturday or Sunday, so we are not able to do the things that we want." – BERNADETTE

A priority was also given to scheduled activities first, leaving less time for spontaneous activities:

"...when they are all in something organized it is difficult to do impromptu type of activities, cause there still is a tone of stuff that needs to be done. ...as kids we saw but have gone on the way-side because of an increased organized focus." – ERIC

Personal factors. Five subthemes emerged as individual factors that influenced whether the parents and their families chose to participate in activities outside. The majority of these factors, however, were mentioned as positive motivators for the individuals. Two parents described that they felt an "innate need" to go outside:

"You just feel better when you're done. We spend, my husband I, because we work in an office environment, we spend so much time inside, that you just feel like a caged animal by the end of the day. You are ready to shake it off, and my mother used to have this phrase...when you been inside too much "get outside, go blow the stink off" she would say...and outside we go, being outside feeling like...It is like a release. You crave it." – ANGELA

"I think it's kind of innate. I have always been pretty active and always wanted to be outside." – COLIN

Other parents described having dogs and using them as ways to be active outside:

“Walking around the neighbourhood with the dogs [is where we tend to be physically active the most]” – ERIC

Another parent explained how he believed role modelling influenced his family’s decisions to be active outside:

“And I think it is kind of a learned thing. And the kids want to be outside. It think if we were in the house all the time on the computer, they want to do that too. It’s just a learned thing, we just find that more enjoyable to be outside and active.” – COLIN

This parent described how she enjoys and chooses to participate in outdoor leisure activity, as it gave her and her spouse time together:

“...[her children] will say “can we go to the dirt heap?”. There is this huge mound that is grassed over, so they will go tripping up there, up and down, you are shaking sand out for weeks [laughs]. That would be a normal thing for us to do. It gives my husband and I time to chat together, minus the children.” – ANGELA

One parent perceived that gender differences influenced his family members’ decisions towards outdoor physical activities:

“I think one of the differences is the guys like to play hockey. We can do that, we can go skating together outside. Sort of gender difference makes a difference too.” – FELIX

Environmental factors. A final theme that emerged was the influence of weather conditions on the parents’ or their family’s decision to be active outside. Most of the time, cold weather was a deterrent for most families to go outside:

“Less active, definitely, in the winter. None of the three kids particularly love winter. They love the first four weeks of it and then it is old... Everything is wet from the last time, they kind of fizzle out [laughs]...I think it is bad role-modeling for me though because I am not going outside!” – ERIC

All parents stated that they tended to be active outside during the warmer months and generally within their local neighbourhood or around their house:

“In the summer time, for all of us. We drag everybody outside to walk the dog and to this place at the far end of our neighbourhood...” – ANGELA

Generally, parents and their families tended to stay indoors more during the winter than the warmer months. As a family when they were outside, they mostly conducted outdoor leisure activities together, for example:

“So, I would say mostly it’s probably in the spring and fall when we’re actually doing ARK stuff [is when we’re most active outside]. And then in the summer when we go camping and do all the hiking and things like that.”

– DARRYL

Most of the parents claimed they would be active outside in the winter, however, only if the weather was conducive to outdoor winter leisure activities, such as expressed by this parent:

“If there is a lot of snow, we will go up there with our toboggans, or whatever they call them now, and go up and down the hill and the dog with chew it and run away with it [laughs].” – ANGELA

Coach’s Reflections on the Program

When interviewing the ARK program coach, three domains were established in the findings. These are highlighted in Figure 8. There was no second level of data analysis, however, direct quotations will be utilized to support the domains.

Figure 8: Results from the coach's interview.



Growth of the program. Adam felt that there had been significant growth in the program since its initiation three years ago. He described a low turnover rate in the families involved in the program:

“...parents really like it. Definitely. The parents that come back again, they like it and that is why they keep coming back. So you see it now where the kids have been in the program from the beginning or kids that are starting to come back, some turnover, but there is a great chunk of the people [who return].” – ADAM

He found that during the last year of the program, they have been running at a maximum-capacity for participants, particularly since they changed one of their park locations to southern Kitchener. The program has enjoyed the large enrollment numbers and has expanded its registration openings to include more children in the current spring sessions. Adam explains, however, that the amount of registration openings they can offer is dependent on the number of volunteer coaches they can attract to help with the program:

“...it is hard to open up spots without volunteers. That’s what started to happen that first year—we were scrambling on who is going to do the coaching. It was very easy to get the parents to come out and hang out with their kid for an hour, but it is a lot tougher not to hang out with their kid but

to go stand in the woods and coach one of the disciplines. And we now have definitely a number of parents that we rely on...who are volunteering to do it.” – ADAM

Community reception and support. Similarly, there has also been growth in community involvement over the last few year:

“...we are starting to see members of the community show up, who have no affiliation, and heard about the program and want to get involved.” – ADAM

The community’s support has also been reflected in the program’s ability to obtain park locations over the last few years:

“...having been involved with STARS, which is an orienteering club, probably more for adults, to get permission to do stuff or permission to access land, it is one of [the STARS program’s] toughest things. It is definitely a lot easier when you are explaining that it is a kids’ program [ARK] and suddenly it is for the community, so the doors open a lot quicker.” – ADAM

Experiences of families in the program. Adam suggested that many of the parents who enrolled their children in the ARK program had a desire to see their child become more active in general. He described seeing many of the children enjoying the program, but not necessarily realizing that they, themselves, were being active and how

some parents became involved in the program and it resulted in the family unit becoming more active:

"...you do see a few individual cases where the father and the mother are volunteers to be with their child and suddenly now the family is being active, where they weren't before...I think of a very specific example in my head where the daughter said to the dad, "Come on Dad, it is time to run for the warm up" and dad went "Oh, so Daddy is going to run now?" and he wasn't planning on running. He was definitely overweight, and that only is a positive, starting to run with his daughter." - ADAM

Adam felt that parents were not fully understanding of the nature of outdoor activity. He described how parents still felt that the program should be weather-dependent and cancelled on bad weather days. He recognized that there is still room for growth in parental perception of outdoor activity:

"...seeing that we go in almost all weather — we go late in the fall and we start in March—I think you see a lot of "my kid can't" and "you can do this stuff in other times of the year" and stuff like that. So that is a big piece of it. Parents who wouldn't have thought [to let] their kids go run in the woods in March are now letting them." – ADAM

Discussion

The purpose of this study was to examine the experiences of families involved in the *Adventure Running Kids* program. This examination was based on the participants' reasons for joining the program, their evaluation of the program, and any perceived behavioural or skill gains from the program. There was also an analysis of what the parents perceived to be factors that influenced their and their family's decision to participate in the outdoor physical activity. Additionally, an analysis of one of ARK's coach's reflections on the program's growth, community reception, and participant experiences was also presented. Several distinct themes emerged in each of the domains for the parents and children, leading to a discussion of this program with regard to communities, families, children, and outdoor physical activity. This study was one of the first to evaluate the experiences of children and their families in organized outdoor physical activity. A summary of key findings of this study are listed in Table 2 in Appendix D.

