

Exploring the feasibility and outcomes of an intergenerational physical activity leadership program (IPAL+) using interpretive phenomenology

by

Filomena (Mena) Westhaver  
B.Sc., University of Victoria, 1995

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of the Requirements for the Degree of

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## **Supervisory Committee**

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## Abstract

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Intergenerational (IG) research has been a growing area of study, however, further study is recommended. The intergenerational physical activity leadership (IPAL+) program examined the feasibility of bringing together elementary school students (ESSs), high school students (HSSs), and older adults (OAs) on the playground to teach playground games to ESSs during lunch recess. A mixed methodology was used with concurrent triangulation collecting data through both means of qualitative (n = 26) and quantitative (n = 118) methods. Qualitative data gathering methods included one-on-one interviews, focus groups, and written responses interpreted through NVivo 11, hand-coding, and Colaizzi's seven-step thematic analysis identified four emerging themes: Structure, IG Opportunities, Leadership Opportunities, and Enjoyment. Pre- and post-surveys were completed for quantitative data and analyzed through the statistical program IBM SPSS 24; a comparison of mean scores were examined to measure changes in leadership confidence, intergenerational attitudes, and social connectedness. Significance

was set at  $p < .05$  and discovered that ESSs experienced significant changes in levels of IG attitudes and social connectedness.

Key words: intergenerational relationships, intergenerational programs, physical activity, leadership

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## Dedication

I was raised in a rink. It continues to be my place of solace; my first performance, my first job, and where I met my husband of 25 years. Our boys are being raised in the rink. As a family, we continue to work and play on the ice.

Everything I have done and continue to do has a component of physical activity intertwined within the process. My mind and my body have always been physically active and I hope that my four boys will forever be inspired by my actions.

*Dear Marty, Andy, Jack, and Jake,*

*I did not do this alone. I asked for help. I did not stop when I thought I was stuck. I tried again. I did not fear when I was lost. I trusted.*

*Boys, the world awaits your gifts. My wish for you, is that you each find your 'arena' that brings you peace. Then, open your gifts and share them wisely. I love you to the moon and back. Thank you for your patience. Now, let's go to the cabin.*

This thesis was “rehearsed on the run, and written in the rink”.

## Chapter One

### Introduction

*Through play we attempt to eliminate ages, combine generations, and ignite connectedness; through lived experiences we unveil what happened.*

~ Mena Westhaver

Exploring intergenerational (IG) opportunities and interactions between older adults (OAs) and younger people has been a growing interest for academics, programmers, and practitioners since the early 1970s (Newman, 2003). The increasing curiosity of IG relationships prompted the dedication of an academic journal by award winning (Schulz, R., 2014), Dr. Sally Newman in 2003, *The Journal of Intergenerational Relationships*.

We have become increasingly aware of informal intergenerational relationships within the family; intentional and planned program driven interactions among non-biologically connected younger and older persons; intergenerational approaches to social and community development issues; work opportunities for intergenerational specialists; and, most recently, a developing academic dialogue around an intergenerational field of study. (Newman, 2003, p. 1)

IG research has been attracting attention worldwide and multiple academic journals also acknowledge the work of researchers investigating the many facets of this growing phenomenon; *The Journal of Educational Gerontology*, *The Journal of Geriatrics*, *The Journal of Gerontological Social Work*, and *The Journal of Pediatrics* are examples of journals that support IG research.

Research has shown that bringing OAs and children together to participate in joint programs can be beneficial to both demographics; OAs reported lower levels of loneliness while young children indicated a positive shift in attitudes and perception towards OAs (Bales, Eklund, & Siffin, 2010; Gaggioli, et al., 2014). Teater (2016) found that both the perceptions of OAs by young people and adult's perception of children could improve by bringing the generations together through time, contact, and joint activity participation. Creating a space where people of all ages can enjoy physical activity (PA) and leadership opportunities can be feasible and encouraging for multiple generations (McConnell & Naylor, 2016).

With an aging population, the lack of IG relationships, the psychological needs of OAs, and the perceptions formed between generations are of concern in Canada (Statistics Canada, 2011). Some OAs could experience a loss of connection and feelings of loneliness (Cook & Bailey, 2011). It is expected within the next 25 years that the number of adults age 65 years and older will double and one out of five adults will be classified as a senior (Biggs & Knox, 2014; Weintraub & Killian, 2007) therefore, with an aging population there will inevitably be emerging concerns that require attention.

In addition to an aging population, family structures have shifted separating families geographically. Researchers have found that increased geographical distances between extended family members has resulted in adults seeing their own parents infrequently and their children having to develop long distance relationships with their grandparents (Cook & Bailey, 2011; Morita & Kobayashi, 2013).

The intention of this study was to expand on the first offering of an intergenerational physical activity leadership (IPAL) program (McConnell & Naylor,

2016). The vision of IPAL was the result of discussions between the President of an existing OA activity center (55+ organization) situated within an elementary school, and the University researchers. Identified leaders from the OA center and the elementary school were provided with leadership training to equip them with a repertoire of physically active games and activities to lead on the elementary school playground during lunch and recess. Elementary school students were also trained and led weekly chair aerobics at the OA center and OAs provided a dedicated 'health fair' afternoon; leading three physically active sessions (pickleball, playground orienteering, understanding PA and heart rate, and a healthy eating station).

McConnell and Naylor's (2016) feasibility study revealed that the IPAL model was feasible, although scheduling challenges were experienced in both groups and outcomes were positive; including a positive shift on the playground environment and in IG attitudes. OAs' perception of children improved and children's perception of OAs shifted to be more positive.

As a community recreation coordinator and a graduate student, I learned about the IPAL program. As a recreation professional, I acknowledged the success and benefits of IPAL and recognized the current lack of IG offerings in the recreation department I worked for and within our greater community. An expression of interest was made by my organization to explore the feasibility of including another age demographic of leaders, high school students (HSSs), and to further expand the IPAL program to engage more partners. The result of this expression of interest resulted in the implementation of a follow-up IPAL+ study (hereafter called IPAL+).

The IPAL+ program involved three sites, referred to as ‘tri-pods’. Each tri-pod brought together elementary school students (ESSs), high school students (HSSs), and OAs. IPAL+ included PA leadership training for OAs and HSSs who subsequently trained ESSs to lead physically active games for ESSs - kindergarten to grade five on the school playground during lunch recess. All tri-pods offered an OA/HSS led ‘health fair’ afternoon and one tri-pod (where the high school and elementary school were juxtaposed on a single space) offered student led chair aerobics for OAs at their facility.

In my professional participation in the IPAL+ project, I participated in the development of the expansion program, supervised a tri-pod, I created the equipment boxes for the three sites, and I was involved in the data collection phase including interviews. As the program evolved I was invited to interpret the evaluation of data that was gathered to assess the feasibility and implementation of the expanded model. Accepting this invitation resulted in my Master’s degree research and this thesis.

### **Purpose**

The purpose of this study was to expand on McConnell and Naylor’s 2016 study; “Feasibility of an intergenerational-physical-activity leadership intervention” and examine the feasibility and outcomes of IPAL+ which included ESSs, HSSs, and OAs and engaged three elementary schools, three high schools, and three OA organizations. While health fairs and chair aerobics were components of the IPAL+ program, this thesis focuses specifically on the lunch recess playground leadership component.

## **Research Questions**

1. Is it feasible to bring elementary school student leaders, high school student leaders, and older adult leaders together in a physical activity leadership program (IPAL+)?
2. How were leadership confidence, intergenerational attitudes, and social connectedness affected when elementary school student leaders, high school student leaders, and older adult leaders were brought together in a physical activity leadership program?

## **Choosing a research method**

In keeping with the hermeneutic spirit, which encourages us to acknowledge that we cannot grasp the ‘whole’ of anything until we understand the parts and that we cannot understand the parts until we understand the whole (Noddings, 2011), it was logical that phenomenology be the nature of this study. As both qualitative and quantitative data were collected, an interpretive phenomenology was chosen for the data analysis of the IPAL+ program. Creswell (2008) says, “whereas a biography reports the life of a single individual, a phenomenological study describes the meaning of the lived experiences for several individuals about a concept of the phenomenon” (p. 51). Noddings (2011) acknowledged phenomenon as personal lived experiences. However, differences between the philosophical roots of phenomenology raises methodological issues that influence research intentions and outcomes (Kerry & Armour, 2002).

Heidegger’s philosophical understanding of phenomenology accepts that a person’s history and experiences cannot be bracketed out of a research process and recognizes that a person’s past in fact will be present through the interpretation of the

findings (Kerry & Armour, 2000). Koch (1995) acknowledges that Heideggerian phenomenology embraces the concept that every human experience potentially has an explanation due to the person's background and holds a piece of interpretation in future experiences. I related to Heidegger's (1962) notion of interpretive inquiry, recognizing that my personal experiences as a seasoned community recreation coordinator embedded in the implementation of the IPAL+ program would inevitably be present when analyzing the data collected for this study. Heidegger's philosophy about phenomenology is different from the founder of phenomenology, Husserl (Wojnar, Swanson, & Simpson, 2007), who suggested that all efforts to bracket any pre-conceived opinions must be made prior to data collection or analysis.

I embraced Heidegger's philosophical roots of phenomenology when analyzing the feasibility of the IPAL+ program and reflecting on how the IPAL+ program affected leadership confidence, intergenerational attitudes, and social connectedness of all the leaders because I was aware and acknowledged that my experiences would be present.

### **Theoretical Framework**

Bolman and Deal's (1997) four-frame organizational model was chosen to guide the analysis of the data exploring the overall feasibility of IPAL+ (research question one) because it has been used extensively by researchers worldwide who study in the area of program implementation and sustainability. The four-frame model suggests the need for structural, human resources, political, and symbolic support systems to be in place for an organization or program to be successful. Further discussion about this framework will be provided in Chapter Two.

## Operational Definitions

1. ***Administrator (ADM)***: For this study, ADM personnel were represented by elementary school support staff who supported the ESSs involved in IPAL+, high school teachers who supported HSSs involved in IPAL+, older adult facility coordinators who supported their OA members involved in IPAL+, and a recreation professional who assisted in the coordination of the IPAL+ program.
2. ***Elementary School Student (ESS)***: For this study, the ESS IPAL+ leaders were in grades four and five. For this study, the participant students that were led by an IPAL+ leader were ESSs - kindergarten to grades five.
3. ***High School Student (HSS)***: For this study, the HSS IPAL+ leaders were in grades ten to twelve.
4. ***Intergenerational (IG)***: IG can be defined “occurring between or involving people of different age groups” (Intergenerational, 2017. Merriam-Webster). IG programs provide a space that offers mutual benefits to all participants, promotes awareness and understanding between age groups, and opportunities for relationship building (Hatton-Yeo, 2015).
5. ***Intergenerational Physical Activity Leadership program (IPAL+)***: The IPAL+ program was the intervention used in this study. The program involved mandatory leadership training sessions for the ESSs, HSSs, and OAs leaders. Following their leadership training, IPAL+ participant leaders worked together leading games during lunch recess for kindergarten to grade five students on the elementary school playgrounds.

6. **Leadership:** Leadership is the action of leading a group of people or organization (Kouzes & Posner, 2012). For this study, ESSs, HSSs, and OAs were trained to be IPAL+ leaders and to deliver the IPAL+ program.
7. **Older Adult (OA):** Although the World Health Organization (WHO) defines OAs as a person who is 60 years and over, for the purpose of this study an OA will be referred to as an individual 55 years and older to reflect the age of allowable membership into the OA activity centres that participated in this study. This also supports McConnell and Naylor's (2016) definition of an OA participant as defined in their study as a person aged 55 years and older.
8. **Older Adult Organizations:** There were a variety of 'types' of OA organizations that are referred to in this document; a facility, an activity centre, and a residence all refer to a space where OAs are associated.
9. **Physical Activity (PA):** Physical Activity is a global term defined by movement in the body that involves muscular contractions that notably increases the amount of energy expended (Thomas, Nelson, & Silverman, 2011). PA can be prescribed in a variety of ways. For the purpose of this study, PA was delivered through playground games traditionally referred to as 'old fashion games' led by IPAL+ trained leaders. Examples of old fashion playground games that were played included hop scotch, four-square, Chinese skipping, and chuck the chicken.
10. **Researcher:** For this study, the researcher is a graduate student who also works as a Community Recreation Coordinator. The graduate student researcher (the author of this thesis), supported the Prime Investigator and her Ph.D. student to become one of a three-person research team.

11. **Stakeholder:** Stakeholders of the IPAL+ program included the participating elementary schools, high schools, and OAs' facilities, a university research team, and a community recreation coordinator from a municipal recreation department. The stakeholders for the IPAL+ program were also referred to as 'partners', 'partner groups', or 'partner organizations'.
12. **Tri-pod:** Each location was represented by a tri-pod of participants that included three groups: ESSs, HSSs, and OAs representing the elementary school, high school, and OA activity centre in a specific geographical area.

**Note:** When one of the above words is being referenced in plural form, an 's' will be added to the acronym indicated in the operation definitions. For example: Elementary School Students would be ESSs.

### **Organization of the thesis**

This thesis includes an Introduction, Review of Literature, a Methods section, Results, a Discussion chapter, and an Epilogue.

The Introduction Chapter introduced the researcher, provided background information, stated the purpose of the study, identified the research questions, presented a theoretical framework, listed the operational definitions, and provided an organizational outline of the thesis.

Chapter Two, the Review of Literature, provides an overview of current IG research.

Chapter Three, Methodology, describes the research process that utilized a mixed methodology approach. The research design and data gathering are described for both qualitative and quantitative processes. Trustworthiness, credibility, transferability,

dependability, and confirmability are addressed. This chapter also includes assumptions, delimitations, and limitations.

Chapter Four, Results, provides a detailed description of both the qualitative and quantitative data gathered.

Chapter Five, the Discussion, provides an analysis and interpretation of the results.

Chapter Six, an Epilogue, provides a conclusion, future recommendations for implementing IG program offerings, and closing remarks from the researcher.

## **Chapter Two**

### **Review of Literature**

Current research indicates that bringing together generations of diverse ages can be a positive experience for everyone involved (Bales, Eklund, & Siffin, 2010; Carson, Kobayashi, & Kuehne, 2011; Langer, 2017). Bales, Eklund, and Siffin (2010) found that children used more positive descriptors and less negative adjectives to describe OAs as a result of spending time with them. They also discovered that young children felt they had much in common with the OAs; they had developed meaningful relationships, were sad when the program was complete and the OAs were no longer present and, as a result of their interactions, they looked for relationships with OAs.

However, research also shows that for many reasons IG connections appear to be dwindling in Canada. Many OAs are separated geographically from their children resulting in a decreased opportunity for child/grandchild interaction (Morita & Kobayashi, 2013). Another factor affecting contact between older and younger people is the rise in age of first time parents that has resulted in related grandparents being older too (Sheldon, 2008). Grandparent involvement with grandchildren can be affected due to mobility challenges or health issues such as dementia or Alzheimer's (Christ, Kandel, Robbins, & Stewart, 2013). Research also demonstrates that many OAs, which include grandparents, have busy lives with travel commitments, volunteer obligations, and participation in their own recreation. Consequently, they are not having constant contact with grandchildren (Cook & Bailey, 2011).

With an aging population that is growing older in numbers, Biggs and Knox (2014) foreshadowed that at the current pace of aging, one in five adults would be 65 years or older by the year 2030. As society becomes more aware of this change in the population demographics, there are many considerations that will need attention; the needs of the OA, the exposure of OA interaction with younger children, the opportunities of social engagement within various generations, the perceptions and attitudes that generations have about each other, and the sense of belonging and social connectivity experienced by all generations (Lynot & Merola, 2007). Research on IG perceptions and attitudes and the interventions to shift attitudes are emerging.

### **Benefits of intergenerational opportunities**

A feasibility study conducted by Gaggioli et al. (2014) explored IG relationships to measure changes in depressive symptoms, self-esteem, life satisfaction, and quality of life and the children's perception of OAs. OAs met with children and reminisced about their lives within groups that were made up of two seniors and six to eight children. The authors of this study noted that the positive effect of IG reminiscing had not been investigated thoroughly and therefore, the repeated measure design study might allow for an exploration of relationships between OAs and children and how the perception between these generations might change.