Several parents and children stated that their initial awareness of the program arose from recommendations, often where their child was invited by a friend to try an ARK session. This finding supports previous research that found that a child's friends' activities influenced the physical activity choices a child made, which is often through co-participation, peer verbal encouragement, or modeling by another child (Russell, Brockman, Fox, Cartwright, Page & Thompson, 2009).

Both parents and children also reflected on a need to find an organized activity that fit their or their child's needs, especially if their child had been unsuccessful in other organized sports. This is consistent with previous research in that children often discontinue participation in organized sport when they feel they are no longer having fun or do not feel that they are competent enough in the activity (Mulholland, 2008). Non-traditional sports have been suggested to be perceived as more enjoyable by children, as they allow them to demonstrate competency in other skills, without competition, and may improve long-term participation levels (Allender, Cowburn, & Foster, 2006). In the researcher's opinion, the *ARK* program may be a viable and complementary structured program to satisfy parents' need to provide organized physical activity and learning experiences for their children, especially if their child does not prefer "traditional" activities. It can also act as an additional opportunity for children to learn transferrable physical literacy skills and confidence in the natural world.

The mastery environment established at *ARK*, described by parents and children, may further contribute to increased enjoyment of the activity and continued participation. This is consistent with previous research and theories on the effects of feelings of accomplishment, self-efficacy, and continued physical activity behaviours (Lox et al., 2010). Children also stated the coaches' use of games to teach skills was enjoyable and motivated them to further participate. Such approaches to teaching skills, especially in children, have been documented to increase the mastery motivational

climate and amplify enjoyment of physical activity programs (McNeill & Fry, 2011). “Games-approaches” to teaching physical activity skills have been documented in recent years as a preferred approach in sport education models and by children (Gubacs-Collins & Olsen, 2010). Furthermore, increasing a child’s responsibility in their own skill learning, such as what was described by participants at *ARK*, can also increase motivation to participate and further skill-enhancement (Gubacs-Collins & Olsen, 2010; Stafford, 2011). *ARK*’s style of coaching delivery seemed to align with contemporary coaching and teaching methodologies and, thus, likely helped to motivate participants.

Some of the criticisms by the parents of the program were with regards to the parent volunteer coaching. Issues surrounding the qualification of coaching is not an uncommon one, as many youth sport organizations primarily rely on volunteers to help coach and run programs (Barber, Sukhi, & White, 1999). The perceived coaching efficacy by a volunteer coach can impact their role as a leader and mentor to youth in a sport setting, especially if the coach believes that they do not have adequate training or previous experience (Kowalski, 2008). Many parents highlighted that, at times, some of the volunteer coaches were perceived to lack expertise in coaching skills, which sometimes led to discipline issues and less opportunities for skill development for the children. A difference in the perceptions of coaching ability between youth and parents and that of the coach can lead to negative coach-athlete relationships (Paiement, Hedstrom, & Porecca, 2008), potentially leading children to discontinue with that activity

(Perry, 2013). Evidently, it can be suggested, then, that the *ARK* program administrators provide more adequate training and preparation for these volunteer coaches.

It was found that *ARK* seemed to have global motivational benefits associated with participation. Parents, children, and the program coach all cited positive changes in physical activity behaviours, which sometimes extended to other behaviours and ideologies. For children, *ARK* was perceived to facilitate skills that were transferable to other areas of life and further outdoor leisure activities. This may be a useful solution to the problem where youth are withdrawing from organized sport in adolescence and having little skills to transfer to “lifetime” physical activities, such as hiking, biking, and canoeing (Lox et al., 2010). Parents also found that their children seemed to have increased confidence in their abilities and independence, which may contribute to children becoming more motivated to try new activities. This was also reflected in parents’ increased comfort levels with perceived risks in their neighbourhood, enabling their child to participate in unstructured physical activity in their local neighbourhood, independent of adult supervision and contrary to contemporary parenting ideologies. Carver, Timperio, Hesketh and Crawford (2010) found that perceived social-environmental risks (e.g., crime, weather etc.) by parents led to them constraining their child’s behaviours in the local neighbourhood and, ultimately, decreasing the amount of spontaneous outdoor physical activity and play. Outdoor play has been associated with

increased activity and enjoyment in children (Brockman, Jago, & Fox, 2011; Mygind, 2007; Rehrer et al., 2011).

Interestingly, parents also cited that the program may have contributed to changes in their own physical activity behaviours. *ARK* seemed to be a central point that either gave parents an opportunity to be active (through using the park facility to walk or run while their child was in the program or by volunteering as a coach) or motivated them to become more active, especially outside. Previous research has also found that children's programs may help to increase physical activity levels in parents, when the parent has an active participating role in the program (Morgan et al., 2011).

Parents were asked to reflect on the factors that they felt influenced their own and their family's choices to participate in outdoor physical activity. The parents' reflections on this align with Davison and Birch's (2001) model, in that there are many complex and multi-layered factors that can influence a person's decision to participate in outdoor physical activity. In this sense, it was not surprising that a relationship between the individual, their sociocultural setting and the environment surrounding arose in the parents' reflections. Examples of this were a perceived lack of time due to societal demands and various adverse weather conditions, which were the most frequent deterrents to the parents and their families' participation in outdoor physical activity. Both factors have been cited in general physical activity and health behaviour research as

a barrier to engaging in positive health behaviours (Lox et al., 2010). Precipitation has also been negatively correlated with outdoor physical activity in adolescents (O'Neill, Lee, Yan, & Voorhees, 2011). It was noteworthy that the families did suggest that they would participate in outdoor physical activity in the winter if there was snow available, which made some winter activities (e.g., snowshoeing, skiing and tobogganing) possible. A previous meta-analysis by Chan and Ryan (2009) suggested that snow can increase the amount of physical activity by some individuals, particularly fit male subjects in the northern US and Canada, which was applicable to many of the *ARK* fathers in this current study. Dogs were also mentioned by several parents as a key feature in their family life that encouraged them to be active outside in their neighbourhood. Multiple studies have demonstrated that dog owners tend to be more active than those without dogs, due to the necessity of having to walk or play with the pet (Christain nee Cutt, Giles-Corti, & Knuiman, 2010; Lail, McCormack, & Rock, 2011; Thorpe et al., 2006).