OAs met with school aged children on three occasions for two hours per visit. There were significant improvements in the areas of psychosocial well-being for the OAs, including decreased loneliness and improvements in quality of life. However, there were no positive improvements noted in self-esteem. Gaggioli, et al., (2014) found self-esteem is not something that can typically change in a short period of time and it is often

related to physical ability changes. In conclusion, this study demonstrated some positive effects of integrating young children with OAs as a result of the opportunity for the OA to re-tell (reminisce) about the past while children's perception of OAs improved.

Weintraub and Killian (2007) discovered that OAs experience positive benefits in their emotional well-being when participating in IG programs with younger generations in their community. This qualitative study focused on the perceptions that existed about OA day programs and how IG programs might affect their overall well-being. Weintraub and Killian identified a lack of attention given to the benefits that OAs gain from being involved with younger people and that research often weighs heavier on the effects of IG programs on younger person's perception changes of the OA. Another aspect of this study was the location; data for this study was obtained at an IG center that encourages multiple generations to gather, socialize, work in designated jobs, dance, sing, and form relationships. Participants included 13 OAs between the ages of 65-90 years of age who each had a different level of physical relationship with their children or grandchildren due to the geographical differences of their residences. Interview questions included a focus on emotional, cognitive and physical well-being. Interviews were conducted with the volunteer participants.

The results were shown by contact level between the OA and the young children. Two groups were defined; the 'contact' group were participants that did not choose to participate in the IG programs but would be present while the children were there while the 'engaged' group were fully engaged in the IG offerings. The contact group of OA participants had fewer interactions with the younger generation than the engaged group.

Subsequently, the engaged OA participants reported more positive attitudes regarding the children than did the OAs in the contact group.

There were seven themes that emerged from the data: 1) both the contact and engaged group of OAs felt they experienced an emotional impact due to the IG programming; 2) the contact group highlighted peer support from others and not feeling pressured to participate as key to their experience; 3) the contact group appreciated the optional participation in IG programs and noted that they received enjoyment from watching the children; 4) the contact group also felt that the youth and enthusiasm of the kids increased their emotional well-being; 5) the engaged group commented they felt needed which contributed to their emotions of positive well-being; 6) participant members from the engaged group commented that they felt they had been given a second chance to see young kids grow up; 7) the familial connection was felt by participants in both groups as most did not have their grandchildren close by or did not have grandchildren in their lives. In addition to these findings, members from both groups noted a sense of calm but described in different ways; engaged group participants reported a sense of peace when being around the children and members of the contact group noted that the children created no nuisance and were respectful to the OAs.

Lastly, Weintraub and Killian's (2007) study identified many best practices, however, the three listed below showed to be favourable and beneficial to the participant's level of engagement and enjoyment. (pp. 382-383)

1. The policy of allowing older persons to choose their level of involvement with the children was important to several participants of the study.

2. The policy of referring to older person's volunteer efforts as work communicated to them that their efforts were valuable contributions to the intergenerational community.
3. The practice of referring to older persons as Grandmas or Grandpas seemed to strengthen participants' feelings of familialism.

This study focused solely on the benefits of OA participation in an environment that has an IG program. It also offered a perspective on a different setting design providing a non-aligned space to either demographic, specific to IG programs for the two different generations to gather which ultimately may have impact on the participants young and old.

IG programming has taken on many different forms and has evolved for multiple reasons. Warburton (2014) summarizes the benefits of IG programs to include improved well-being for seniors and highlights the desire of the OA to pass on his or her experiences and knowledge in consideration of caring for future generations. "Increasingly, older people are seeking to contribute to future generations and the betterment of future society through intergenerational programs" (p. 215).

### **Effects of IG programs on children**

Research presently focuses primarily on the positive benefits of the OAs participant in an IG program as noted above. However, Chorn Dunham and Casadonte (2009) in a study that incorporated OAs volunteering in the classroom found that young children need to know that the volunteers are competent and willing to help. These authors implemented the 'Program Serve' project that had senior citizen volunteers integrated into high school and elementary school science classes to see if and how the

perception of OAs might change. They used an experimental design with a comparison condition and measured the factors that could lead to a child or adolescent seeking help from a senior volunteer pre- and post-program while controlling for gender and age. The analysis showed that the experimental group had a significantly greater positive shift in attitudes towards OAs compared than the control group. Those with more positive attitudes about OAs were more likely to approach an OA for assistance and students in elementary school were more positive than those in high school. Gender did not influence the results.

The authors noted that children expressed the desire to be reassured that the OAs wanted to be present in the classroom and that they actually liked children. The researchers suggest that an introduction of the OAs and the school children would be helpful prior to OAs being engaged in a setting and a role where they are present to assist young children.

A study by Bales, Eklund, and Siffin (2010) explored the perception of OAs formed by school-aged children. This qualitative study examined diary entries made by three different classes of students that spent varying amounts of time with designated 'elders' (OAs). The authors concluded that younger students that were in the grade two and four classes had a significant positive change of attitude towards their older counterpart. The perceptions of the grade five students did not change significantly but they did not spend as much face to face time with the OAs. This study suggests the more time young children and OAs spend together, the greater the positive change in perceptions of OAs by the children. The authors identified four emerging themes from diary analysis. These themes described: finding a lot in common with the elders,

developing meaningful relationships, sadness when visits were over and looking forward to their next time together, and proactively trying to maintain a relationship with their elders. This study provides some answers to the question, “does an IG program improve the perception that younger children have of elders?”

### **Effects of IG programs on older adults**

Researchers have discovered that OAs report feelings of isolation, loneliness, low self-esteem, and a sense of being detached from their own community (Goll, Charlesworth, Scior, & Stott, 2015). IG opportunities have been showing positive effects on OAs in their overall well-being and will be increasingly critical as our population ages (Watts, 2017). Watts explored IG arrangements in community and concluded that providing ‘multigenerational’ learning spaces proved beneficial for multiple generations.

Withnall, (2017) identifies many ‘missing-links’ of IG programming that require attention moving forward to benefit all participants. The author draws attention to cognitive aging recognizing that cognitive ability changes over time and is affected by age and life experiences such as cancer treatment, while neuroscience can provide us information about the ability to learn. Withnall (2017) emphasizes that a methodological framework is required for ongoing success and within this framework a specialized training program provided for individuals working within IG programs would be vital for those individuals to be equipped with the knowledge, understanding, and training to work with the aging brain. Allied to this, it would benefit teachers, trainers, and facilitators of intergenerational learning if findings from cognitive psychology and, in particular, those from neuroscience concerning learning processes and how they may change over the life

course could be incorporated into both initial training and as part of any continued professional development. (Withnall, 2017, p. 11)

### **Barriers to intergenerational programming**

One challenge that has existed in IG programs historically is prioritizing the needs of one age demographic over the other. Dellmann-Jenkins (1997) discovered that there was often a lack of consideration of OAs when IG programs were developed and offered. The emphasis of many of the programs were child-centered due to the belief that it was important to educate and change attitudes of young people toward OAs. She wanted to ensure that both OAs and pre-school aged children benefited from IG programs. She proposed a seven-step senior-centered model that attended to the needs of both the OAs and the children involved in an IG program experience. The seven-steps (pp. 500-503) include:

1. Conduct orientation sessions for both older adults and children prior to actual contact.
2. Encourage the older adults to identify creative, vocational, daily living, and hobby skills they would like to share with the children.
3. Conduct training sessions for staff who will be in charge of facilitating the intergenerational exchanges.
4. Incorporate intergenerational experiences that have previously been found to receive positive evaluations by both older adults and young child participants.
5. Formally evaluate the activities.
6. Identify the older adults' views about their participation in a program involving interaction with very young/preschool-age children.

7. Assess the effect of participating in the intergenerational program on the young children's perceptions of older adults.

This study, although dated, deserves attention as IG programming offerings appear to be on the rise and accommodating for both the OA and young children is a valid concern. Dellmann-Jenkins acknowledged the need for further research utilizing her model, which provides a comprehensive set of guidelines to ensure the needs of all participants are considered.

Ayala, Hewson, Bray, Jones, and Hartley (2007) completed a telephone survey about IG programming with 107 people whose work responsibilities included programming for youth and OAs in a variety of organizations in Calgary, Alberta. Over one-third of the respondents stated that they offered IG programs. Sixty-one percent of the respondents said that the programs were successful or very successful. However, the researchers also found three major barriers to the IG program – resources, accessibility, and knowledge, skills and attitudes about IG programming.

Resource barriers linked to the need to find funding, staff time, and proper facilities to implement the programs. The second main barrier included accessibility issues for the participants. Cost of transportation proved to be a barrier. Location of seniors and youth facilities was another. In some cases, there were no seniors or youth facilities close by and participants were not eager to travel long distances to attend IG programs. Accessibility issues were also related to when the program was scheduled and language and cultural concerns were present. The third major barrier was connected to the knowledge, skills, and attitudes that staff and participants had in the programs. Only 18 percent of all participants surveyed were able to describe the goals of the IG programs

and understand that IG programs should provide benefits to both the OAs and younger people. Staff members were not always capable of developing programs that engaged OAs and youth. Negative and stereotypical attitudes of staff and participants were identified as a barrier.

### **Variations of intergenerational opportunities**

There have been different approaches of IG program offerings; site/location arrangements, activity variations, and contact time between children and OAs. This section presents unique examples.

Marcia, Alicia, Parpura-Gill, and Cohen-Mansfield (2004) credit the Foster Grandparent Program for building the foundation for IG programming back in 1963. The growth, creativity, and diversity of IG program offerings have been inclusive of traditional social get-togethers, innovative site-models that combine OAs with younger people, and imaginative recreation programs. Marcia et al.'s study identified children who displayed 'at risk' behavior(s) such as "inappropriate behaviours, poor social skills, difficulty with making and keeping friends, and poor self-concept" (p. 666) to engage in visitations to an OA facility. Visits occurred once a month for four months with visits lasting approximately one hour in length. The meetings took place in the kitchen/craft or activity room. The children showed significantly better behaviours when with the OAs and reported lower levels of anxiety in their presence over the classroom setting.

Grandparent involvement with grandchildren can be affected due to mobility challenges or health issues such as dementia or Alzheimer's (Christ, Kandel, Robbins, & Stewart, 2013). Within the library of IG offerings, there have been a variety of creative 'program models' used. Biggs and Knox (2014) evaluated an IG volunteer program that

linked members of a Girl Scout troop and OAs residing in an assisted living home. This model was based on the Social Contact Model (Pettigrew, 1998), that suggests combining multiple generations can minimize negative thoughts and generate positive ones. It reflects the understanding that stigmas and stereotypes can influence a person's perception or thoughts about other people however, by bringing together multiple generations or members of various groups, negative thoughts can be minimized and positive ones can be generated (Crisp & Turner, 2009; Kuehne, 1999).

The Girl Scout participants ranged from ages 5-16 years. The OAs that participated in the focus groups were 75 years of age or greater. The girl scouts had been meeting on a bi-monthly basis for six years at the facility. What began as a need for a no-cost meeting space developed into an opportunity for the girl scouts to share in conversations and develop relationships with the OA residents. Participants took part in group activities together and enjoyed special occasion traditions as one larger group. The resident's interaction with the Girl Scouts and their parents was voluntary. Multiple focus groups were conducted to learn from this collaborative experience with parents, residents of the OA home, the staff that worked at the residence and Girl Scouts in the program. Four themes emerged from the focus group data collected including: learning opportunities, building relationships, social interaction, and positive changes in personal responses to the other generation. All parties involved credited their learning opportunities to the success of their growing interactions. Friendships were built and stereotypes removed as a result of the bi-weekly meetings. Emotions of fear or feeling shy were removed and some parents commented that their youngster was now interested in the OAs.

The findings of the Biggs and Knox study echo findings in an extensive review of literature by Chorn Dunham and Casadonte (2009) that found cross-study confirmation that increased exposure between generations improved the perceptions that young children had of OAs and reduced evidence of ageism. They were also in line with research showing that acceptance between individuals or groups of people can increase with more personal contact time (Ives, Alama, Oikonomidou, & Obenchain, 2016; Lynot & Merola, 2007).

An Intergenerational Learning Centre has been created at Providence Mount St. Mary's in an OA residence that houses over 400 seniors in Seattle, Washington. The unique feature within Providence Mount St. Mary's is a state established preschool. Briggs (2013), producer of *Present Perfect*, a documentary featuring this IG use of space, showcased the emotions that the participants were experiencing through intimate social encounters between young and old. Highlights included comments from teaching staff and older adult care givers who indicated that mutual respect between the pre-school children and the OAs grew over time. They commented on how much the OAs enjoyed the interaction with the children. Both age groups reported positive benefits.

Another illustration of the impact of IG interactions was provided by studying an intensive integration of a teacher's classroom into an OA residence where the teacher's hope was to create meaningful relationships between children and OAs by bringing them together physically for extended periods of time (MacKenzie, Carson, & Kuehne, 2011). The children in a designated classroom were bussed to the local OA residence following their arrival at school in the morning and would return to their school by bus at the end of their day with the exception of one afternoon a week. This arrangement happened over

five weeks in the fall and again for three weeks in spring. Carson, Kobayashi, and Kuehne (2011) wanted to see if this level of intense integration (both in the number of days and number of weeks) would build community, increase understanding between two generations, and eliminate stereotypes. Significant benefits were discovered for both age demographics using self-report and positive benefits were reported not only by participants but those that were present in the facility or in the lives of the participants; family members, facility staff, and the teacher. A unique finding of Carson, Kobayashi, and Kuehne's study was that the recreation activities director noted "the project, mediated by social connections, may also have facilitated improved cognition and mental well-being..." (p. 412). These findings highlight that further research, including measures of cognition in IG interventions, may be important.

### **Intergenerational recreational and physical activity programs**

Regular physical activity provides many benefits for people of all ages. Fern (2009) suggested that PA was especially beneficial for OAs. Aerobic capacity, muscular strength and endurance, flexibility, and weight management are all benefits that have been reported in the literature. Positive benefits of living a physically active lifestyle include improved cardiovascular benefits which are vital as the aging body reduces VO<sub>2</sub> max, psychosocial improvements, and a reduction in the risk of acquiring illnesses such as Alzheimer's (Cerin, Leslie, Sugiyama, & Owen, 2009; Chase, 2013). Harper (1999) encouraged partnerships between academic institutions, local community recreation departments, students, and OAs as a way of providing safe and effective IG physical activity and fitness programs. Offering a variety of programs that include non-

competitive and competitive fitness and recreation activities can be conducive to IG programming where OAs and young people share skills and interact with each other.

The Trust Us program (Saanich Parks and Recreation, 2013) is one such program; a partnership program formed between an eldercare foundation, a recreation department, and the community health authority in the region. The program brought together OAs and teens in common spaces that included spending time sharing conversations and working in community gardens. The program encouraged teamwork, IG engagement, and healthy relationships. The goal of the program was to break down barriers and bridge the age gap between the teens and OAs. Bringing together partners with similar goals was vital to ensure the fundamental objectives of the program were not missed. This included securing an accessible meeting place that accommodated both age groups and a variety of travel options (walking, wheelchairs, bus transportation) to ensure the environment felt safe for all participants. It was important to have individual leaders present from both generations. Principals of local high schools and administrators of senior activity centres were contacted to invite all students and OAs to participate.

Although the Trust Us Program has not been formally studied the program stakeholders deemed it to be successful based on the oral feedback provided, the dedication in attendance, the desire of the participants to continue the program, and online media releases highlighting personal stories shared by video posts the participants had created. (<https://www.youtube.com/watch?v=PXGJ6ZDc9a0>) In coming together, relationships were formed, stigmas were diminished, barriers were removed, and collaboratively teens and OAs began to work on community programs. The OAs and

teens also created their own logo and slogan; Trust Us: Seniors and Teens Working Together - Building Better Communities.

Reflecting the importance of physical activity to quality of life and overall health Flora and Faulkner (2007) conducted a systematic review of IG interventions and found a limited number included a PA component. Their review examined the feasibility of the published interventions and the reported outcomes in terms of behavioural shifts by OAs towards healthier behaviours and physical changes (e.g. fitness) to determine if the IG program interventions had an effect. The review found: 1) decreased levels of loneliness were experienced post IG intervention; 2) increased positive attitudes among younger children in regards to older generations; 3) that studies were weak in design and few followed any theoretical framework or model; and 4) OAs experienced significant positive changes in both physical and cognitive health.

In a related study, that focused more on group based PA for OAs, Christensen, Schmidt, Budtz-Jorgensen, and Avlund (2006) investigated how social circles and relationships were affected when sedentary OAs engaged in group PA. Their qualitative data highlighted increases in respect, trust, and reliance on each other when training in the same environment. Through the group development within the class, participants felt more confident and accomplished physical exercises they did not think they would be able to do. This study appeared to support the importance of group activity for the uptake and adherence to PA, but also highlighted the positive impact on OA's confidence level in regards to social behaviour.

McConnell and Naylor (2016) explored the feasibility of an intergenerational physical activity leadership (IPAL) program. Their study included OAs (55 years+) and

ESSs in grades four and five in a variety of physically active IG activities with a primary focus on leadership training. The leadership training consisted of the OAs learning how to lead sections of an established outdoor playground games leadership training workshop for older ESSs. They then helped to implement the workshop and taught older ESSs (grades four and five) about leading outdoor playground games and activities on the playground during lunch recess targeting ESSs – kindergarten to grade five. Once the IPAL leaders were trained each leader signed up for leadership duties a minimum of one to two times per week over a six-week time period. OAs would join the ESS leaders on the playground as mentors and support their activities. Both OAs and ESSs also took part in a six-week marathon walking and tracking program and an OA taught the students how to develop and lead chair aerobics routines. The grade four and five students then taught the OAs a chair aerobics class and the OAs put on a health fair at the school.

Qualitative data highlighted the benefits including: relationship building, learning and engaging in rewarding experiences. McConnell and Naylor found that both the OAs and the ESSs reported high levels of satisfaction, increased leadership confidence, and had intentions to use the leadership skills they had acquired. These authors acknowledged that the IPAL program encouraged OA and IG interaction but that further research was recommended.

Recreation professionals are beginning to recognize the benefits of IG programming. An environmental scan of current IG offerings (Westhaver, 2016), was completed in British Columbia. Staff at 62 recreational facilities representing 26 separate communities revealed that recreation professionals and community members valued IG programs within a community recreation system. However, very few agencies had

organized, structured, or designated IG program offerings. Only eight recreation facilities had a program they would consider to be IG. Four commented that IG programs occur organically through monthly or bi-monthly community dinners; one noted that participants in their preschool programs visit a senior home on a regular basis, and seven noted that they saw more grandparents than parents participating in their designated parent and tot programs.

Internationally, IG recreation has been used to foster positive attitudes between people from different cultures with a past history of mistrust and hate of each other. In a 1998 study (Leitner, Scher, & Shuval, 1999) recreational programs such as Pictionary and charades, seated aerobic sessions, ring toss, frisbee, adapted bowling games, relay races, dancing, and, throwing and catching games were organized for Jewish and Arab elders from senior centres from south Tel Aviv and Yafo, Israel, Jewish college students from Zinman College at the Wingate Institute, and twelve and thirteen-year old Arab children from a school in Yafo. The activities were introduced to encourage fun, laughter, and group cohesiveness. They were offered for a three-month period of time. Statistically significant positive changes in attitudes occurred among both the Jewish and Arab experimental group elders. Fifty-six percent of the Jewish elders, indicated that that they would now have Arabs as guests in their home. This compared with zero percent in the control group. Statistically significant changes were also recorded among the Arab children who were in the experimental group but not in the control group. There were no significant changes in attitudes toward Arabs found in the college aged experimental group.

A follow-up study conducted after one year found that the IG recreation activities did have a lasting effect with regard to attitude change and the building of relationships between the two groups of elders (Leitner & Scher, 1999). They also reported sustained positive changes in attitudes of Arab children in the intervention group. Once again, no changes in the attitudes of the Jewish college students towards Arabs were found but this attributed to high positive attitudes toward Arabs prior to their participation in the recreation programs.

### **Gaps in the literature**

Acknowledgment has been given to the many efforts of IG program offerings, the designs that have been used, and the variety of organizations and settings that have hosted these programs. In a review of literature authored by Chorn Dunham and Casadonte (2009) IG programs to date had included young children and OAs but adolescents' engagement was lacking. They suggest that including adolescents in a study design is needed to further understand the benefits and challenges of IG programming and perceptions of OAs, young children, and adolescents.

### **Intergenerational theoretical frameworks – a work in progress**

Flora and Faulkner (2007) suggest that many IG studies demonstrated a lack of methodological rationale and were remiss in utilizing IG theoretical frameworks to guide their interventions and support data analysis. They suggested that this opened the door to study design criticism, biases that may exist, data collection errors, and study weaknesses due to lack of direction, structure, and focus. However, despite these claims there are researchers actively working towards establishing a conceptual structure and ultimately a theoretical framework for IG research.

One of the pioneers in IG research, Dr. Sally Newman, the founder and now past editor of *the Journal of Intergenerational Relationships* (JIR) provided a space for others to share their own IG investigations and research. The JIR, begun in 2003 (Newman, 2003), has acted as a ‘host’ for researchers to contribute, learn from each other, and encourage further research as well as identify gaps in the literature. It is within the JIR that publications illustrate attempts at developing an IG theoretical framework and the growing need to ensure that such a framework is available for researchers to utilize in their own research (VanderVen, 2010).

IG research has been carried out worldwide (de Souza, 2010; Franz & Scheunpflug, 2016). Dr. Elza de Souza, over the past one and a half decades, has influenced and encouraged the future of IG research and concurs with many IG researchers. She stated (2010):

Intergenerational programs have been introduced as a means of building social capital for health promotion, a subject in which I have particular interest and have been working for about 14 years in Brazil. However, there still is much to be done in the field. I think that *the Journal of Intergenerational Relationships* has given us plenty of motivation to keep going. JIR has been stimulating the debate on a number of questions, and through its inspiring papers has raised many unexpected questions. I am reflecting now on the benefits I have enjoyed since I started my career as an “intergenerational worker”. (p. 112)

Further efforts made by de Souza (2011) to explore IG relationships have resulted in the development of three conceptual frameworks built on social change as a basis for creating an IG theoretical framework.

A systematic review by Fox & Giles (1993), provided evidence that attempts at advancing an IG theoretical framework have been made, however challenges continue. They discovered that there were over 50 research articles and documents focusing on IG issues that highlighted the vast growth that has happened in the field since the beginning of the JIR. However, they also discovered that the studies had numerous inconsistencies in the data collection methods, data analysis, and dependent variables examined.

Dr. Valerie Kuehne, a researcher in the field of nursing, has similarly taken an interest in IG relationships and has published articles contributing to the development of an IG theoretical framework. Kuehne (2003) identified described efforts made to further IG research as limited and attributed this shortcoming to the lack of structure in research design and control. Conducting research with structure, clarity, and informed direction is important. In regards to theoretical perspectives, O’Leary (2014) teaches graduate students to identify a conceptual or theoretical framework for their study. “The idea here is to articulate the theoretical perspective(s) that underpin and inform your ideas, an, in particular, to discuss how ‘theory’ relates to and/or directs your study” (p. 75). Applying O’Leary’s advice would benefit anyone researching in the area of the IG field and in any settings inclusive of recreation centres, school setting, and OA activity centres.

Recreation professionals, educators, and researchers are tapping into the possibilities of providing, teaching, and studying IG relationships and the prospect of offering IG programs in a variety of settings. Supporting such programs with integrity and structure will assist in success, growth, sustainability, and positive experiences for everyone involved. VanderVen (2011) suggests that further study and application of theoretical frameworks supporting IG research is needed:

While theories of the life course and of human development in various phases of the life course abound, the intergenerational field still needs its own conceptual framework to communicate its own identity and serve as a means for interacting with these and other related fields. Since intergenerational programs, practices, and university-based activities have increased tremendously, perhaps the time is now to take advantage of this growing capacity and use it to engage in some theory-building. (p.22)

### **Bolman and Deal's Four-Frame Model – Theoretical Framework**

Bolman and Deal's Four-Frame Model (1997), was used to guide the interpretation of the data. This model has been used as an organizational development theory leading groups of people from a variety of businesses, companies, and organizations world-wide to success. In their book titled *Reframing Organizations: Artistry, Choice and Leadership*, Bolman and Deal outline four organizational frames including a Structural Frame, a Human Resource Frame, a Political Frame, and a Symbolic Frame. Acknowledging that each frame plays an integral part of the overall success of an organization, these authors recognize that one frame or more will be more eminent during some situations of time and need. "For different times and situations, one perspective may be more helpful than others" (p. 270). Acknowledging that each of these frames can be weighted with more or less in value at various times dependent on the present need of the organization. "Each of the frames offers distinctive advantages, but each also has blind spots and shortcomings" (p. 280).

### **Structural Frame**

The Structural Frame views an organization as a bureaucracy or a Factory. Key words that describe the Structural Frame are coordination, control, policies and procedures, planning, budgeting, evaluation. A leader working within the structural frame would be analytical, a logical thinker, someone who was organized and concerned about systems management. Assumptions that support this frame are: organizations exist to achieve established goals and objectives, structures must be designed to fit an organization's circumstances and appropriate forms of coordination and control are essential to ensure individuals and units work together to service the organizational goals.

### **Human Resource Frame**

The Human Resource Frame puts 'people first'. Within this frame, employees are seen as a primary resource. There is an emphasis on collaboration. This frame is sometimes described as a Family. A Human Resource Frame leader is supportive and participative. Assumptions that support this frame include the understanding that people and organizations need each other and when the fit between the individual and system is good, to both the individual and the organization benefit.

### **Political Frame**

A Political Frame leader might be persuasive, skilled at negotiation and bargaining. This frame assumes that within an organization there will be conflict or ongoing tension, although that is not necessarily a negative thing. Thus, the Political Frame is sometimes called a Jungle. Bolman and Deal (1997) suggest that assumptions for the Political Frame include an understanding that scarce resources and enduring differences give conflict a central role in organizational dynamics and make power the

most important resource and there are enduring differences among coalition members in values, beliefs, information, interests, and perceptions of reality.

### **Symbolic Frame**

Sometimes described as a Theater, Bolman and Deal (1997) suggest, “meaning, belief, and faith are central to a symbolic perspective” (p. 216). Key words that describe the Symbolic Frame are ceremony, ritual, celebration, and inspiration. Leaders who are aligned to the Symbolic Frame understand the underlying assumptions of this frame which include uncertainty and ambiguity, the need to create symbols to resolve confusion and increase predictability, and that processes are more important for what is expressed than what is produced. They form a cultural tapestry of secular myths, rituals, ceremonies, and stories that help people find meaning, purpose, and passion.

### **Application of the four-frame model**

Formal and informal leaders must be masters of many roles to support an organization’s vision and motivate group members. Multi-frame thinking can enhance leadership effectiveness. When an attempt to create a balance between the frames is made, an organization or program has a better chance of sustainability and growth. Thus, the use of Bolman and Deal’s model was chosen to guide the interpretation of the data and support the discussion of the findings.

### **Summary**

Researchers have been investigating IG program offerings since the early 1970’s. Pioneers in this area of research, such as Dr. Sally Newman, have provided information about IG programs and initiatives, the progress made in the development of possible

theoretical frameworks for IG, and the experiences of multiple generations participating in IG opportunities.

Research has presented many examples of positive outcomes as a result of IG interventions. “Intergenerational programs offer benefits to both the young and the old and physical activity is a novel approach” (McConnell & Naylor, 2016, p. 220).

Applying PA as an intervention has proven to be beneficial both for individuals in various demographics and as a tool to bring the generations closer together. Skropeta, Colvin, and Sladen, (2014) and Cohen-Mansfield (2015) suggested that there was a need for further study and an increase in IG organized offerings that include PA or other program options.

Children’s perceptions of OAs are improving as a result of spending time together. Teenagers when given the opportunity to work on community projects with OAs acknowledged that they, their two age demographics, are in fact more similar than different. OAs found they were surprised by the behaviours of the younger people and reported lower levels of loneliness, increased levels of happiness, and increased sense of purpose.

Yet, Kuehne (2003) acknowledges that there is more work to be done to deepen the wealth of IG research and bring together research and evaluation to support IG program development at a community level.

## **Chapter Three**

### **Methods**

Chapter three summarizes the methodology employed within this study that investigated the IPAL+ program involving students from elementary schools, high schools, and adults from OA activity centres brought together to lead games on elementary school playgrounds. This chapter will outline the research design, shifts in the research team, participant criteria, recruitment, selection, and a description of the participants and background information of the researcher. It will also discuss data collection methods and analysis that include both qualitative and quantitative approaches.

#### **Research Design**

This study utilized an interpretive phenomenological research approach (Giorgi, 2012; Lopez & Willis, 2004) and included mixed methodology (Yardley & Bishop, 2015). Moran (2000) refers to phenomenology as the study of phenomena, anything a person consciously experiences. Noddings (2011) highlights the importance of phenomenon, noted as personal lived experiences that can provide rich data and information. Descriptive phenomenology seeks to describe a participant's lived experiences (Lopez & Willis, 2004) while interpretative phenomenology goes beyond the description of the reported experiences and reveals deeper personal insights (Mayoh & Onwuegbuzie, 2015). In this study, interpretive phenomenology was selected as it allowed the research team to look at the feasibility of the IPAL+ program (the phenomenon) and to determine if there was an effect on leadership confidence, IG

attitudes, and social connectedness of the participants who took on a leadership role (the participant's lived experiences).

This study used a mixed methodology research approach that combined qualitative and quantitative methods of data collection. This mixed methodology was a concurrent triangulation design with integration at the analysis phase (Castro, Kellison, Boyd, & Kopak, 2010). Different qualitative and quantitative data sources were used to answer the research questions. A mixed method approach provided a more in-depth understanding of the IPAL+ program and potentially increased our ability to gather more information while lessening the chance of being remiss to a potential finding.

### **Shifts in the research team**

The research team shifted throughout the study. My original role in the IPAL+ program was that of a stakeholder, working as a community recreation coordinator. Employed in this job, I identify and manage essential community development plans, social engagement opportunities, and PA programs in a municipal recreation agency that supports various community populations. The IPAL+ program connected to sections of my agency's strategic plan and gave me the opportunity to explore the possibility of adding to the present IG offerings within my recreation department. As a stakeholder, I assisted the Ph.D. student and university professor, the primary researchers, with the IPAL+ program implementation and data collection process. As stated in the introduction chapter, my evolving role from the community recreation coordinator to researcher, resulted in this thesis research project.

### **Inclusion and exclusion criteria**

It is vital that a clear definition of participant criteria be defined prior to the onset of the recruitment phase to ensure that both inclusion and exclusion criteria are understood to ensure an adequate participant pool can be identified to minimize confounding factors (Chase, 2011).

- This study welcomed all genders to participate.
- This study included participants in grades four and five, grades ten to twelve, and OAs 55 years and over.
- Participants had to be available to engage in IPAL+ leadership training, be supported by their organization to engage in the IPAL+ commitment, and willing to participate regardless of their physical limitations. For example: an OA in a wheelchair would not see this as a barrier to participation.

### **Description of samples**

168 participants from three groups served as study participants:

**Elementary School Students (ESS).** 130 ESSs participated from four classrooms across three participating elementary schools. These ESSs were in grades four and five and were designated as the IPAL+ leaders.

**High School Students (HSS).** The HSS population began with 26 students in grades ten to twelve from three high schools. This group of IPAL+ leaders were participating in either of two leadership programs that were offered outside of the school time table or one athletic leadership class that was part of their school curriculum.

**Older Adults (OAs).** Twelve OAs, ages 55 years and over, associated with three different OA activity centres were the OA IPAL+ leaders.

**Administration (ADM).** The ADM group was made up of different individuals taking a leadership role in the IPAL+ program. One elementary school was represented by an elementary school teacher, one elementary school was represented by a vice-principal who was also the teacher of that school's grade five participating IPAL+ classroom, and one elementary school was represented by the principal of the school. The high schools each had a leadership teacher assigned to the IPAL+ program. The ADM of the OAs facilities varied; one was the President of the OA organization and 'championed' the initiative, one was the activity coordinator for the OA facility, and one was the OA facility director.

**Tri-pod.** The participants were aligned to create a 'tri-pod' partnership represented by one elementary school, one high school, and one OA population. Each tri-pod had associated ADMs connected who were represented by leaders within their organization.