The *ARK* coach commented on the growth and support of the program in both the Kitchener-Waterloo community, as well as other chapters in Southern Ontario. As previously stated in the results section, the program has experienced considerable growth in the Waterloo Region, while also experiencing low-turnover rates in returning families. The *DONTGETLOST* organization (the umbrella organization for *ARK*) as a whole, has also experienced increased popularity over the last decade and now boasts seven different program locations for *ARK*, including two new venues for the 2014 season

(Golden Horseshoe Orienteering, 2013). Community support for outdoor recreation programs has been shown to be a factor in the increased participant satisfaction, engagement and connections within a community (Crompton & Witt, 1997; Sallis, 2006).

Despite the benefits and community support of such an activity, it appeared that this activity may still be missing the mass population. All of the families in this study had parents who had completed at least one post-secondary degree or diploma, making this a highly-educated population that is likely aware of the current trends in society. To the researcher's knowledge, no previous literature exists specifically on parents' education level and the amount of outdoor physical activity in which their children participate; however, previous research (Gordon-Larsen, McMurray, & Popkin, 2000; Jiménez-Pavón et al., 2012; Active Healthy Kids Canada, 2014) does suggest that parental education-level is positively correlated with organized sport participation in children. Furthermore, Canadian families with highly-educated parents are more likely to come from a higher socioeconomic status (Government of Canada, 2008) and have better financial means to provide organized sport and physical activity opportunities to their children (Active Healthy Kids Canada, 2014; Mo et al., 2005). Consequently, it may be difficult to establish if this is a program that has been marketed to families of different socioeconomic statuses and/or if this program is only attracting certain families.

Additionally, the locations of the *ARK* programs seemed to be located in affluent neighbourhoods, often near a university or college. For example, Churchill Park is used for the Hamilton branch and it is located near McMaster University. Other communities, such as Oakville, Milton and Caledon, are known for having wealthy residents (Cain, 2013). While more research is needed as to why these programs have been located in such affluent neighbourhoods, it could be speculated that this may be linked to higher perceived community safety, which has been associated with outdoor physical activity and recreation (Gómez, Johnson, Selva, & Sallis, 2004; Shinew, Stodolska, Roman, & Yahner, 2013; Tester, 2009).

The transferability of such a program to the larger mass population remains an opportunity for *ARK* administrators. Adventure therapy programs have been shown to have positive effects on special populations (Jelalian, 2006; Tucker, 2013) and children and families from low-income neighbourhoods (Swank, 2010). However, it is still not known if outdoor physical activity programs would have similar positive-behaviour outcomes in such populations. Unfortunately, this research was unable to explore the experiences of children with special needs or from low-income families, as there were no participants that were explicitly from either of these two groups. It is speculated that programs such as *ARK*, could have increased benefits to these populations, however, the accessibility of outdoor physical activity programs to these individual may be more challenging. Little investigation has been on the costs-benefits of outdoor physical

activity programs to such populations, and, as a result, more research is needed in order to understand the applicability and marketing of outdoor physical activity programs to the mass or special populations.

Parents also acknowledged that society is leaning towards an increased reliance on organized physical activity. This is consistent with previous research by multiple researchers (e.g., Salmon & Timperio, 2007). Coupled with twenty-first century parenting ideologies that prescribe constant supervision and “over-rearing” of children (Rutherford, 2011), it is not surprising that parents are paying to have their children run through the forest. Parents can still maintain a sense of supervision in this structured outdoor running activity. Organized physical activity participation has increased to 75% of Canadian children (Active Healthy Kids Canada, 2014), suggesting this structuring of outdoor physical activity is consistent with contemporary society trends. As stated in a recent report by Active Healthy Kids Canada:

“We have engineered spontaneous movement out of our kids’ daily lives, and believe we have made up for this by providing things like dance recitals, soccer leagues and physical education classes. Canadian parents have been conditioned to look to structured activities and schools to get their kids moving.” (Active Healthy Kids Canada, 2014, p. 14)

ARK did attempt to combat this problem of perceived barriers to outdoor physical activity. Parents, children, and the coach reflected that the program did help to encourage them to increase their physical activity outside, either as an individual or a family. *ARK* also appeared to increase the self-efficacy of these individuals to overcome various barriers to being active outside, by increasing confidence in abilities, and further spurring individuals engage in new activities and more spontaneous outdoor physical activity. This need was highlighted in previous literature. More outdoor physical activity programs are needed for youth and families in the society that effectively build confidence in and engage participants, while integrating physical activity and meaningful experiences in the nature (Flett, Moore, Pfeiffer, Belonga, & Navarre, 2010). Making programs, such as *ARK*, available to families, may, on a larger scale, decrease perceived barrier to outdoor physical activity and foster a greater appreciation of nature and park spaces.

Limitations

Similar to any research, this study has several limitations. First, there was only a small population of parents recruited to fill out the demographic questionnaire at the initial contact point. This resulted in a smaller number of individuals to recruit for interviews. As such, the research may not be completely representative of the population who participated in the fall *ARK* programming. For example, there were no interviewed participants that had an overall negative experience with the program, so there was

limited criticisms about the programming. Also, the participants that were interviewed may have had positive biases about *ARK* as many of them were searching for an organized physical activity program that fit with their child's needs. After witnessing their child's success and enjoyment with a physical activity program at last, they may have responded more optimistically about the program in comparison to other parents who simply enrolled their child in the program as a way for their child to augment their skills. Furthermore, with the small initial numbers for interviews, the researcher decided to lower the age requirement of the child participants from ten years to eight, in order to establish a larger participants. Previous research has mentioned that it is more difficult for younger children to articulate their experiences in interviews (Fargas-Malet et al., 2010), and, evidently, some information regarding experiences may have been missed from the younger children. Unfortunately, as well, four interviews were lost, due to technological failures, further decreasing the participant number for final results. Two *ARK* formal coaches were asked to participate in the research study, however, only one coach responded to recruitment communications and completed an interview. This made it difficult to compare and contrast the experiences of coaches in the program, as only viewpoint was recorded. The quality of the data collected was sufficient enough to develop a general description of the experiences of families in the program, however, the small numbers may have limited the number of developed themes within the data. Therefore, subject saturation may not have been met from parents, children, or coaches.

While satisfied that the themes are legitimate, they may not have represented all of the thoughts that could be expressed by children, parents, and coaches involved in the *ARK* program, and therefore it can be difficult to establish internal generalizability (Maxwell, 1992) of the data.