### **Data collection methods**

The following methods were used to collect data from the participants; focus groups, one-on-one interviews, questionnaires based on open-ended questions, and pre- and post-surveys.

**Qualitative instruments.** The interview questions were taken from McConnell and Naylor (2016) and were purpose based (designed to specifically address practical evaluation questions). These interview questions were used to maintain "consistency and future potential comparability analysis" (J. McConnell, personal communication, July 5<sup>th</sup>, 2017). Minor revisions were made to the interview questions to reflect the addition of the HSSs demographic (Appendix A).

**Quantitative instruments.** Surveys were designed to collect information in four areas: descriptive statistics (participants' personal information), leadership confidence, IG attitudes, and social connectedness (McConnell and Naylor, 2016) and were implemented pre- and post-program (see Appendix B and C). Adaptations were made within some surveys to accommodate different age groups for example: "I like visiting old people" was asked of the ESSs and HSSs participants and "I like visiting young people" was asked of the OAs. Reliabilities for these surveys are provided in Table 1.

- Leadership confidence was measured using items adapted from Powell, Stern, Krohn, and Ardoin (2011). This survey was used for all age groups.
- The Children's Perception of Aging and Elderly Scale was used to measure the ESSs and HSSs attitudes towards OAs (Rich, Myrick, & Campbell, 1983). This same survey was adapted to measure OAs' perception of the ESSs and HSSs.
- Social connectedness was measured using three different scales.
  1. The School Connectedness – School Experience Scale Elementary School Youth survey was used for ESSs (Anderson-Butcher, Amorose, Iachini, & Ball, 2013).
  2. Ten sub-scales of the Hemingway Measure of Adolescent Connectedness Scale (Karcher, 2001) were used for the HSSs survey however, only seven scales were used in the data analysis due to logic and best fit for the research questions. Seven of the ten sub-scales had satisfactory reliability scales set at a value of 0.7 or greater with the exception of one sub-scale that scored less than 0.7 but showed an increase in the reliability score when the reverse code question of the sub-scale survey was removed. See Table 1.

3. OA belongingness was measured using the Social Connectedness and the Social Assurance Scales survey (Lee & Robbins, 1995).

Table 1

*Internal Consistency Scores of Applied Measurement Tools*

Measurement Tool	Cronbach's Alpha ( $\alpha$ )	Group	Cronbach's Alpha ( $\alpha$ ) Pre-test	Cronbach's Alpha ( $\alpha$ ) Post-test
Development and Validation of Scales to Measure Environment Responsibility, Character Development, and Attitudes Toward School	$\alpha = .844^a$	ESSs	.706 - .735 <sup>b</sup>	.856 - .864
		HSSs	.792	.722
		OAs	.930 - .966	.968
The Children's Perception of Aging and Elderly Scale	$\alpha = .780$	ESSs	.805 - .830	.843 - .851
		HSSs	.716	.826
		OAs	.867	.854
The School Connectedness – School Experience Scale Elementary School Youth survey was used for ESSs	n/a <sup>c</sup>	ESSs	.778 – .803	.726 – .729
The Hemingway Measure of Adolescent Connectedness Scale	n/a		.868	.889
		HSSs		
		Sub-Scales:		
		Neighborhood	.862	.800
		Friends	.871	.918
		Self in present	.923	.717
		School	.463	.638
		Peers	.710	.492
Teachers	.849	.810		
Future	.757	.633		
The Measuring Belongingness: The Social Connectedness and the Social Assurance Scales Survey	n/a	OAs	.250	.835

<sup>a</sup>Based on McConnell and Naylor's 2016 scale reliability

<sup>b</sup>A range of reliability scores is shown due to the multiple imputations performed.

<sup>c</sup>Not available in the research

## **Procedures**

The procedures for the IPAL+ program are listed in detail below and summarized in Table 2.

### **Step 1: Ethical considerations**

An application was submitted to the Human Research Ethics Board (HRSB) at the University in January, 2014. Ethics approval was granted for the purpose of this study and data collection from the HRSB. A request for a renewal of the ethics certificate was completed once I assumed the role of the researcher for this study (Appendix D). Additional permission was required and granted from the school district's research ethics review office. The inquiry was deemed to be of minimal risk to the participants involved.

### **Step 2: Recruitment**

Three study catchment areas were identified by stakeholders (called tri-pods) based on identified needs. Each tri-pod combined a partner of each age demographic that was geographically located in close proximity to one another. The research team members presented the IPAL+ program and explained how it would also be used as a study for research purposes to administrators (ADMs) of three prospective elementary schools, three high schools, and three OA activity centres in the catchment area. A follow-up meeting was scheduled and brought all interested partners together to discuss the design of the IPAL+ initiative and the roles and responsibilities of each partner organization.

Purposeful sampling was employed to ensure the participant pool matched the study intention. The research team searched for grades four and five students, grades ten to twelve students, and OAs 55 years and older. "The logic and power of purposeful

sampling lies in selecting information-rich cases for study in depth. Information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the research, thus the term purposeful sampling.” (Patton, 1990, p. 169). We accomplished purposeful sampling by working together with our stakeholders to each identify who our participant pool would be made up of. From there, we solicited the program to these participants. By engaging those involved with the demographics we were looking to attract, purposeful sampling was attainable.

There was an anticipation of snowball sampling occurring within the OA populations as the convenience of finding additional desirable participants for our study may have happened for some because they may know, work with, or live with other participants of the IPAL+ program (Noy, 2008).

Each participating elementary school designated a class or classrooms of grades four and five students to participate as the IPAL+ leaders for their school. Each school notified their entire school body about the added IPAL+ lunch recess program during daily announcements.

High school ADMs consulted with high school leadership teachers and supported leadership groups to participate as the IPAL+ leaders. Two of the high schools added IPAL+ as an optional program to participate in and one high school had IPAL+ added to their course syllabus ensuring that all students in their leadership program participated.

The ADMs of the OA facilities posted information about the IPAL+ program in their facilities offering opportunities to further discuss this opportunity one-on-one. Some members of the OA facility were approached by their organization inquiring about their interest and availability.

**Step 3: Consent forms**

Prior to the beginning of the IPAL+ program, all partner organizations were given a recruitment letter (Appendix E). Letters were read, reviewed, and explained as needed to each potential participant. Opportunities for clarification were provided via email, phone or face to face meetings. Once the letter was read and understood, participants were required to sign a consent form, which also included consent for future material reproduction purposes (Appendix F). ESSs were given both the letter and the consent form to take home to their parent(s) or guardian(s) to review, sign, and return back to the school. Consent forms were immediately stored in a secure filing cabinet at the University.

**Step 4: IPAL+ training**

There were two 2-hour IPAL+ training sessions led by an experienced activity leader and retired physical education teacher for each HSS and OA partnership. The first training session combined the HSSs and the OAs to provide an opportunity for them to learn about the IPAL+ program structure, leadership expectations, and games. The IPAL+ equipment box was introduced and games were taught to IPAL+ leaders using the equipment box contents, see Appendix G.

The second leadership training session combined all of the ESSs, HSSs, and OAs IPAL+ leader participants within each tri-pod partnership. The IPAL+ equipment box was introduced to the ESSs and the HSSs and OAs leaders began this session by leading the ESSs leaders on the playground as an example of the IPAL+ intervention; the HSSs and OAs taught games to the ESSs. The ESSs IPAL+ participants were then given the opportunity to be the leaders and practiced their leadership skills leading IPAL+ games

with the HSSs and OAs as participants. All IPAL+ leaders were informed of where to pick-up the IPAL+ equipment box at their designated elementary school and were information of the IPAL+ identification (ID) bands, see Appendix H. These ID bands were to be worn during every IPAL+ session by all IPAL+ leaders from each group.

### **Step 5: Pre-surveys**

Pre-study surveys were distributed to IPAL+ leader participants from each demographic group at the leadership workshop (Step 4). Completed pre-study surveys were collected and stored in a secure filing cabinet at the University.

### **Step 6: Scheduling**

An IPAL+ leadership schedule was put on a calendar for the ESSs and HSSs to ensure there were always two to four leaders representing their age demographic every day the IPAL+ program was offered. The OA population used a sign-up calendar format to ensure there was ample OAs present and to accommodate the personal needs of their schedule demands.

### **Step 7: Intervention**

While health fairs (which occurred within each tri-pod) and chair aerobics (that happened in one tri-pod) were components of the IPAL+ program, this thesis focuses specifically on the lunch recess playground leadership component that was offered in each tri-pod hosted on the elementary school playground. The program was offered Monday to Thursday for six consecutive weeks in the months of October and November. The program did not run on Fridays due to the varying schedules of high school and elementary school timetables. HSS and OA IPAL+ leaders would gather on their assigned elementary school playground and be ready for the lunch recess bell to ring.

Once the bell rang, the ESS IPAL+ leaders that were scheduled for that day would come out on the school playground with the IPAL+ equipment box. All IPAL+ leaders would put on their IPAL+ ID bands. All IPAL+ leaders from each age demographic would begin leading games for whoever wanted to join in on the playground.

**Step 8: Focus groups, one-on-one interviews, questionnaires, and post-surveys**

Data collection for the completion of the post-surveys and the qualitative data happened concurrently. Following the six-week IPAL+ program, ADM personnel from each organization were contacted to arrange one-on-one face-to-face interviews. At that time, arrangements were also made to meet with the ESSs, HSSs, and OA participants of the IPAL+ program from their organization in a focus group setting. The location of interviews and focus groups were determined by the participants to ensure comfort and privacy was respected. Interview time slots were scheduled for 30-45 minutes in length. Interviews were audio recorded and field notes were taken to collect the data shared by the interviewees during the questioning process. The data collection tools included digital recording devices and pen and paper for note taking. In preparation for the interview process, a reminder about consent was read by the researcher. To ensure accuracy Creswell (2008) says,

During the interview, stick to the questions, complete within the time specified (if possible), be respectful and courteous, and offer few questions and advice. This last point may be the most important, and I am reminded how a good interviewer is a listener rather than a speaker during an interview. (p. 125)

Following the completion of the interview phase and the collection of surveys, all documents and data were placed in a secured designated space at the University to ensure privacy and confidentiality.

Table 2

*Summary of the Steps and Procedures for the IPAL+ Program*

Step 1	Ethical Considerations	<ul style="list-style-type: none"> <li>• Apply and acquire all necessary ethics and permission documentations through participating organizations</li> </ul>
Step 2	Recruitment	<ul style="list-style-type: none"> <li>• Identify stakeholders and participants</li> <li>• Purposeful sampling</li> <li>• Employ recruitment strategies</li> </ul>
Step 3	Consent Forms	<ul style="list-style-type: none"> <li>• Administer recruitment letters</li> <li>• Hand out consent forms with instructions</li> <li>• Collect consent forms and store them in a secured space</li> </ul>
Step 4	IPAL+ Training	<ul style="list-style-type: none"> <li>• Book trainers, a space, and invite all identified HSSs and OAs for a 2-hour IPAL+ training session</li> <li>• Book trainers, a space, and invite all identified ESSs, HSSs, and OAs for a 2-hour IPAL+ training session</li> </ul>
Step 5	Pre-surveys	<ul style="list-style-type: none"> <li>• Hand out pre-surveys</li> <li>• Circulate, complete, and collect pre-surveys, and store in a secured space</li> </ul>
Step 6	Scheduling	<ul style="list-style-type: none"> <li>• Ensure each partner has a method for scheduling their IPAL+ leaders</li> </ul>
Step 7	Intervention	<ul style="list-style-type: none"> <li>• The IPAL+ program is run over six weeks Monday to Thursday during lunch recess on the elementary school playground of each participating tri-pod</li> </ul>
Step 8	Focus groups, one-on-one interviews, questionnaires, and post-surveys	<ul style="list-style-type: none"> <li>• Book interviews</li> <li>• Prepare appropriate data collection tools</li> <li>• Circulate, complete, and collect pre-surveys, and store in a secured space</li> </ul>

## Data Analysis

### Qualitative data analysis

Qualitative data were gathered to disclose information about the personal experiences of the IPAL+ leaders. This was accomplished through one-on-one interviews, focus groups, and hand written or email typed replies. See Table 3 for a demographic summary.

Table 3

#### *Demographic Summary – Qualitative Data*

	One-on-one interviews	Focus group	Handwritten questionnaires
ESSs	None	Three 7 females, 6 males	None
HSSs	None	One 2 females, 4 males	Five (anonymous)
OAs	None	Two 2 females, 3 males	None
ADMs	6 interviews 4 females, 2 males	None	one male
Total respondents:	6	24	6

Thematic analysis was carried out based on Colaizzi's seven-step theoretical framework (Colaizzi, 1978; Sanders, 2003; Shosha, 2012). An adaptation of Colaizzi's seven-step methodology was used and is shown below. (pp. 59, 61-62)

1. The transcripts of each participant were read over (referred to as protocols by Colaizzi).
2. Information within the protocols that pertained to the phenomenon under study was identified and significant statements were extracted.

3. Each significant statement was further defined.
4. Steps one to three were then repeated to organize the significant statements into theme clusters.
  - a. Theme clusters were validated checking them against the original transcripts/protocols to ensure the themes represented the information and that nothing was missed in the theme clusters. Discrepancies were addressed to ensure that data wasn't ignored.
5. An exhaustive list of theme clusters that represented the transcripts from all participants was created.
6. Each theme on the exhaustive list that represented the investigated phenomenon (feasibility of IG leadership) was formulated into a statement of identification where no additional exhaustive meanings were sought.
7. Each participant received a copy of findings thus far for validation.

Transcriptions were completed by members of the research team. At this time, I the community recreation coordinator, assumed the responsibilities for this study. Because I had been involved in the preparation, planning process, data gathering, and interview process of the IPAL+ program for this second study, this transition was possible. As the new researcher, I re-transcribed interviews following Colaizzi's seven-steps. This provided practice and an understanding of this process and the time commitment required. As the researcher, I acknowledged the necessity to listen intently to participants' voices as this was key information needed to interpret the results (Koch, 1995), and recognized my extensive professional experience in the recreation field might assist in the interpretation process.

In addition to Colaizzi's seven-step methodology, data was explored using NVivo, Version 11 (QSR International, 2015). All one-on-one interviews and focus groups digital recordings were listened to numerous times for accuracy and transcribed verbatim. All handwritten responses were also transcribed into NVivo 11. Using NVivo 11 search tools, theme clusters and sub-themes were identified using the family tree of nodes. An exercise was then conducted through moving and sorting of nodes and parent nodes to explore similarities, patterns, commonalities, associations, and relationships. This was done for data reduction.

As a new researcher, I had learned about the importance of hand-coding (Campbell, Quincy, Osserman, Pedersen, 2013). I exercised this practice with the qualitative data I had collected. In consultation with my research supervisor, we identified commonalities within both practices and the support for emerging themes and sub-themes was strengthened.

### **Controlling the qualitative research**

I took steps to demonstrate that my research practice established trustworthiness, credibility, transferability, dependability, and confirmability as defined in Thomas, Nelson, and Silverman (2011) and described following.

**Trustworthiness.** The participants were reassured that the information they provided would be kept in a secure space and remain anonymous. Voluntary participation in all IPAL+ interactions was respected. During IPAL+ leadership training, participants were provided information about the positive outcomes of IG relationship building and how IPAL+ had the potential to do this as learned through McConnell and Naylor's 2016 study. Attention to personal confidentiality is imperative (Thomas,

Nelson, & Silverman, 2011). The rights of all participants of the IPAL+ program were respected at all times.

**Credibility.** An accurate description of the research setting enhances credibility and thus I provided a detailed description of where IPAL+ took place.

**Transferability.** The usefulness of the study results in other settings or by another researcher conducting a study in a similar setting and can easily be repeated by the information provided. Although transferability can not be guaranteed the method section has been presented in-depth by a step by step process for future duplication purposes.

**Dependability.** Dependability examines the researcher's ability to manage change throughout the study process. Formative assessment assisted in this process recognizing change was inevitable and addressing it was mandatory for success.

**Confirmability.** Belief in research must be established. "Confirmability deals with the issue of researcher bias" Thomas, Nelson, and Silverman (2011, p. 365). "Confirmability, similar to objectivity in quantitative terms, occurs when credibility, transferability, and dependability have been established" (Thomas & Magilvy, 2011).

### **Quantitative Data Analysis**

Quantitative data was collected through pre- and post-surveys administered before and after the intervention and data was inputted in IBM SPSS 24 (IBM Corp., 2016). Initially, data was examined for out-liers, abnormalities, and missing scores.

**Missing data.** "The impact of missing data on quantitative research can be serious" (Dong & Peng, 2013). Dong and Peng note there is not an established allowable maximum missing data amount currently in the research, therefore, I prepared to manage

possible missing data by using multiple imputations (MI). MI, is a principled missing data method that provides valid statistical inferences under the missing at random (MAR) condition, by generating a set of reasonable values for each unobserved data point or missing data entry. MI then imputes data a specific number of times to produce an equivalent number of complete data sets (Little & Rubin, 2002). “The general basis of MI is to use observed values to generate a range of plausible values (i.e., imputations) for each censored value, based on existing correlations between variables” (Newgard & Haukoos, 2007). Dong and Peng (2013) indicated that the number of imputations needed in MI is a function of the rate of missing information in a data set. Presently, methodologists have not agreed upon a recommended number of data imputations however, it has been suggested that three to five data sets are a satisfactory number of additional information to achieve good results (Schafer & Olsen, 1998). As a result of the MI process, one ‘pooled’ result taking the MIs into all calculations makes up the final ‘new’ data set that stands in the place of the original missing data (Dong, & Peng, 2013).

Prior to necessary imputation, I analysed the data for patterns, and found no systematic routine. Then, I selected the Mersenne Twister to generate random fixed value numbers, an automatic imputation method in SPSS to generate five imputations (IBM SPSS, version 24.0). The pooled data from the five imputations were used for subsequent analyses. Once the missing values were imputed, analysis was completed on each new data set.

Once all data sets were established, screening for outliers, normality, and linearity, was completed. Calculated correlations, means, and standard deviations (SD) for all variables were performed. Reliability testing was done to ensure that internal

consistency of the data was established which indicates the extent to which all variables that make up the scale are measuring the same things, Muijs (2011). Reliability was shown using Cronbach's Alpha represented by the symbol  $\alpha$ . Muijs (2011) note that Cronbach's  $\alpha = .7$  is an acceptable level of reliability based on a scale of 0.00-1.00 with the score of one being a perfect relationship. For this study, attempts to maintain reliability at Cronbach's  $\alpha = .7$  or greater was intended however, due to the recoding of questions, acceptance of  $\alpha < .7$  has been tolerated because once the recoded questions were removed from the data scores a considerable increase in reliability in the Cronbach's  $\alpha$  score was seen.

A repeated measure design, dependent paired t-test was then used to analyze pre- and post-survey mean scores and standard deviations, to see if significant changes were made in leadership confidence, IG attitudes, and social connectedness. A significance level of  $p < .05$  was used. Due to multiple t-tests applied to the data, a Bonferroni's adjustment was applied therefore, alpha ( $\alpha$ ) was reduced from  $p < .05$  to  $p < .016$  for ESSs and OAs and to  $p < .005$  for HSSs.

### **Use of a theoretical framework to guide data interpretation**

Following data entry and analysis a theoretical framework was used to assist in the integrated analysis of the overall findings. In reference to Bolman & Deal's four-frames (1997), the following questions were used to guide the interpretation of the results of the IPAL+ program.

- 1. Structural.** Was the IPAL+ program organized with clear roles and responsibilities? Was the IPAL+ program operated in an appropriate setting and was specific and appropriate training provided for all leaders involved?

2. **Human Resources.** Were the needs of all participants taken into consideration with consistency to ensure the thoughts of the participants were shared and heard? Was collaboration and teamwork part of the integral structure of the leadership team?
3. **Political.** Were the potential barriers and challenges for the IPAL+ program addressed? How were organizations that were willing to contribute to the success of the program secured? How was the need for a sustainability plan identified?
4. **Symbolic.** How were discussions around the culture and philosophy of the organizations involved, scheduled, and shared? How was a celebration of the success of the IPAL+ program, which engaged all participating stakeholders, organized and presented?

#### **Assumptions, limitations, and delimitations**

**Assumptions.** There were three primary assumptions in this study. It was assumed that:

1. Throughout the research study the participants were honest and truthful when completing surveys and answering questions.
2. Interviews conducted and surveys administered were valid measures to assess both the qualitative and quantitative data.
3. That all IPAL+ leaders would deliver the IPAL+ program as trained to do.

**Limitations.** There were four identified limitations in this study:

1. IPAL+ participation was a volunteer commitment and participant involvement was needed to complete pre- and post-survey information.

2. There was potential for both researcher and participant biases which might have been influenced by past lived experiences.
3. Participant experience with IG relationships could vary dependent on life circumstances and family structure.
4. There was the possibility of data entry error.

**Delimitations.** Delimitations in this study include the following:

1. Participants were limited to the schools and OA activity centres that were identified partners for this study.
2. Only participants that were able to speak and write English were able to complete the survey documents as they were all presented in English.
3. The study was limited to include ESSs grades four and five, HSSs in grades ten to twelve, and OAs ages 55 years and older as the IPAL+ leaders.
4. A Hawthorne effect may have accounted for some of the findings in the study, as I, as a member of the research team, was involved in soliciting and confirming participant participation and training of IPAL+ leaders. Sedgwick (2015) suggests that participants may respond in a certain way in the presence of familiar people or circumstances.

### **Researcher bias**

As the researcher, I must disclose my previous background in working in recreation. I was introduced as the community recreation coordinator to all IPAL+ participants and identified with the municipal recreation centre partner while the IPAL+ program was in operation. I have also expressed my passion for providing recreational opportunities in the section titled 'Background of the researcher'. As a member of the

research team, and the researcher that analyzed the data, my past experiences needed to be considered in regards to issues such as:

- Experience working with school aged children, HSSs, and OAs
- Experience working in the field of recreation
- Past experience as a volunteer in an OA facility
- Personal experiences in relationships with OAs.

### **Background of the researcher**

As a recreation community coordinator, health promotion professional and as a certified fitness trainer, I know the value of PA and social engagement. I have been fortunate to live an active lifestyle from childhood to adulthood and anticipate continuity throughout my elder hood. My years of experience in working with others has reinforced my passion for people and lessened my perceived barriers surrounding age. I have acknowledged my own growth as a leader and attempt to accept all ages and capabilities in appreciation for what we ‘can’ do opposed to what one is ‘supposed’ to be able to do. As I continue my journey through health, wellness, PA promotion, and leadership, I am reminded that age is simply a number, however, social engagement and PA experiences are what count.

## **Chapter Four**

### **Results**

Guided by interpretive phenomenology, a mixed methodology was used to gather qualitative and quantitative data to address the two primary research questions of this study:

1. Is it feasible to bring elementary school student leaders, high school student leaders, and older adult leaders together in a physical activity leadership program (IPAL+)?
2. How were leadership confidence, intergenerational attitudes, and social connectedness affected when elementary school student leaders, high school student leaders, and older adult leaders were brought together in a physical activity leadership program?

This chapter is organized to answer these questions and is presented as follows: description of participants, and qualitative and quantitative results.

#### **Description of participants**

Descriptive statistics of the IPAL+ participants are shown in Table 4. This information includes ages (range and mean), leadership training, and details of past leadership experiences and was gathered through the pre-surveys completed by the participants.

Table 4

*Descriptive Statistics of the ESSs, HSSs, and OAs*

Group	n	Range (yrs)	M (yrs)	Grade	Past leader training
ESSs	92	8.90-11.02	10.15	16 – grade 4 76 – grade 5	39 said yes - lunch monitoring 28 said yes - green team leader 13 said yes to both lunch monitoring and green team Six more to various leadership roles; four as a PA games leader, one big buddy program, and one Terry Fox run bunny
HSSs	19	14.29-15.79	15.29	19 – grade 10	15 reported athletic leadership Training
OAs	7	63.07-89.44	77.54	n/a	Three said yes; one soccer coach and trades volunteer rep, one worked with grade seven students, and one TA at school with a nursing background

*Note:* M = mean; yrs = years

**Administrator/Administration (ADM)**

The ADM group was made up nine participants: an elementary school vice-principal who also taught the grade five class that participated in the IPAL+ program; an elementary school grade four/five classroom teacher; an elementary school principal; two teachers that sponsored a high school athletic leadership program; a teacher that sponsored a voluntary leadership programs; one executive director of a senior's activity centre; one program coordinator of an OA residence; and the President of an OA association. ADMs did not complete pre- or post-surveys but participated in one-on-one interviews or completed questions by means of a written reply.

## Qualitative Results

These results are shared by introducing the main themes and sub-theme clusters that emerged from the data while transcribing all interviews, information from the focus group meetings, and written responses from those unable to attend a face to face meeting. A demographic summary of who contributed to this data collection is shown in Table 3 in Chapter Three, the Methods.

### Theme clusters

Through a coding process, four emerging themes became clear and consistent in the qualitative data: structure, IG opportunities, leadership opportunities, and enjoyment. Each of these themes had multiple sub themes that are presented in Table 5.

Table 5

*Theme Clusters and Sub-Themes*

Theme Clusters			
Structure	Intergenerational Opportunities	Leadership Opportunities	Enjoyment
Sub-themes			
Communication	Intergenerational appreciation	School and community support	Fun
Scheduling	Social engagement, sense of belonging and purpose	New experiences and responsibilities	Positive experiences
Location			
Equipment	Shifts in intergenerational attitudes	Increased self confidence	

### **Theme Cluster One: Structure**

This theme included instrumental factors of the IPAL+ program that were relied upon for successful operation and sustainability. Theme cluster one – structure, included considerations about communication, scheduling, location, and equipment. The accumulation of feedback was collapsed into these four sub-themes and weighed in varying importance among the IPAL+ leader groups.

#### **Structure**

**Sub-theme - communication.** This theme represented the need to ensure that everyone knew ‘who, what, where, why, and when’ was imperative for each involved partner. Communication was rooted into the structure of the program from the beginning; reaching out to potential partners through emails, phone calls, and presentations. Effective communication continued to guide the progress of the program into the training phase of IPAL+ leaders, and ultimately to program delivery. There were multiple levels of communication that required attention and performed with different angles of intention.

ESSs suggested they could communicate to their fellow schoolmates to inform and encourage more students to participate in IPAL+.

*Maybe we could have an assembly or something just to let them know there are IPAL+ students; come at this time, at that place [to experience IPAL+].*

(Interview statement from an ESS participant)

ESSs commented about their communication on the playground as an IPAL+ leader with the HSSs and the OAs. They felt encouraged, motivated, and good about their new relationships, their leadership abilities, and how they were supported by the

other leaders. Their dialogue on the playground was a new experience for many because the ESSs were leaders with support from the OAs and not being led by the OAs in the environment; a more typical adult/child scenario.

*...sometimes it felt a little bit weird leading adults which are usually supposed to lead us, so that was a whole new step for me but I kind of liked it.*

(Interview statement from an ESS participant)

Communication was necessary between many personnel to ensure people knew where to go or who to expect was arriving on the playground. Two HSSs expressed their dismay when they arrived to their designated elementary school on one occasion and no one knew where they were to go. Their supervisor voiced their frustration and their need for thorough communication.

*There was a lack of communication and a lack of touching base [um] students felt, [name of student] and the team, [um] felt that they wanted to communicate more face-to-face [with the program supervisor].*

(Interview statement from an ADM, high school leadership teacher)

Communication at all levels was paramount for the success of the IPAL+ program.

## **Structure**

**Sub-theme - scheduling.** The challenge of scheduling was identified by all partners of the IPAL+ program. ESS students knew that IPAL+ happened during lunch recess Monday to Friday for six consecutive weeks but expressed that they did not want the program to end and requested that the IPAL+ program continue throughout the school year.

*I want them [HSSs and OAs] back.*

(Interview statement from an ESS participant)

*...stay [HSSs and OAs] for the whole year next time cause they're not coming anymore, they're not doing it anymore and it's really depressing because it was a lot of fun when they were here.*

(Interview statement from an ESS participant)

Scheduling included coordinating the lunch recess time with the HSSs' lunch break or leadership program class time. HSS wanted to ensure they would be able to maintain their school commitments concurrently with those of the IPAL+ program. Travel time to and from the elementary school to their high school was a concern and is discussed further in the sub theme 'location'. Some participating students were in a leadership program that had their class time coincide with their partnering elementary school's lunch recess. This worked well. Other HSSs were challenged by the overlapping time commitments of other regular classes (i.e. Math, English) and the elementary school's lunch recess.

ADM staff identified scheduling challenges as they watched the IPAL+ program unfold with their members' participation.

*The challenge is trying to mesh it [the IPAL+ program] with the high school student's schedule. So, the fact that the two schools run lunch hours at different times is a significant challenge.*

(Interview statement from an ADM, leadership teacher from a high school)

*Just the time table when [school name]'s lunch was and when their break was so those logistic kinds of pieces, that was I think difficult.*

(Interview statement from an ADM, leadership teacher from a high school)

OAs referred to the challenges of finding time to squeeze in the program. Some OAs requested that the program be done over fewer weeks because they were so busy.

*You know, once I retired I don't know how I had time to work.*

(Interview statement from an OA participant)

The most common response of the OA group regarding scheduling was their desire to know the schedule ahead of time so they could plan accordingly. The common theme from the OA ADM personnel within the groups was the need to ensure the schedule 'worked' for their members.

*I said you'd only have to do it once, but that still, like once a week, but that was still six times and [um], yeah you know within that I had somebody go in for surgery and somebody that moved and somebody go on holidays and so to find six consecutive weeks...*

(Interview statement from ADM, staff of an OA facility)

## **Structure**

**Sub-theme - location.** The elementary school playground was the home base of the IPAL+ program. HSSs and OAs had to travel independently to the site of the IPAL+ program. The elementary schools and the high schools in each tri-pod varied in geographical distance from each other. One high school was located within fifteen minutes walking distance from the elementary school. One high school had a five-minute walk to their partnering elementary school and one high school neighbored their elementary school partner sharing a field fence line. Proximity of locations, convenience, and accessibility became explanations for tardiness and attendance. The ESSs did not

voice concerns regarding their location for the IPAL+ program as there was no change experienced for them regarding where they played at lunch. However, a couple of ESSs noted that the ‘sides’ of the playground were eliminated due to the inclusive nature of the IPAL+ program.

*I really enjoyed playing with kids I didn't know on the primary side but also in the intermediate side because you got to play with people you didn't know...*

(Interview statement from ESS participant)

HSSs did not comment about the travel challenges directly in their feedback however, these concerns were noted to their teachers and echoed in the data. HSSs alluded to the challenges of being late to class which implies that the travel distance or the scheduling may have been the reason for their lateness.

*My least favorite activity during the IPAL+ program was to miss a little bit of my class.*

(Interview statement from HSS participant)

School ADM staff commented on the distance that the HSSs were required to travel to participate in IPAL and the impact that it was having. Although school ADM staff were consistently positive about the IPAL+ program, some travel situations were problematic.

*It's about fifteen minutes downhill one way [to the elementary school] and then the tougher sell is to come back up.*

(Interview statement from an ADM, leadership teacher from a high school)

*What made it really successful was the close proximity of our yards. There probably isn't another high school so close to an elementary school in the city. It [IPAL+] would be tough to do another place.*

(Interview statement from an ADM, athletic leadership teacher of a high school)

There were three different situations of OAs regarding location. One OA population shared the same property as their elementary school partner. One OA population was very mobile and the OA activity centre they attended was one kilometer away in distance from the elementary school, however, the OA participants typically travelled from home to the IPAL+ program. The third OA population had limited mobility and lived at an older adult residence; therefore, they relied on organized assistance to travel to the elementary school as they were unable to travel independently.

*Just leaving can be a challenge for older adults for many of our folks anyways, so that's the main thing I think just travelling there as our population is quite frail.*

*A bus trip out can be a hard thing for them.*

(Interview statement from ADM, staff from an OA facility)

The location of the elementary school playground had impact on people's ability to travel there in an effective time period and to return to their regular obligation in a timely manner.

## **Structure**

**Sub-theme - equipment.** ESS IPAL+ leaders were responsible for taking the IPAL+ equipment box out to the playground for every lunch recess and for ensuring that everything was returned to the equipment box. Toys were broken, not returned, or

absorbed into the school's equipment closet. IPAL+ leaders of all ages expressed the appreciation for the toys and the upset when the equipment box was depleting.