Recommendations and Future Research

It is recommended that future research employs a larger recruitment of participants in order to more accurately compare and contrast the experiences of families in adventure running programs. This could be done through electronic methods, such as an online recruitment survey given to participants when they register, as opposed to the face-to-face recruitment methods used in this study. With the growth of the *ARK* program in several communities, it is suggested that sample size could be further increased by including members of all the various chapters of this program.

It would also be beneficial to expand the research to other outdoor physical activity programs for children, perhaps in more diverse communities, to better determine the effects of these programs on individuals and communities. For example, how would an outdoor physical activity program be experienced by children and families in lower-income neighbourhoods? In addition, barriers and marketability of the program to other populations needs to be evaluated. This would help to determine what types of families these programs are attracting and what may be limiting other families from enrolling

their children in such a program. For example, is it a question of awareness or perhaps accessibility to the program facilities?

Longitudinal research evaluating the behaviours and knowledge of individuals before they engage in these programs and the effects these outdoor physical activity programs may directly have, would be beneficial. This may enable future researchers to better understand how engaging in outdoor physical activity programming could change physical activity patterns over time and long term.

Finally, applications of this research could extend towards creating outdoor physical activity programs in the education system as well as through community centres. This could potentially reach more children, especially if they come from special populations. As previously mentioned, questions surrounding the cost and benefits of such programs does need to be addressed in order to provide possible accessibility solutions at the environmental and policy level. Targeting policy makers may help to promote such programs through subsidization and allow for the greater ease of access to the mass population.

Conclusion

Outdoor recreation in nature has been linked to several health benefits including increased social opportunities (Bird, 2012), decreased symptomology in behavioural and mental disorders (Fabor Taylor & Kuo, 2009), buffering the effects of health inequalities in high-risk neighbourhoods (Mitchell & Popham, 2008), and enhancing the cognitive development of children (Kellert, 2002). Contemporary society, however, has created a fear of the natural world (Glassner, 2010), which combined with the increasing convenience of technology for entertainment, many individuals, especially children, are not experiencing nature or being active outside (Carver, Timperio, Hesketh, & Crawford, 2010; Louv, 2008a).

This study has been one of the first to qualitatively examine the experiences of families in a structured outdoor physical activity program (*ARK*). Semi-structured interviews were conducted with children, their parents, and an *ARK* coach who participated in the fall 2013 *ARK* session. Participants in this study came from highly-educated, dual-parent, and active families. Results indicated that parents and children chose to enroll in this program based primarily on past physical activity experiences and recommendations. Parents, children, and the coach perceived that the program benefited the families involved by changing their physical activity patterns and encouraging more participation in outdoor leisure activities. Parents also cited several societal, personal, and environmental factors that determined whether they would participate in outdoor

physical activity. This study provides preliminary evidence for the benefits associated with involvement in the *ARK* program.

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Appendix A





**Wilfrid Laurier
University**

75 University Ave. W.
Waterloo, ON

Background Questionnaire Consent Form

An Exploratory Examination of Children Engaging in a Structured Adventure Running Program

Heather Isnor
Principal Investigator

Dr. Kim Dawson, PhD
Department of Kinesiology and Physical Education
Wilfrid Laurier University

You are invited to participate in a research study designed to evaluate the lived experiences of children in structured outdoor physical activity (ARK). The principal investigator of this study, Heather Isnor, is associated with the Wilfrid Laurier University and a student in the Masters of Science in Physical Activity and Health program.

INFORMATION

This research study has two components. As a parent of a child participating in the ARK program, you are asked to complete a background information questionnaire that will ask you about your family's physical activity preferences and pursuits. The questionnaire will take about ten minutes to complete and can be completed while your child participates in their ARK session or you may select to take the questionnaire home and return it at next week's ARK programming.

The second component of the study involves the gathering of additional information regarding the ARK program from you and your child in separate interviews. Interviews for adult and child participants may last between forty-five to ninety minutes. Parents will be asked questions about their family's activity habits, their own physical activity choices, why they chose to enroll their child in ARK and their perceptions of their child's experiences through ARK. Child participants will be asked about their experiences in ARK, their indoor and outdoor physical activity choices outside of ARK and things they feel influence their participation in outdoor physical activity.

At the end of the questionnaire, you have the opportunity to indicate your willingness to have your child and yourself engage in the interview process. If you are willing to be contacted to schedule an interview, please provide the necessary contact information. Based on your

response, although you may indicate your willingness, you may not be contacted to be interviewed.

RISKS

There are minimal risks associated with participating in this study; however, participants may feel a loss of privacy after disclosing information about their past physical activity experiences after discussion with the interviewer. Participants may feel regret over the revelation of personal information to the interviewer as well as feeling dissatisfied about their past physical activity experiences after discussion in the interviews. Participation in the interview process may disrupt normal family routines; however the interviewer will accommodate with the participating family's schedule to minimize inconveniences. Also, parent/caregiver and child participants may experience feelings of boredom while waiting for either their parent/caregiver or child to finish being interviewed.

BENEFITS

The findings from this research study will help to assess the role that outdoor structured activity plays in the lives of children. Results of the study may help to generate better programming, not only for the immediate ARK program, but also for other children's outdoor physical activities.

CONFIDENTIALITY

Participants' confidentiality and anonymity will be ensured in this study. Raw data from this study will only be accessed by the principal investigator and the research supervisor. All participant information will be kept in a secure location in the Department of Kinesiology and Physical Education at Wilfrid Laurier University. Data will be transferred to a secure electronic database at the completion of the study and all hard copies of information will be destroyed. Only group demographic information will be presented and without any individual identifying markers. Direct quotations from participants may be used in the study write-up and/or in presentations, however only with the participant's review and permission. Participants will only be referred to using a participant number; no real names or other identifiers will be used. All efforts will be taken to ensure that those quotations will not identify the participant.

CONTACT

If you have questions at any time about the study or the procedures, you may contact the researcher, **Heather Isnor** by email at isno9130@mylaurier.ca. This project has been reviewed and approved by the University Research Ethics Board. If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Dr. Robert Basso, Chair, University

Research Ethics Board, Wilfrid Laurier University at (519) 884-1970, extension 4994 or rbasso@wlu.ca.

PARTICIPATION

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any time without penalty and without loss of benefits to which you are otherwise entitled. If you withdraw from the study, every attempt will be made to remove your data from the study, and have it destroyed. You have the right to omit any question(s) or procedure(s) you choose.