Tangible toys were not the only medium of play tools that were used. Hopscotch and square ball painted figures were popular playground games however, their markings on the concrete court were fading. The ESSs leaders advocated for personnel in their school system to maintain and add more of these figures so these games could continue to be played and enjoyed by more people.

*We really wanted hop scotch and four-square; more of them painted and they said they would come and do it but it's been like two months and they haven't done anything so we are a little bit annoyed cause we have two four-squares but they are totally faded and we have one hop scotch.*

(Interview statement from ESS participant)

HSSs and OAs both appreciated the IPAL+ equipment boxes and noticed when things were not there.

*It [square ball] would have been more popular if we didn't run out of chalk. In the last few sessions we ran out of chalk.*

(Interview statement from an OA participant)

The IPAL+ equipment boxes became a concern for everyone. It represented IPAL+ and people identified the IPAL+ equipment boxes with the IPAL+ leaders and the IPAL+ program. Everyone involved in IPAL+ took pride in ensuring the equipment boxes were taken care of.

*The only piece that I would say was even problematic now is keeping the equipment up. Like having a bin in the classroom is great [uh] having the*

*students responsible is terrific but I've noticed equipment being broken or torn and I just don't have the time to keep chasing after it or replacing it.*

(Interview statement from ADM, teacher/vice principal of an elementary school)

### **Theme Cluster Two: Intergenerational Opportunities**

The IPAL+ program provided the space for multiple generations to have a reason and purpose to come together. IG opportunities became an overarching theme that emerged from numerous statements that were consistent among all of the partners. Participants were willing, excited, and appreciated the opportunity to be engaging outside of their age demographic. This main theme is comprised of the sub-themes - IG appreciation, social engagement, a sense of belonging and purpose, and an acknowledgement was made to the shifts in IG attitudes.

#### **Intergenerational opportunities**

**Sub-theme - intergenerational appreciation.** There was an expression made by participants for their appreciation of each other. Many statements alluded to the opportunity to be in the presence of 'younger people' or 'older people'. These interactions were described as 'new' and 'first-time' opportunities. ESSs enjoyed having the HSSs around and for some it filled a void of not having an older sibling.

*I felt like she [the HSS] was like my sister.*

(Interview statement from an ESS)

HSSs referred to the ESS as being fun and cooperative with each other. They acknowledged the times that the ESS experimented with leading and identified some as being natural leaders. The HSS participants acknowledged the appreciation that the OAs were experiencing because of IPAL+.

*It [the IPAL+ program] really showed how these small interactions mean so much to them [the OA] and we as teens or young children don't typically approach them.*

(Written comments from a HSS)

*I really enjoyed working with the older adults.*

(Written comments from a HSS)

OAs noted they enjoyed the presence of the younger generations while HSSs regarded the OAs as being fun to have around.

*I think it was nice to meet some people out of my age group and it was cool meeting new people.*

(Written comments from a HSS)

*Spending time with the kids and older adults was nice to be able to step back from high school and our busy lives and have a good time. It's also a great way to meet others within your community.*

(Interview comments from a HSS)

The OA population were appreciative of the time they had with the younger generations. Some noted that they did not have grandchildren or that their grandchildren lived in another city. There were many comments made by the OAs regarding how impressed they (the OAs) were with the younger generation. Many comments alluded to being pleasantly surprised with their experience.

*I didn't expect them to be that attentive or that well-mannered because my only judgement, I don't have any grandchildren, is just the television and they*

[children and teens] *certainly aren't* [well-mannered] *on the television. I was certainly pleased at how the children behaved.*

(Interview statement from an OA)

The IPAL+ intervention provided people the opportunity to work together in a leadership role that was atypical.

*It was an intergenerational connection that some students never get from older adults.*

(Interview statement from an ADM, elementary school principal)

*It was a really lovely feature. They [the OAs] enjoyed the students, the students enjoyed them [the OAs] and I noticed that it was such a respectful relationship. Sometimes children don't always know how to behave but they just got it, they were wonderful.*

(Interview statement from an ADM, elementary school teacher/vice-principal)

### **Intergenerational opportunities**

**Sub-theme - social engagement, sense of belonging and purpose.** IPAL+ provided an opportunity for all participants to be socially engaged with other members of society. ESSs commented that IPAL+ gave them something to do at lunch recess, a purpose, and acknowledged that other kids were playing as opposed to sitting alone. The program was regarded as being for everyone and the identified IPAL+ ESSs leaders took responsibility in ensuring the program happened.

*I saw a lot of kids not playing with anyone but just walking around but when we started IPAL+ everyone, all of those kids, started to play because there was*

*something they could do...[unclear] games that anyone could do and there was no excluding and so it was a big change for probably everyone.*

(Interview statement from an ESS)

*Yeah, like kids just walk around the school. That's what we did too and then IPAL+ came. But one thing I wish is that we still did it because people came but not like as many kids are showing up cause there's not the older kids to help everybody it's just like oh, there's the bin again.*

(Interview statement from an ESS)

HSSs and OAs remarked on the commitment of showing up to the program despite obstacles. They knew that their presence was being relied upon and that the younger leaders and students on the playground were looking forward to them coming. However, they also had commitments to their own school timetable.

*It was hard to get volunteers just because it was during school and classes can be hard to miss. Also, even though it's a legit reason for missing class many teachers aren't okay with students being absent.*

(Written response from a HSS who helped to coordinate their HSS IPAL+ team of leaders)

ADM representation witnessed changes on the school playground and overheard stories being shared. IPAL+ provided a role of responsibility to those wanting the challenge. IPAL+ leaders were effective and purposeful.

### **Intergenerational opportunities**

**Sub-theme - shifts in intergenerational attitudes.** This sub theme developed from statements made by participants that indicated a change in their thoughts,

assumptions, and perceptions of different generations. Participants commented with positive views and pleasant surprise about the ‘other’ population in reference to their IPAL+ experience. The appreciation for each other was expressed in between all age groups.

*They [HSSs] helped us.*

(Interview statement from an ESS)

*They [OAs] could teach us how to do their ping pong now because they were like ninjas at ping pong.*

(Interview statement from an ESS)

*It was just nice getting to know them [HSS].*

(Interview statement from an ESS)

*I felt comfortable. The older adults were very down to earth and gave lots of positive feedback so I enjoyed it.*

(Written response from a HSS)

*The younger kids as well seemed like a positive role model for the older kids.*

(Interview statement from a HSS)

*They [OAs] always brought a positive attitude and had fun.*

(Written response from a HSS)

One OA shared this experience.

*You know how the students line up after the recess to get into the school, so I was heading towards my car and they are lining up and one girl there she shouts at me saying, “hi teenager” and I said to myself, you know these kids are unpredictable and I don’t remember anyone calling me a teenager for the longest*

*time. And you know it was like I don't know what prompted her to say that but all I know is they are unpredictable [laughing]. They like to be sassy. Oh, I don't know but it was great.*

(Interview statement from an OA)

*Well I know it's part of nature or part of growing old or whatever [um], we seem to have this pre-conceived notion about the high school kids and grade five kids, whatever, what I am trying to say is the generational gap ok, so these pre-conceived notions that I had about the younger children and apparently, they have them [pre-conceived notions] about the older people so that really brought me closer, it kind of jived, I really enjoyed their company, and my perspective changed.*

(Interview statement from an OA)

### **Theme Cluster Three: Leadership Opportunities**

The IPAL+ program provided leadership opportunities to ESSs, HSSs, and OAs. For many participants in each of these demographics, being in the role of the leader was a new experience. This theme cluster included three sub themes; school and community support, new experiences and responsibilities, and increased self-confidence.

#### **Leadership Opportunities**

**Sub-theme - school and community support.** The success of the IPAL+ program would not have been possible without the support of the individual partners stemming from the ADM roles to the teachers to the participating ESS, HSS, and OA participants. The IPAL+ program was built through a collaboration of efforts and this joint effort set the scene for continued success.

*I just love the way they put IPAL+ all together and everything.*

(Interview statement from an ESS)

*Having the collaboration between all the organizations [names], I think that was positive.*

(Interview statement from an ADM, teacher of a high school leadership program)

*Having those opportunities provided to them [the HSSs] and then the fact that our HSSs get to go down and interact with elementary kids that, I am all about that.*

(Interview statement from an ADM, teacher of a high school leadership program)

*I think the concept of it is fantastic to integrate [um] seniors with elementary students and high school students is wonderful, that's what it's all about is making connections and I think that [um] it certainly was done.*

(Interview statement from an ADM, teacher of a high school leadership program)

*I thought it was a wonderful project and just really beneficial for everybody involved.*

(Interview statement from an ADM of an OA facility)

## **Leadership Opportunities**

**Sub-theme - new experience and responsibilities.** The IPAL+ program provided a first-time leader experience for participants of all ages. For many grade four and five students, they had never been in a leadership role before.

*It was really cool because we got to work with kids that you really didn't know before.*

(Interview statement from an ESS)

Based on the responses provided, the IPAL+ program provided many participants from all groups an opportunity for many firsts; leading games, creating games, managing groups of kids, and working along with others outside of their age demographic.

*My favourite was when we got to do the free-for-all and when we got to create our own games. It was really fun because the little kids got to create their own games and we got [to] help them out so that was fun.*

(Interview comment from an ESS)

*I thought it was cool because I have never been a leader before, and it was cool doing it for the first time.*

(Interview comment from a HSS)

*It gave high school students a chance to work with kids.*

(Written responses by a HSS)

Participants were proud of their role and shared it with others back in their community.

*They would come back feeling invigorated and excited. They would often [um] you know tell other members in our community what they did, for instance, a quote would be “my arms are sore because I spent hours skipping with this grade one student”.*

(Interview statement from an ADM, staff of an OA facility)

## **Leadership Opportunities**

**Sub-theme - increased self-confidence.** The opportunity to participate in the IPAL+ program has provided all groups an opportunity to practice being a leader.

Through the IPAL+ experience, leaders were empowered to make decisions. They were

relied upon to ensure the program happened. It provided the ESSs, HSSs, and OAs time to share their knowledge of playground games and build their confidence in a position that may include leading a group of children, problem solving when equipment was missing, and encouraging others to join in a game.

*The IPAL+ program was good for me because it got me out working in the community.*

(Written response by a HSS)

Confidence was noted by others who were in leadership roles.

*They were lovely boys, really lovely. But they were given a chance to be good leaders and they stepped up.*

(Interview response by an ADM, teacher/vice principle of an elementary school)

*I got the children engaged and they were standing in line. You didn't have to discipline them, nothing.*

(Interview response by an OA participant)

#### **Theme Cluster Four - Enjoyment**

There was a consistent message of enjoyment experienced by IPAL+ participants embedded in comments using words such as fun and enjoyment. Positive experiences were expressed by statements that included affirmative adjectives such as “great”, “awesome”, “wonderful”, and “cool”. IPAL+ leaders clearly felt invigorated by their engagement in IPAL+ and excited to provide an upbeat testimonial. This theme cluster divided into the sub-themes fun and positive experiences.

## Enjoyment

**Sub-theme - fun.** As the researcher, the descriptor ‘fun’ was the word I coded, read, and listened to most frequently. Fun was used to describe interactions with the children, the experience, specific games, and other IPAL+ leaders. The title of this theme cluster represents the word that was reported by all partners and participants engaged in the IPAL+ program most consistently and frequently. Participants alluded to the ‘fun’ they experienced because of IPAL+.

*It was fun to help out. It was fun to teach them.*

(Interview statement from an ESS)

*It was really fun to play with them [young elementary students].*

(Interview statement from an ESS)

*It was really fun because they [OAs] were like trying to encourage you when [um], it was really fun because we had a plan and it was fun because they [OAs] also had these fun toys.*

(Interview statement from an ESS)

*It was a lot of fun. It kind of focused on bringing [games] back into kids’ lives, and not a technology focus, by bringing back some of the old school games.*

(Interview statement from a HSS)

*I don’t know the last time I participated in hopscotch, but it was fun.*

(Interview statement from an OA)

## Enjoyment

**Sub-theme - positive experiences.** The majority of comments regarding the IPAL+ program experiences were positive. Participants spoke to the enjoyment of their

experience, the positive affirmations of doing a good job when being an IPAL+ leader, and the desire to want to do it more. This consistent theme was experienced by all IPAL+ participants.

*It [IPAL+] was really cool because you got to work with the kids that you really didn't know before.*

(Interview statement from an ESS)

*The kids were wholeheartedly into it, they enjoyed it [IPAL+], that's the main thing. I mean I enjoyed it too.*

(interview statement from an OA)

Observations were made by ADMs on the site of the elementary school playgrounds and when the IPAL+ leaders returned to their own locations; in the high schools and the OA facilities. The positive experiences that they had during designated IPAL+ times were being shared through the IPAL+ leaders to others in their community.

A teacher who played a role in bringing IPAL+ to her school made this statement:

*Overall it was brilliant, the students are still doing it, and now other classes are trying to come in and take the equipment to be a part of it, so I think it has had an influence in the school, culturally in the school.*

(Interview statement from a ADM, leadership teacher of a high school)

*Definitely some joy I would say, yeah, it [IPAL+] is something to do that day. It is in their schedule, so I think it provides purpose for the week, [that is] what is important. They come back feeling invigorated and excited.*

(Interview statement from an ADM of an OA facility)

## Unique Findings

As mentioned earlier, there were unique findings rich in qualitative nature.

Unique findings included stereotyping, collaboration, and reminiscing and were referred to by one or two demographics but were not common themes amongst all IPAL+ leaders.

**Stereotyping.** Although the IPAL+ program involved three different age demographics and ADMs, the data revealed that the OAs and the HSSs would refer to ‘working together’ but there was no reference of the ESSs IPAL+ leaders feeling this same phenomenon. In fact, some ESSs alluded to the HSSs and the OAs as the leaders and referred to themselves as being in their ‘care’ despite them all being designated IPAL+ leaders. Information provided by the ESSs indicated that age implied that adults had a leading status over children.

*Yeah, the older adults they were also very nice and they did help out a lot and they were kind of in charge of it as well.*

(Interview statement from an ESS)

**Collaboration.** IPAL+ provided a unique opportunity for people of different ages to come together and be a part of the same leadership team.

The word collaboration and words to identify the efforts of more than one age group such as ‘we’, were embedded within statements from HSSs and the OAs groups unlike the ESSs who referred to their OA IPAL+ cohorts as ‘those in charge’ as noted above.

*We got a chance to work and collaborate with some seniors.*

(Written feedback received from a HSS)

Administrative members of all partners acknowledged the need for organization. One ADM from an elementary school expressed the importance of having an individual ‘stick handle’ the operation. The collaborative approach was echoed by those in ADM positions acknowledging the need for every partner understanding who was involved and what needed to be done.

**Reminiscing.** HSSs and OAs commented on past experiences. The HSSs enjoyed the opportunity to be ‘kids again’ and ‘less connected’ to social media and the OAs shared vivid memories of experiences of their childhood on the playground and in the presence of younger children as an adult.

*Well, I found we were playing games that reminded me of being back in elementary school and stuff and when I used to have fun and stuff and not worry about school.*

(Interview statement from an HSS)

*I like the contact with the younger generations, something I had when I was a young father myself but not lately so that was kind of a good thing.*

(Interview statement from an OA).

*Well you can't help but look back to your own youth and make comparisons, my school days were so different. We played soccer that's all we ever played, no other game, we just knocked around anything that looked like a ball or could be knocked. I don't think there were too many people standing around during recess, they were all doing other things.*

(Interview statement from an OA)

## Quantitative Results

Table 6 indicates the response rates from the participants who completed pre- and post-surveys. The data from participants that completed both pre- and post-surveys were used for the analysis.

Table 6

### *Response Rates to Pre- and Post-Surveys by ESSs, HSSs, and OAs*

	Group	Pre-surveys completed	Pre- and post-surveys completed
Leadership Confidence	ESSs	130	92
	HSSs	26	19
	OAs	12	7
IG Attitudes	ESSs	130	92
	HSSs	26	19
	OAs	12	7
Social Connectedness	ESSs	130	92
	HSSs	26	14 <sup>a</sup>
	OAs	12	7

<sup>a</sup>five participants were eliminated from this data set due to missing data and no variance within the responses provided within this section of the survey, therefore, no MIs were performed.

There were unanswered questions discovered in the surveys completed by participants of each group. The percentage of total missing data within each age group was 2.9 percent for the ESSs, 1.5 percent of the HSSs, and 3.2 percent of OAs. Although this percentage is very small, missing data can be problematic (Dong & Peng, 2013; Newgard & Haukoos, 2007), therefore, multiple imputations (MIs) were required.

## Descriptive statistics

Descriptive statistics for all scale results sorted by age group, variables, pre- and post-test mean values and standard deviations are shown in Table 7.

Table 7

*Pre- and Post-Test Mean Scores (M) and Standard Deviations (sd) for ESSs, HSSs, and OAs Measuring Leadership Confidence, IG Attitudes, and Social Connectedness*

Variable	Group	Pre-test		Post-test	
		M	sd	M	sd
Leadership Confidence	ESSs	20.52	3.46	20.24	4.05
1-5 range/5 items	HSSs	20.00	3.09	19.58	2.61
	OAs	18.37	6.21	18.30	5.77
IG Attitudes	ESSs	69.19	9.45	71.25	10.52
1-5 range/19 items	HSSs	58.41	4.82	58.40	6.218
	OAs	54.17	(-) <sup>a</sup>	53.83	(-) <sup>a</sup>
For ESSs and HSSs; 16 items for OAs					
Social Connectedness	ESSs	13.80	2.13	13.59	2.05
1-4 range/4 items for ESSs; 1-6 range/35 items for HSSs; 1-6 range/8 items for OAs	HSSs <sup>b</sup>	75.50	12.98	73.71	13.50
	OAs	9.00	1.29	10.14	2.27

*Note:* Range = the Likert Scale values; items = questions

<sup>a</sup>There was no standard deviation calculated because there was no variance in the scores.

<sup>b</sup>These values represent an accumulation of all 7 sub-scales that represented social connectedness.

Social connectedness for HSSs was made up of seven sub-scales. Further investigation and results of these seven sub-scales are shown in Table 8.

Table 8

*Pre- and Post-Test Mean Scores (M) and Standard Deviations (sd) for HSSs Seven Sub-Scales Measuring Social Connectedness*

Variable	Sub-Scale	Pre-test		Post-test	
		M	sd	M	sd
Social Connectedness	Neighborhood	14.00	4.095	13.71	3.474
in HSSs 1-6 range/5 items per sub-scale	Friends	9.93	3.951	9.57	4.799
	Self in Present	10.93	4.531	10.71	2.972
	School	9.57	1.989	9.86	2.598
	Peer	11.21	2.778	10.93	2.645
	Teacher	10.14	3.085	9.50	2.534
	Future	9.71	3.024	9.21	2.547

*Note:* Range = the Likert Scale values; items = questions

A comparison of mean scores from pre- and post-surveys were used to answer research question #2: “were leadership confidence, intergenerational attitudes, and social connectedness affected when ESSs, HSSs, and OA leaders were brought together in a PA leadership program to lead games to ESSs - kindergarten to grade five, on the school playground during lunch recess?”

### **Elementary School Students (ESSs)**

There were significant differences in two outcome variables over time; IG attitudes became more positive and social connectedness scores appeared to decrease (despite evidence of the contrary in the qualitative data). No significant difference in leadership confidence was found between the pre- and post-intervention scores when using the Bonferroni correction although the alpha value (probability) was less than .05.

All ESSs statistical findings are shown in Table 9.

Table 9

*Comparison of Pre- and Post-Survey Scores of ESSs Measuring Leadership Confidence, IG Attitudes, and Social Connectedness*  
(*n* = 92)

	M	sd	t	df	p <sup>a</sup>	r
Leadership Confidence	0.285	3.235	2.060	547	0.040	0.210
IG Attitudes	-2.058	8.800	-5.316	516	0.000	0.487
Social Connectedness	0.209	1.954	2.506	545	0.013	0.254

*Note:* M = difference in pre- and post-test mean scores; *sd* = standard deviation; *t* = significance; *df* = degrees of freedom; *p* = probability; *r* = effect size

<sup>a</sup>p value significance at < .05 with Bonferonni Adjustment p < .016

### High School Students (HSSs)

The results from the HSS surveys showed no significant differences between the pre- and post-intervention leadership confidence, IG attitudes or social connectedness scores, see Table 10.

Table 10

*Comparison of Pre- and Post-Survey Scores of HSSs Measuring Leadership Confidence, IG Attitudes, and Social Connectedness (n = 19)*

	M	sd	t	df	p <sup>a</sup>	r
Leadership Confidence	0.42	2.87	0.639	18	0.531	0.149
IG Attitudes	0.01	6.50	0.025	18	0.980	0.006
Social Connectedness	1.79	10.84	0.616	13 <sup>b</sup>	0.548	0.168

*Note:* M = difference in pre- and post-test mean scores; *sd* = standard deviation; *t* = significance; *df* = degrees of freedom; *p* = probability; *r* = effect size

<sup>a</sup>*p* value significance at < .05 with Bonferonni Adjustment  $p < .005$

<sup>b</sup>smaller *df* because five participants were eliminated due to a valid skip value on the Likert Scale

Further analysis was done on each specific sub-scale within the social connectedness survey presented to the HSS population. Seven sub-scales were selected from the short version edition of The Hemingway Measure of Adolescent Connectedness Scale Survey (2001). By using logical rational in considerations to what was being measured and based on internal consistency values which are displayed in Table 1, the seven sub-scales were chosen. Again, due to multiple use of the HSSs data, the Bonferroni's adjustment was applied, therefore, alpha ( $\alpha$ ) was reduced from  $p < .05$  to  $p < .005$ . Table 11 shows the results of the statistical analysis for the seven-sub scales of social connectedness. In short, there were no significant differences in any of the sub-scale scores pre- and post- intervention.

Table 11

*Comparison of Pre- and Post-Survey Scores of HSSs Measuring Leadership Confidence, IG Attitudes, and Social Connectedness*  
(*n* = 14)

	M	sd	t	df	p	r
Neighborhood	0.29	2.95	0.363	13	0.723	0.10
Friends	0.36	2.62	0.510	13	0.619	0.14
Self in present	0.21	3.02	0.266	13	0.795	0.07
School	-0.29	2.05	-0.520	13	0.612	0.14
Peers	0.29	2.79	0.384	13	0.707	0.10
Teachers	0.64	3.30	0.730	13	0.478	0.20
Future	0.50	1.95	0.959	13	0.355	0.28

*Note:* M = difference in pre- and post-test mean scores; *sd* = standard deviation; *t* = significance; *df* = degrees of freedom; *p* = probability; *r* = effect size  
<sup>a</sup>*p* value significance at < .05 with Bonferonni Adjustment

### Older Adults (OAs)

When the OA results were considered, there were no significant differences in leadership confidence, IG attitudes, or social connectedness (see Table 12).

Table 12

*Comparison of Pre- and Post-Survey Scores of OAs Measuring Leadership Confidence, IG Attitudes, and Social Connectedness*  
(*n* = 7)

	M	sd	t	df	p <sup>a</sup>	r
Leadership Confidence	0.069	2.137	0.206	6	0.838	0.08
IG Attitudes	0.343	5.412	0.133	6	0.895	0.05
Social Connectedness	-1.143	2.610	-1.159	6	0.291	0.43

*Note:* M = difference in pre- and post-test mean scores; *sd* = standard deviation; *t* = significance; *df* = degrees of freedom; *p* = probability; *r* = effect size  
<sup>a</sup>*p* value significance at < .05 with Bonferonni Adjustment

## **Chapter Five**

### **Discussion**

The purpose of this study was to establish if the IPAL+ program was feasible and to determine if there were changes in leadership confidence, IG attitudes, and social connectedness as a result of this intervention. This chapter will be presented in three sections. In the first and second sections I will discuss how both the qualitative findings and quantitative results connect to previous research and how the connections help to answer the research questions for this study. In the third section I will speak to how the use of Bolman and Deal's Four-Frame Organizational model, helped strengthen my understanding of the findings and provided guidance for future IPAL+ programming within recreation and school settings.

#### **Section one – qualitative results**

The qualitative findings from this study compliment past research that has reported on the benefits of IG relationships, various configurations of IG program offerings, and the need to establish an IG theoretical framework to strengthen this growing area of research.

#### **Theme Cluster One: Structure**

Theme cluster one, demonstrated the importance of structure. How was the program going to run? What did the program look like? When did the program happen? Who did the program involve? Where was the program located? Answers to these questions were of utmost importance and needed to be relayed to all participants of the

IPAL+ program. A clearly defined plan was necessary to ensure an efficient operation of IPAL+.

The feasibility of the IPAL+ program will be discussed in terms of communication, scheduling, location, and the necessary 'equipment box', known as the equipment, which represent the four sub-themes of Theme Cluster One: Structure.

This main theme cluster provides critical insight into the operations behind a program such as IPAL+. Planning, communicating, and evaluating are respected best practices in the field of recreation. This theme provided evidence that structure is important for ESSs, HSSs, and OAs. Participants informed us when the schedule did not fit or when the walk to the elementary school was too far. Participants voiced their concerns when the supplies were limited or when they arrived on-site to be IPAL+ leaders but the secretaries did not know what was going on. As a seasoned recreation professional, these messages were strong reminders for the need to attend to the multiple layers of the program so structure was sustained throughout the research time-line.

The structure of the IPAL+ project was appreciated by those engaged in the program. One compliment by an ADM of an OA activity centre reminds recreation coordinators and researchers that a program such as IPAL+ must have specific structure with clear intentions: "I think too there was a real structure to it, that there is[are] definite projects, definite goals, and objects and I think that certainly helped to facilitate a successful outcome." Dellmann-Jenkins' (1997) proposed seven-step model for IG programs in senior centres and the emphasis on following a structure and framework supports our findings.

Overall, the feedback from the participants provides me, as the researcher and as a community recreation coordinator, the confidence to answer the first research question as it links to structure; yes, the IPAL+ program is feasible. However, this study has provided me an opportunity to identify where attention is needed to ensure greater success in the future limiting, potential problems and increasing accomplishments while contributing to research.

### **Structure**

**Sub-theme - communication.** The need for ongoing communication was paramount. IPAL+ leaders needed to communicate with the ESSs, within their own age demographics, with ADMs, and with stakeholders. Stakeholders and ADMs needed to ensure that communication was ongoing to provide the best ‘platform’ for the IPAL+ leaders to run the program and that the communication chain was comprehensively filtered down to all participants; teachers, education assistants, playground supervisors, support staff such as secretaries, and students.

Concerns about the level of communication were valid. Although the research team may have believed they were effective with communication methods between the ADMs, more attention was needed towards the ‘whole’ communication process. One ADM representing a high school leadership team relayed this message from one of her HSS IPAL+ leaders; “the secretaries didn’t even know the program was even running so the kids came back here to me and said, they sent us away”. This is an important finding. A more organized avenue for communication to the program coordinator or research team needs to be put in place during the program implementation so that issues such as these can be addressed immediately, not after the program has been completed.

I cannot dismiss the concerns voiced by the one high school who stated ‘the lack of communication was frustrating’ but I will also acknowledge their admiration for the idea; “I just love the concept, I just think everything needs to be tightened up.” This is important for program coordinators to hear as it tells us what people want in terms of communication that ultimately connect to structure.

An ADM representing an OA activity centre noted the “importance of having an explanation of the purpose” in reference to the IPAL+ information letters (Appendix E) that were provided to all participants as being very useful. However, further discussion about how to communicate in ways that all the participating demographics could benefit from a communication strategic plan is warranted. One question we could ask ourselves, as members of a research team and program staff might be: Could we provide a forum for all partners to communicate with the research team, the ADMs and each demographic group to find out what communication strategy would be a good fit for all the participants? I reviewed current communication platforms; email, voicemail, text, Facebook, instant-messaging options, and face-to-face communication, and referred back to research. How were these age groups communicating? Lenhart, Ling, Campbell, and Purcell (2010), found that 75% of American teens ages 12-17 years of age owned a cell phone and texting was the preferred choice of communication. ”The mobile phone has become the favored communication hub for the majority of American teens” (p. 1).

Permission was granted through the Human Research Ethics Board for one of the engaged high schools to create a Facebook page with the intent of sharing an evaluation tool through this means of communication, however, the Facebook page did not attract any attention nor was it used in any other means to communicate about the IPAL+

program. A Facebook page may be a successful tool in the future if the HSSs were given the opportunity to train the OAs on its capabilities and show them how to use it. Yuan, Hussain, Hales, & Cotten (2016) found that although OAs preferred talking to someone face-to-face, they were exploring social media in a 'spectator' role. With guidance and training, OAs may feel more confident to engage in communication through Facebook.

Older adults reported a range of ways that they communicated and stayed in contact with their social ties. In-person interaction was, by far, the most preferred method of communication, followed closely by phone communication. Few respondents reported using Skype, e-mail, or texting, but those who did varied in their preferences. (Yuan et al., 2016, p. 168)

Future considerations must be made prior to the onset of the IPAL+ program to ensure participants have communication avenues that they are comfortable and familiar with. Hosting a meet and greet session of all IPAL+ leaders to discuss such issues would be recommended. A focus group or school café gathering to troubleshoot possible concerns at the onset of the program implementation stage may result in fewer challenges along the way. A pre-intervention meeting was held with ADMs and the research team however, specific additional communication means were not discussed.

A meaningful finding for me was hearing the suggestions made by the ESSs on communicating the IPAL+ program to the rest of the school population. "Maybe we could have an assembly or something just to let us [the ESSs] know there are IPAL+ students, come at this time and at that place". "Maybe we could have an announcement because [um] we were like encouraging people to come and everyone is like 'where is it, what are you doing' we really don't know anything [about IPAL+]."

Improvements in communication will provide a plan that will assist all facets of the IPAL+ program as communication is linked to every sub-theme and main theme.

### **Structure**

**Sub-theme - scheduling.** The schedule of the IPAL+ program was a concern for all IPAL+ leaders. There were challenges within the HSSs that resulted from the fact that the leadership programs happened outside of the regular school timetable. Students expressed their concern about being late for class. “My least favorite activity during the IPAL+ program was to miss a little bit of my class.” If HSSs are expressing that being late to class is bothersome, we need to make alterations in how they participate or we may lose this cohort of participants. Possible alterations to their time commitment to the IPAL+ program could be made so that the students could return to school on time. If this is not possible the future of IPAL+ may be limited to partnering with leadership programs that are embedded within the school timetable or to physical education classes that are willing to add this into their course syllabus and receive a school credit for their participation.

OAs wanted to know in advance when the IPAL+ program was operating, when IPAL+ training would be, and what days they would be required to attend. OAs commented regarding their retired lifestyle; “once I retired I don’t know how I had time to work I was so busy”. An ADM from an OA activity centre noted that consistency worked well for their residents and stated:

I think having a regular time was really key. I liked that they could have their one day that they went; one went Mondays and one went Thursdays and I think that it was really important to have a routine and the fact that it was consistent and

weekly and I like that there was choice and flexibility because that is so important, especially for our group because things change and as you know, people had things happen in their lives and they weren't able to come or [because of] their own health right, so I thought that was good too.”

Recreation coordinators cannot assume that OAs and retirees are bored. This was something I learned as I transcribed interviews and analyzed quantitative data. OAs are busy and scheduling for them was important. Lack of attention to this need may deter the OAs from participating.

Coordinating the schedules of people alongside the schedules of various school timetables was problematic and deterred schools from participating. These discoveries were key findings in respect to the first research question and for future considerations of program planning. As a recreation coordinator, I will need to be cognisant of schedules because if I fail to plan appropriately for the age demographic I am targeting, the program has potential to fail. This is a good reminder that an academic schedule, and a school schedule, and an OA schedule have different demands and expectations.

One concern expressed by the ESSs regarding scheduling was the desire to have the IPAL+ program run the length of the school year. As researchers, we needed to communicate with the ESSs before IPAL+ began that the program was on a fixed time frame. As a recreation coordinator, and in this case also a researcher, this comment helped me understand the difference between implementing a research study versus a recreation program. In community recreation, we celebrate the success of a program by finding ways to extend the offering or we add another session to accommodate a waitlist. However, in this instance the program had a start and finish date, successful or not.

Moving forward, I would ensure the program schedule was shared to avoid the let-down that was reported by the ESSs. “Yeah, like kids would just walk around the school, that’s what we did and then IPAL+ came but one thing I wish, what I really wish, is that we still did it [IPAL+].”