FEEDBACK AND PUBLICATION

Results of the research will be utilized to complete the requirements of the Masters of Science program at Wilfrid Laurier University and will be presented during thesis defense procedures. Results of the study may published in peer-reviewed journal. A summary of the final research results will be provided to all participants at the completion of the study in approximately May 2014.

I would like to have a summary of study results sent to me via email at _____.

I would like to have a summary of study results mailed to me at _____.

CONSENT

I, _____, have read and understand the above information. I have received a copy of this form. I agree to participate in this study.

Participant's signature:

Date:

Investigator's
signature:

Date:



**Wilfrid Laurier
University**

75 University Ave. W.
Waterloo, ON

Interview Consent Form for Coaches

An Exploratory Examination of Children Engaging in Structured Adventure Running Program

Heather Isnor
Principal Investigator

Supervised by Dr. Kim Dawson

You are invited to participate in a research study. The purpose of this study evaluate the lived experiences of children in structured outdoor physical activity (ARK). The principal investigator of this study is associated with the Wilfrid Laurier University and a student in the Masters of Science in Physical Activity and Health program.

INFORMATION

As an administrator involved with the Waterloo ARK program, you are asked to engage in an interview process to gather information regarding your perspective of the ARK program. As an administrator involved with the Waterloo ARK program, you are asked to engage an interview process to gather additional information regarding your perspective of the ARK program. Interviews may last between forty-five to ninety minutes in length. We will ask you questions such as why you are involved with this program, your goals for the participants and what factors you feel might prohibit parents selecting this program for their children.

RISKS

There are minimal risks associated with participating in this study; however, participants may feel a loss of privacy after disclosing information about their past physical activity experiences after discussion with the interviewer. Participants may feel regret over the revelation of personal information to the interviewer as well as feeling dissatisfied about their past physical activity experiences after discussion in the interviews. Participation in the interview process may disrupt normal family routines; however, the interviewer will accommodate the participant's schedule to minimize inconveniences.

BENEFITS

The findings from this research study will help to assess the role that outdoor structured activity plays in the lives of children. Results of the study may help to generate better programming, not only for the immediate ARK program, but also for other children's outdoor physical activities.

CONFIDENTIALITY

Participants' confidentiality and anonymity will be ensured in this study. Raw data from this study will be kept in a secure location in the Department of Kinesiology and Physical Education at Wilfrid Laurier University and only the principal investigator and the research supervisor have access to it. Data will be transferred to a secure electronic database at the completion of the study and all hard copies of information will be destroyed after two years. Only group demographic information will be presented and without any individual identifying markers.

Direct quotations from participants may be used in the study write-up and/or in presentations, however only with the participant's review and permission. Participants will only be referred to using a participant number; no real names or other identifiers will be used. All efforts will be taken to ensure that those quotations will not identify the participant.

CONTACT

If you have questions at any time about the study or the procedures, you may contact the researcher, **Heather Isnor** by email at isno9130@mylaurier.ca. This project has been reviewed and approved by the University Research Ethics Board. If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Dr. Robert Basso, Chair, University Research Ethics Board, Wilfrid Laurier University, (519) 884-1970 at extension 4994 or rbasso@wlu.ca.

PARTICIPATION

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any time without penalty and without loss of benefits to which you are otherwise entitled. If you withdraw from the study, every attempt will be made to remove your data from the study, and have it destroyed. You have the right to omit any question(s) or procedure(s) you choose.

FEEDBACK AND PUBLICATION

Results of the research will be utilized to complete the requirements of the Masters of Science program at Wilfrid Laurier University and will be presented during thesis defense procedures. Results of the study may be published in peer-reviewed journals. A summary of the final research results will be provided to all participants at the completion of the study in approximately May 2014.

I would like to have a summary of study results sent to me via email at _____.

I would like to have a summary of study results mailed to me at _____.

CONSENT

I, _____, have read and understand the above information. I have received a copy of this form. I agree to participate in this study.

Participant's signature: _____ Date: _____

Investigator's
signature: _____ Date: _____

I do not want my interview responses used in direct quotations for any study write-ups or presentations.



**Wilfrid Laurier
University**

75 University Ave. W.
Waterloo, ON

Interview Consent Form for Parents

An Exploratory Examination of Children Engaging in a Structured Adventure Running Program

Heather Isnor
Principal Investigator

Dr. Kim Dawson, PhD
Department of Kinesiology and Physical Education
Wilfrid Laurier University

You are invited to participate in a research study designed to evaluate the lived experiences of children in structured outdoor physical activity (ARK). The principal investigator of this study, Heather Isnor, is associated with the Wilfrid Laurier University and a student in the Masters of Science in Physical Activity and Health program.

INFORMATION

This research study has two components. As a parent of a child participating in the ARK program, you are asked to complete a background information questionnaire that will ask you about your family's physical activity preferences and pursuits. The questionnaire will take about ten minutes to complete and can be completed while your child participates in their ARK session or you may select to take the questionnaire home and return it at next week's ARK programming.

The second component of the study involves the gathering of additional information regarding the ARK program from you and your child in separate interviews. Interviews for adult and child participants may last between forty-five to ninety minutes. Parents will be asked questions about their family's activity habits, their own physical activity choices, why they chose to enroll their child in ARK and their perceptions of their child's experiences through ARK. Child participants will be asked about their experiences in ARK, their indoor and outdoor physical activity choices outside of ARK and things they feel influence their participation in outdoor physical activity.

At the end of the questionnaire, you have the opportunity to indicate your willingness to have your child and yourself engage in the interview process. If you are willing to be contacted to schedule an interview, please provide the necessary contact information. Based on your

response, although you may indicate your willingness, you may not be contacted to be interviewed.

RISKS

There are minimal risks associated with participating in this study; however, participants may feel a loss of privacy after disclosing information about their past physical activity experiences after discussion with the interviewer. Participants may feel regret over the revelation of personal information to the interviewer as well as feeling dissatisfied about their past physical activity experiences after discussion in the interviews. Participation in the interview process may disrupt normal family routines; however the interviewer will accommodate with the participating family's schedule to minimize inconveniences. Also, parent/caregiver and child participants may experience feelings of boredom while waiting for either their parent/caregiver or child to finish being interviewed.

BENEFITS

The findings from this research study will help to assess the role that outdoor structured activity plays in the lives of children. Results of the study may help to generate better programming, not only for the immediate ARK program, but also for other children's outdoor physical activities.

CONFIDENTIALITY

Participants' confidentiality and anonymity will be ensured in this study. Raw data from this study will only be accessed by the principal investigator and the research supervisor. All participant information will be kept in a secure location in the Department of Kinesiology and Physical Education at Wilfrid Laurier University. Data will be transferred to a secure electronic database at the completion of the study and all hard copies of information will be destroyed. Only group demographic information will be presented and without any individual identifying markers. Direct quotations from participants may be used in the study write-up and/or in presentations, however only with the participant's review and permission. Participants will only be referred to using a participant number; no real names or other identifiers will be used. All efforts will be taken to ensure that those quotations will not identify the participant.

CONTACT

If you have questions at any time about the study or the procedures, you may contact the researcher, **Heather Isnor** by email at isno9130@mylaurier.ca. This project has been reviewed and approved by the University Research Ethics Board. If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Dr. Robert Basso, Chair, University

Research Ethics Board, Wilfrid Laurier University at (519) 884-1970, extension 4994 or rbasso@wlu.ca.

PARTICIPATION

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any time without penalty and without loss of benefits to which you are otherwise entitled. If you withdraw from the study, every attempt will be made to remove your data from the study, and have it destroyed. You have the right to omit any question(s) or procedure(s) you choose.

FEEDBACK AND PUBLICATION

Results of the research will be utilized to complete the requirements of the Masters of Science program at Wilfrid Laurier University and will be presented during thesis defense procedures. Results of the study may published in peer-reviewed journal. A summary of the final research results will be provided to all participants at the completion of the study in approximately May 2014.

I would like to have a summary of study results sent to me via email at _____.

I would like to have a summary of study results mailed to me at _____.

CONSENT

I, _____, have read and understand the above information. I have received a copy of this form. I agree to participate in this study.

Participant's signature: _____ Date: _____

Investigator's
signature: _____ Date: _____

I do not want my interview responses used in direct quotations for any study write-ups or presentations.



**Wilfrid Laurier
University**

75 University Ave. W.
Waterloo, ON

Interview Assent Form for Children

An Exploratory Examination of Children Engaging in Structured Adventure Running Program

Heather Isnor
Principal Investigator

Supervised by Dr. Kim Dawson

My name is Heather Isnor and I would like to know about your experiences with Adventure Running Kids. I want to know how doing this type of activity has affected you and if such an activity could be beneficial to other children and their families.

I am going to give you information and invite you to be part of this research study. You can choose whether or not you want to participate. I have discussed this research with your parent(s)/guardian and they know that we are also asking you for your agreement. If you are going to participate in the research, your parent(s)/guardian also have to agree. **If you do not wish to take part in the research, you do not have to, even if your parents have agreed.**

You may discuss anything in this form with your parents or anyone else you feel comfortable talking to. You may decide whether to participate or not after you have talked it over with someone. You do not have to decide immediately.

There may be some words you don't understand or things that you want me to explain more. Please ask me to stop at any point and I will take time to explain.

WHY AM I DOING THIS RESEARCH?

I want to find better ways to help children be more active, especially outside. In Canada, children are becoming increasingly inactive and I want to find out more about how children feel about participating in outdoor physical activities. In order to find out how children feel about this activity, I have to talk to children and their families.

WHY ARE YOU ASKING ME?

I am asking children about ARK who are your age, between 10 and 14 years old, and who participate in this program. We are only interviewing children and their parents who participate in Adventure Running Kids.

DO I HAVE TO DO THIS?

You do not have to be in this research if you do not want to be—your participation is up to you, regardless if your parents have signed you up or are also participating in the research. If you decide not to be interviewed, that is fine and you will not be penalized. Even if you say "yes" to participating now, you can still change your mind later.

I have checked with the child and they understand that participation is voluntary _____ (child's initial).

WHAT IS GOING TO HAPPEN TO ME?

I am going to find out more about children's experiences with ARK by asking you, other children, the ARK coaches and your parent(s)/guardian(s) several open-ended questions. There are no right or wrong answers to these questions and you may say whatever you wish to about your experiences. By doing the research like this, I can gather a lot of information about how ARK and outdoor physical activity is being viewed by children and their families.

If you decide that you want to do this, this is what will happen:

1. You and your parent(s)/guardian(s) will have come to the research space at Wilfrid Laurier University for an interview each. Here, you will meet with me and my supervisor, Dr. Kim Dawson.
2. I will interview you in a separate room first and then interview your parent(s)/guardian(s). Your parent(s)/guardian(s) will not be in the same room as you when you are being interviewed. You will also not be in the same room as them when they are being interviewed.
3. During the interview with you, I will ask you twelve questions about your experiences with ARK, what other things you like to do for physical activity, who you like to be physically active with and what you feel influences your decision to participate in physical activity outside.
4. Only the audio from our interview session will be recorded and there will be no videotaping of you or myself.
5. Altogether, you can expect your interview with me to last between thirty minutes to up to an hour.

I have checked with the child and they understand the procedures _____ (child's initials).

ARE THERE ANY RISKS TO ME?

This interview process is considered to be safe and has minimal risks. One risk you may encounter is realizing you had a negative experience with ARK or other activities after we have talked. I will do everything possible to ensure you are not uncomfortable and you are welcome to discuss your interview with a parent or trusted friend. If at any point in the interview process you feel uncomfortable answering a question or continuing on, you do not have to answer or participate.

I have checked with the child and they understand the risks and discomforts _____ (child's initial).

WHAT ARE THE BENEFITS OF ME PARTICIPATING?

While this interview may not directly benefit you at this moment, the findings from this research study will help me to assess the role that outdoor physical activity plays in the lives of children. Results of this study may help to generate better programming opportunities, not only for the ARK program, but also for other children's outdoor physical activities.

IS EVERYONE GOING TO KNOW ABOUT THIS?

I will not tell other people that you are in this research and I will not share information about you to anyone who does not work in the research study; this includes your parent(s)/guardian(s) and fellow ARK participants.

Information about you that will be collected from the research will be put away and no-one but the researchers will be able to see it. Any information about you will have a participant number on it instead of your name. Only the researchers will know what your number is and we will lock that information up with a lock and key. It will not be shared with or given to anyone except my supervisor, Dr. Kim Dawson.

Direct quotations from our interview may be used in the study write-up and/or in presentations, however, I will only do this with your review and permission. All efforts will be taken to ensure that those quotations will not identify you.

WILL YOU TELL ME THE RESULTS?

When I have finished all my research for this project, I will send you and your parent(s)/guardians a written summary of the research and that will tell you about what I learned. Afterwards, I will

be telling more people, at the university and others, about the research and what I found. I will do this by writing and sharing reports and by going to meetings with people who are interested in the work I do. Again, you will not be identified in the study.

CAN I CHOOSE NOT TO BE IN THE RESEARCH? CAN I CHANGE MY MIND?

You do not have to be in this research. No one will be mad or disappointed with you if you say no. It is your choice. You can think about it and tell me later if you want. You can also say "yes" now and change your mind later and it will still be fine.

If you choose to be part of this research, I will also give you a copy of this paper to keep for yourself.

WHO CAN I TALK TO OR ASK QUESTIONS TO ABOUT THE STUDY?

If you have questions at any time about the study or the procedures, you may contact the researcher, **Heather Isnor** by email at isno9130@mylaurier.ca. This project has been reviewed and approved by the University Research Ethics Board. If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Dr. Robert Basso, Chair, University Research Ethics Board, Wilfrid Laurier University, (519) 884-1970, extension 4994 or rbasso@wlu.ca.

You can ask me any more questions about any part of the research study, if you wish to. Do you have any questions?

CONSENT

I have read this information (or had the information read to me) and I have had my questions answered and know that I can ask questions later if I have them.

I agree to take part in the research.

Print name of child _____

Signature of child: _____

Date: _____

OR

**I do not wish to take part in the research and I have not signed the assent below _____
(child's initials).**

I, Heather Isnor, have accurately read or witnessed the accurate reading of the assent form to the potential participant, and the individual has had the opportunity to ask questions. I confirm that the individual has given assent freely.

Print name of researcher: _____

Signature of researcher: _____

Date: _____





Appendix B





Wilfrid Laurier University

75 University Ave. W.
Waterloo, ON

Family Background Questionnaire

Please take a moment to help us understand your child's experience through the *Adventure Running Kids* program by providing us with the following demographic information about you and your family. You do not have to answer any questions you do not feel comfortable with.

-
1. Please indicate your sex: _____
2. Please indicate your date of birth: _____
3. What level of education do you currently hold?
- less than a high school diploma
- high school diploma
- some post-secondary
- college diploma
- university degree
- some graduate level
- Master's / Professional / PhD degree
4. What best describes your family parenting situation?
- dual-parent family
- blended family
- single-parent family
- relative, caregiver or guardian
- foster family
- other
5. Please indicate the ages and sexes of the children in your family (i.e. male (age 8), female (age 10)):
- _____
- _____
- _____
- Please place a star beside the children who are involved in the ARK program.**
6. What best describes your family's place of residence? Please select a **location** and **residence style**.
- within 10 km of city core
- new neighbourhood subdivision
- small town
- rural or remote location
- other: _____
- house
- townhouse/row home
- low-rise apartment
- high-rise apartment
- farm
- trailer
- other: _____
7. Please indicate the types of leisure activities your **child(ren)** participates in on a regular basis **outside of their school and not including ARK**. Check all that apply and please underline the three most popular activities for each child:
- music lessons or bands
- art lessons or activities
- academic tutoring
- environmental activities
- drama lessons or activities
- unstructured activity
- recreational team sports
- recreational individual sports (*includes lessons*)
- recreational dance or martial arts
- drop-in physical activity programming
- board or video gaming
- competitive team sports
- competitive individual sports
- competitive dance or martial arts
- fitness activities (weightlifting, using cardio equipment, yoga)
- other

8. Please indicate the types of leisure activities **you and/or spouse** participates in on a regular basis. Check all that apply and please underline the three most popular activities:

- | | | |
|--|---|---|
| <input type="checkbox"/> music lessons or bands | <input type="checkbox"/> recreational team sports | <input type="checkbox"/> board or video gaming |
| <input type="checkbox"/> art lessons or activities | <input type="checkbox"/> recreational individual sports (<i>includes lessons</i>) | <input type="checkbox"/> competitive team sports |
| <input type="checkbox"/> academic tutoring | <input type="checkbox"/> recreational dance or martial arts | <input type="checkbox"/> competitive individual sports |
| <input type="checkbox"/> environmental activities | <input type="checkbox"/> drop-in physical activity programming | <input type="checkbox"/> competitive dance or martial arts |
| <input type="checkbox"/> drama lessons or activities | | <input type="checkbox"/> fitness activities (weightlifting, using cardio equipment, yoga) |
| <input type="checkbox"/> unstructured activity | | <input type="checkbox"/> other |

9. What setting does your **child(ren)** usually engage in physical activity most often? Please underline response if including different answers for more than one child.

- | | | |
|--|---|--|
| <input type="checkbox"/> indoors at: | <input type="checkbox"/> school | <input type="checkbox"/> home |
| <input type="checkbox"/> outdoors at: | <input type="checkbox"/> a community centre (<i>includes arenas, pools, studios and gymnasiums</i>) | <input type="checkbox"/> fitness centre |
| | <input type="checkbox"/> local park, greenspace or conservation area (<i>excludes playing fields</i>) | <input type="checkbox"/> neighbourhood (<i>excludes parks</i>) |
| | | <input type="checkbox"/> playing fields (soccer, baseball) |
| | | <input type="checkbox"/> other: _____ |

10. What setting does **you and/or you spouse** usually engage in physical activity most often?

- | | | |
|--|---|--|
| <input type="checkbox"/> indoors at: | <input type="checkbox"/> school | <input type="checkbox"/> home |
| <input type="checkbox"/> outdoors at: | <input type="checkbox"/> a community centre (<i>includes arenas, pools, studios and gymnasiums</i>) | <input type="checkbox"/> workplace |
| | <input type="checkbox"/> local park, greenspace or conservation area (<i>excludes playing fields</i>) | <input type="checkbox"/> fitness centre |
| | | <input type="checkbox"/> neighbourhood (<i>excludes parks</i>) |
| | | <input type="checkbox"/> playing fields (soccer, baseball) |
| | | <input type="checkbox"/> other: _____ |

11. What setting does **your family** usually engage in physical activity together most often?

- | | | |
|--|---|--|
| <input type="checkbox"/> indoors at: | <input type="checkbox"/> school | <input type="checkbox"/> home |
| <input type="checkbox"/> outdoors at: | <input type="checkbox"/> a community centre (<i>includes arenas, pools, studios and gymnasiums</i>) | <input type="checkbox"/> workplace |
| | <input type="checkbox"/> local park, greenspace or conservation area (<i>excludes playing fields</i>) | <input type="checkbox"/> fitness centre |
| | | <input type="checkbox"/> neighbourhood (<i>excludes parks</i>) |
| | | <input type="checkbox"/> playing fields (soccer, baseball etc.) |
| | | <input type="checkbox"/> other: _____ |

12. If applicable, when does your family usually participate in outdoor physical or leisure activities? Please check all that apply.

- spring summer fall winter year-round

Thank you for completing this survey. At this time, we would like to ask your permission for you (and/or your spouse) and your child to participate in separate interviews at times convenient to you about your experiences with Adventure Running Kids.

All interviews will take place at research facilities at Wilfrid Laurier University during mid-October to late November on weekday evenings or weekends. Interviews will be recorded using an audio device and transcribed verbatim for further analysis. All information will be kept in a secure location at the research facility.

You are not required to enroll your child in an interview and they may withdraw from the interview at any time. For more information, please contact the primary researcher, Heather Isnor, at isno9130@mylaurier.ca.

Would you be willing to have us contact you to schedule an interview for you and your child?

Yes

No

If yes, please provide the following information. The researcher will contact you at a later date to arrange a convenient interview time for you and your child(ren).

Your and/ or your Spouse's _____
Your Child's Name _____
Your Child's Age _____
Phone Number _____
Email _____
Any Other Contact _____

Thank you for your participation!

Appendix C





Wilfrid Laurier University

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Waterloo, ON

Interview Guide for Child Participants

Participant Demographic Information

Child's gender:	Child's age:	New to ARK this year?	Number of years with ARK:	Sibling in ARK?	ARK Session in:
_____	_____	_____	_____	_____	_____

INTERVIEW QUESTIONS

1. Why did you choose to join *ARK* this year? Have your reasons changed as the season went on and how so?
2. Who decided if you will attend *ARK* or not?
3. What did you like about *ARK*? What did you not like about *ARK*? Overall, what did you think of *ARK*?
4. What other activities do you do besides *ARK*? Are you participating in any of these at the same time as *ARK*? What's your favourite activity and why?
5. Where and what do you like to spend your time when you're not in school?
6. Where and what do you like to do to be physically active the most?
7. Where do you like to hang out or play with your friends or family? How has this changed since you've participated in *ARK*?
8. Where do your friends like to hang out or play? Your family?
9. What are your favourite activities to do with your family? Your friends?
10. How do you think *ARK* has made you feel about physical activity overall?
11. How do you think *ARK* has made you feel about the outdoors?
12. Any other thoughts you would like to share about your experience with *ARK*?



**Wilfrid Laurier
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Waterloo, ON

Interview Guide for Parent Participants

Participant Demographic Information

Parent's gender:	Parent's age:	New to ARK this	Number of years	Number of	ARK Session
_____	_____	year? _____	with ARK: _____	children in	in: _____
				ARK? _____	

Interview Questions

1. Why did you choose to enroll your child in ARK this year? In repeat years (if applicable)?
2. What did you like about ARK? What did you not like about ARK?
3. How does this compare with other structured activities that your child participates in?
4. What physical activity behaviour changes have you noticed in your child since they were enrolled in ARK? With yourself?
5. What do you think that your child is gaining from ARK?
6. How does your child normally get to the ARK sessions?
7. What other activities does your child participate in besides ARK and school? Are they participating in any of these at the same time as ARK?
8. What activities do you like to conduct on your own personal time? What activities does your spouse enjoy doing? What activities do you conduct with your spouse? Your children?
9. Where do your children tend to choose to be physical active the most?
10. Where do you and/or your spouse tend to choose to be physical active the most?
11. When participating as a family in physical activities, where does your family tend to choose to be physical active the most?
12. When does your family usually participate in outdoor physical activity?
13. What do you feel is a major influence on whether you and/or your family chooses to participate in outdoor physical activity?
14. Would you sign your child up again for ARK?
15. Any other thoughts you would like to share about your child's experience with ARK or outdoor physical activity in general?



Wilfrid Laurier University

75 University Ave. W.
Waterloo, ON

Interview Guide for Coaches

Participant Demographic Information

Coach gender: _____ Coach age: _____ Years involved
with ARK: _____

Interview Questions

1. Why did you choose to start *ARK*? Have your reasons changed as the seasons have progressed?
2. What is your overall vision about the program? What goals do you have for it?
3. What did you like about coaching the *ARK* programming?
4. What other activities do you do besides *ARK*?
5. How has the program been received by the children, parents and the Waterloo community?
6. How do you think *ARK* has made children and their parents feel about physical activity overall?
7. How do you think *ARK* has made children and their parents feel about the outdoors?
8. Any other thoughts you would like to share about your experience with *ARK*?

Appendix D



Table 2: Key findings from the research study

Parents chose to enroll their child in ARK primarily based on their child's past physical activity experiences, especially if their child had unsuccessful experiences in "traditional sports" and if they also enjoyed running.
Consistent with their parents, children found that their past physical experiences influenced their decision to join ARK.
Parents praised the program with regards to: <ul style="list-style-type: none"> • diverse skills taught and the learning environment; • the delivery of the program; and, • effective coaching from the main ARK coaches.
Children also praised the program with regard to: <ul style="list-style-type: none"> • being able to learn skills beyond augmenting their running abilities; • effective coaching that maximized interactive learning and games; • tracking their improvements; and, • the program allowed them to run through the forest.
Parents were critical of some of the aspects of the program delivery, particularly the reliance on under-qualified parent volunteer coaches.
Parents claimed that the program helped their child build confidence in their abilities and motivation to improve skills, which resulted in: <ul style="list-style-type: none"> • their child being more willing to try new activities after being in ARK; and, • their child conducting activities more independently.
Parents felt that the program helped their child have a healthier lifestyle by providing an organized physical activity that fit their child's needs by increasing activity in the children.
Children felt that they most benefited from the program by becoming more interested in the outdoors and nature.
Parents believed that the program helped their child become more interested in and appreciative of the outdoors.
Children and parents felt that the program provided social opportunities for children outside of their normal social environments (school, home).
Parents felt that it either gave them an opportunity to be active during their child's activity or motivated them to become more active in some way.
Parents also felt that as a result of their child's involvement in ARK, they and/or their family unit was more active outside.
Parents also cited that some of their ideologies changed after their child was enrolled in that they felt more comfortable allowing their child to be active outside in their local community without parental supervision or felt that the program made them re-define their traditional definition of sport.

Parents described several societal, environmental and personal factors that influenced whether they or their family would participate in outdoor physical activity

The program coach described the significant growth in the Waterloo chapter of ARK over the last few years, where they are experiencing low-turnover rates in the families that participate.

The coach felt that the program has generally been well-received in the greater community through the ease of accessing facilities and involvement of the community as volunteer coaches.

The coach described several positive outcomes he felt children and their parents were experiencing from the program including:

- increased physical activity levels in parents and children;
- increased outdoor physical activity participation as a family; and,
- parents felt more comfortable allowing their child be in a forest independently and in different weather conditions.