### **Structure**

**Sub-theme - location.** The geographical location of the IPAL+ program became a real concern for participating partners. I discovered that this sub-theme had multiple definitions; location had different meanings for different demographics. The IPAL+ program took place in the community by connecting partners from different schools and OA activity centres, in neighborhoods where geographically each tri-pod was of close proximity, and school playgrounds were where all partners met.

An example of how location had different meanings was revealed through a comment from an ESS. This sub-theme of location was a concern for some ESSs in regards to the ‘sides of the playground’; which ‘side’ were they allowed to play on. At the participating schools, there were designated playground areas for the grades Kindergarten to grade three and for grades four and five. This designated location was represented by a ‘line’ between the playground areas and the children were aware of where they were allowed to play during recess and lunch. The IPAL+ program disintegrated the ‘sides’ of the playground extending an invitation to all children at the school to play in a common space on the school property. The IPAL+ program was specifically designed to include the gathering of multiple generations but was offered in an environment that had instilled boundaries separating ages.

This major finding is supported by further comments expressed by ESSs with statements such as; “[because of IPAL+] we started teaching like the little kids on the primary side”; “They should bring other people like from the intermediate side on the primary side or the primary to the intermediate [side] just so they can experience [um] not only being with their age category but with being with older or younger kids”. The following quote from an ESS draws attention to multiple themes; communication, location, IG relationship, and IG opportunities revealed all through the words of a child.

“I really enjoyed playing with the kids I didn’t know on the primary side but also in the intermediate side because you got to play with people you didn’t know and you got to [know them] when you started playing with them and introducing them to these new games it was kind of like you were like you’ve known them for a long time and it was just fun to play with them”.

Positive situations shared by some of the ESSs IPAL+ leaders that were now communicating with younger children from their school for the first time show that they appreciated the opportunity of an inclusive playground area. “I think that it was a lot of fun to have the kids come over [from the other side of the playground], you know just hang out with them because they are learning and we are learning and being leaders. The little kids and the older kids.”

Another opinion about the importance of the sub-theme location was shared by the athletic leadership teacher that supervises the cohort of HSSs that happens during the school timetable. “It was maybe partially successful because of the close proximity of our yards. There probably isn’t another high school so close to an elementary school in the city. It would have been tough to do another place”. Similar to scheduling concerns, the

other two HSS groups struggled with the distance between their school and their partnering elementary school. Travel time contributed to expressed concern about being late to class upon their return from being an IPAL+ leader. Independent living OAs did not express difficulty in attending their partnering elementary school. However, there were comments about the length of the program, “we travel all the way here for 25 minutes, is there more we can do?” (OA participant, personal communication, fall 2015). This provides valuable feedback towards program structure as it may affect OA’s willingness to participate in future IG programs that are implemented in different facilities.

The greatest location challenge was among the OA population that were no longer independently mobile. One of the OA groups lived in an OA care home and relied upon the resident bus for transportation. This created more scheduling responsibilities at this OA facility because the bus scheduled needed a two week lead up for booking purposes. The transportation requirement also incurred travel costs. This particular OA group was also less mobile with some OAs using wheelchairs. This pose challenges in some areas of the school playground; OAs were restricted to areas of the playground where there was no grass or stairs as these areas were not conducive to wheelchair mobility. This was important to consider and addressed during the program. This OA group worked within the means of their abilities and IPAL+ operated where they were able to function safely on the playground. Future replications of this IPAL+ program will need to be attentive to the mobility limitations.

Location played a significant role in the feasibility of the IPAL+ program. If participants cannot manage to get to the program, the program will not be feasible. If the

location is not convenient, accessible, and realistic, IPAL+ leaders will not be able to participate and the program risks the potential of being cancelled. These deciding factors will need to be addressed in the future; do we limit IPAL+ partners to elementary and high schools that are within a certain kilometer distance? Do we ensure that OAs are physically able to travel independently? As a recreation coordinator I refer to McKenzie, Carson, and Kuehne (2011) and their shared site model for an IG program. The children were bussed to the OA assisted-living facility where adaptations were already in place to accommodate the OA's function level.

### **Structure**

**Sub-theme - equipment.** The IPAL+ equipment box was a tangible item that the ESSs connected with to the IPAL+ program; when the equipment box was out, children knew the program was on. The researcher was surprised to learn of the amount of attention and concern evolving around the equipment box; who was responsible for getting the equipment box, returning the equipment box, returning the toys, replacing or fixing the toys, and as one OA said, "guarding the equipment box" was important. The information gathered from IPAL+ participants contributes to the feasibility of the IPAL+ program. Toys were identified as an integral piece of the IPAL+ program; they were an important part of the structural theme and directly linked to the first research question surrounding feasibility.

Through the research process I can now confidently discuss that some brands of skipping ropes lasted longer than others, plastic handles broke easily, rubber chickens without the squeakers sufficed although the squeaker was preferable, chalk is messy and depletes quickly, any cloth material based item gets wet and dirty (capture the flags), and

balls of all sizes are popular. This is a take away to be used for future efficient program planning when playground toys are considered.

To reduce costs, I assembled the equipment boxes for this IPAL+ program. It was important that I acknowledged the value of the equipment boxes as an important component to the IPAL+ program as they contributed to the success of the IPAL+ program. Future IPAL+ coordinators will need to ensure that a budget is allocated for the purchase of equipment box items and that someone is designated to not only compile the equipment box and the contents as suggested in Appendix G, but attends to broken or missing equipment.

In conclusion of theme cluster one, the feasibility of the IPAL+ program relied on many variables that emerged from the qualitative data collection expressed through the IPAL+ participants from all age demographics and the ADMs. Organizers needed to ensure communication was participatory among all partners, attention to schedule demands of all partners needed to be respected for ongoing engagement to happen, location challenges surrounding the elementary school playground needed to be addressed, and the necessary equipment had to be readily available.

Linkages were discovered between sub-themes; communication and equipment. These sub-themes were inter-connected because if IPAL+ participants were not told where the equipment was stored they would not know where to find it. The themes that evolved taught me that structure is not a single dimensional nor are sub-themes sequential, but that sub-themes are intertwined and each is needed to support the other.

## **Theme Cluster Two: Intergenerational Opportunities**

IG opportunities emerged as the second theme cluster as a result of multiple reports made by IPAL+ leaders remarking they had not been a part of something like this before. One OA IPAL+ leader said, “I haven’t worked with groups like this before” while HSSs looked at this opportunity as something new. “It [IPAL+] gave high school students a chance to work with kids”. ESSs remarked on the appreciation of the HSSs acknowledging their leadership and spoke to what fun they had with the OAs. “It [IPAL+] was really fun because they [OAs] were trying to encourage you” was stated by an ESS. A HSS commented “I think working with the older adult participants made the games more fun”. IPAL+ participants mention ‘many firsts’ in regards to a leadership role and working with the ‘other’ demographic.

The findings provided a clear story that IG relationships can develop when IG opportunities are offered. Many IPAL+ leaders referred to this experience as their ‘first’ interaction with young people or with older people. Building these IG relationships also helped us discover shifts in IG attitudes, which helped to answer part of our second research question. As highlighted in Chapter Two, Carson, Kobayashi, and Kuehne (2011) found that children experienced a heightened appreciation of OAs; both their abilities and their challenges shifted their thoughts about this demographic in a positive way as a result of spending more time with them. Our study also confirmed similar findings. ESSs reported having positive shifts in IG attitudes as a result of participating in the IPAL+ program through both the qualitative and quantitative data collected as a result of participating in the IPAL+ program.

The sub-themes that formed theme cluster two were 1) IG appreciation, 2) social engagement, a sense of belonging and purpose, and 3) shifts in IG attitudes.

### **Intergenerational Opportunities**

**Sub-theme - intergenerational appreciation.** Accolades were expressed by a number of IPAL+ leaders. There was an appreciation for each other that surprised some; HSSs commented on the amount of positive energy the OAs brought to the games. The OAs were consistently impressed with the behaviours of the HSSs and the level of responsibility they displayed. “I was really impressed with them, they were always right prompt on time”. There was a desire of the ESSs to continue IG relationships after the IPAL+ program was over; “I wish they didn’t have to leave, I don’t want them to go”. This connects with the findings by Biggs and Knox (2014) referred to in Chapter Two. From their focus group reports, these authors identified one of the emerging themes to be ‘personal change responses’. Participants and parents of the participants both refer to a shift in attitudes towards OAs. Our findings support Biggs and Knox’s findings. ESSs wanted more interactions with OAs. “I wish they didn’t have to go”.

Reflecting on my role as a community program coordinator I can now see and understand the benefits of the IPAL+ program. These findings addressed both research questions. The research questions are built around people; if there are no willing participants the IPAL+ program would not be able to run. The second research question measures the changes that people experienced as a result of the IPAL+ program. This finding is important as it builds upon past and current IG research about IG relationships. IPAL+ created a space that invited people of multiple generations to work together in new experiences and begin to appreciate each other.

The ESSs appreciated the HSSs being present and spoke about their connections. “I like that I know some of them [HSSs] because I have a friend that goes there and I like that they know my name some of them and they always had their smiles on. They were encouraging.” Within all age demographics, appreciation was voiced. This reinforced for me as a recreation coordinator that IG programs need to be included in the future. We commit in community recreation to answering people’s requests, the IPAL+ project has provided many suggestions through the data acquired.

### **Intergenerational Opportunities**

**Sub-theme - social engagement, sense of belonging and purpose.** The IPAL+ program provided a place of commitment, responsibility, and purpose for leaders of all ages. An ESS reflected on their experience, “we got to create and totally we were like the teachers”. An elementary school principal noted, “There was an organized sense of purpose with volunteers on our school grounds during lunch recess”. This finding shows why the IPAL+ program has the potential to be a valuable offering in community for multiple generations. In community recreation, one steering guideline for program community development is to create and provide opportunities that are inclusive and available to everyone. "Social capital is defined as the resources available to individuals and groups through social connections and social relations with others. Access to social capital enables older citizens to maintain productive, independent, and fulfilling lives." (Cannuscio, Block, & Kawachi, 2003, p. 395). I connect with social capital theory for all demographics when I think about program development. IPAL+ provided another program option and resource for people to access within a community recreation and school setting.

Weintraub and Killian (2007) used social contact as the intervention for their IG study (discussed in Chapter Two) and found that those OAs engaging in more social contact with children experienced a positive increase in emotional well-being. The findings of the IPAL+ program emphasized the importance of social connectivity. IPAL+ provided a place for OAs to connect with others; ESSs, HSSs, and ADMs. The level of social engagement that occurred within the IPAL+ program provides evidence IPAL+ did, what recreation programs attempt to do, which is to provide people the space to be in contact with one another.

Emerging from social engagement was a sense of belonging. IPAL+ brought people together. Relationships were formed that might not have happened without the existence of the IPAL+ program. ESSs, HSSs, and OAs spanning over eight decades in age worked together in a leadership role. The experience gave them an opportunity to be responsible, and provided a sense of belonging and purpose. They identified themselves as a player of the IPAL+ leadership team. They felt they belonged. When we asked the question, “Is there anything else we missed that you feel is important to say?” to a focus group of OAs this was one response:

I think you scored on all of those points on all those objectives. I agree like I said you know, it’s a win-win program and you should encourage this intergenerational [program]. I don’t know how much the kids got out of it. But I get the feeling that generally speaking they were genuinely surprised too, to actually see us participating in recess time in the games and that’s something they had not envisioned I think.

## **Intergenerational Opportunities**

**Sub-theme - shifts in intergenerational attitudes.** Statements by many of the IPAL+ leaders of all ages indicated that there was a change in attitudes about ‘other’ age groups. “I like the seniors being around because they not only taught the little kids stuff they hadn’t learned but they taught us. They were really helpful in giving us tips on how to get more people involved, and they were just great to have around.”

A HSS reflected on a personal shift that was experienced because of the IPAL+ program. “I think for us as well, we were aware we were like too much on our phones and we’re like playing and going back to our old games a little more now”. This statement infers that the IPAL+ program can also contribute to a self-change project. It illustrates an IG attitude shift from a different angle; one of a self-observation.

An ESSs stated, “I felt a big [um] change that happened, I liked I guess playing with little kids and I guess kind of brought out different sides I guess because [I guess] that was stuck inside me the whole time.” This statement infers IG attitudes were happening within the ESSs which speaks to the scope of the effects of the intervention. This statement also connects with the impact of the ‘sides’ of the playground that emerged in the sub-theme location within theme cluster one. This statement shows that the designation of specific sides of the playground for specific ages groups could be taking away the opportunities for IG relationship building on the playground and hindering possible shifts in IG attitudes.

Within my department of community recreation, we categorize program offerings into groups; early childhood, school age, teens and adults however, there are situations of further age segregation within these age offerings especially within the school age

category. This reminds me of a shift our department experienced a few years ago when the title 'senior' was eliminated from our marketing language. The OA program offering would now be unlimited for persons ages 55 years and older. Through expressions of feedback, people voiced their opinion; they do not want to be connected to a stigma that is strictly based on a number qualifier.

An OA expressed his concern about the lack of social engagement teens were displaying in public spaces; they were too involved on their cell phones. When this OA participated in IPAL+, he was delighted to see that HSSs were not always on social media. The IPAL+ program provided the opportunity to look at others under a different lens. Yet another OA's comment illustrates this:

The kids were good. As I said in my survey, my survey from the first one is much different because I didn't expect them to be that attentive or that well-mannered because my only judgement, I don't have any grandchildren, is just the television. They certainly aren't [well-mannered] on the television. I was certainly pleased at how the children behaved.

These findings answered the second research question; were there changes in IG attitudes? This is important because it provides the researcher an understanding of what changed the attitude. Being involved in IPAL+ provided the space, place, and time for the IPAL+ leaders to watch and get to know each other and engage with them as opposed to 'watching' them and making assumptions. "So, these preconceived notions that I had about the young children and apparently, they have about the older people, so that [IPAL+] really brought me close, it kind of jived, I really enjoyed their company and my perspective changed".

These recollections link to a quote gathered through an environmental scan (Westhaver, 2016) where a teen participant of the Trust Us Program commented, “we are more alike than we are different”. Shifts in IG attitudes evolved because of participation as an IPAL+ leader within the IPAL+ program.

We can connect these findings to literature and acknowledge that IPAL+ is contributing to IG research. We are joining the movement of researchers that are discovering when we bring people of different ages together in common places, in shared activities, or to engage in conversations, pre-conceived attitudes of each other begin to break down and shift to be more positive (Biggs & Knox, 2014; Carson, Kobayashi & Kuehne, 2011; Weintraub & Killian, 2007).

### **Theme Cluster Three: Leadership Opportunities**

The IPAL+ program provided leadership opportunities for multiple generations. The IPAL+ program trained individuals to facilitate a PA program to ESSs. The leadership training included lessons on how to lead groups of children and how to teach specific games. “Leadership is a key factor in assisting individuals, groups, organizations in achieving their goals in an ever-changing and complete society” (Edginton, Hudson, Scholl, & Lauzon 2011, p.19). Daft (2015) reflects on reciprocal leadership; leaders learn from their experience of being in a leadership position and from the people they are leading. He speaks to influence being a reciprocal process that is not passive but multidirectional. The IPAL+ program was designed to bring ESSs, HSSs, and OAs together where each demographic had leadership responsibilities. Every participant of the IPAL+ program was needed in order for the program to be successful.

It was interesting to note that although many participants reported having had leadership training (79 percent of ESSs, 79 percent of HSSs, and 43 percent of OAs) through the quantitative data, there were many accounts from the qualitative data of the IPAL+ program being a 'first'. Perhaps the participants were not connecting theoretical leadership with practical leadership experiences. In the future of IPAL+ leader training, an organizational chart similar to Table 2, may assist the participants in grasping an understanding of the whole picture; IPAL+ is multi-dimensional. Descriptive statistics (Table 4) provides an indication of leadership training experienced by the IPAL+ participants.

### **Leadership Opportunities**

**Sub-theme - school and community support.** The support of stakeholders represented by the ADMs played an instrumental role in the success of the IPAL+ program. Many ADMs had to work directly with the IPAL+ leaders in their schools. This was an additional work task. Ensuring that their own needs and school culture were respected while developing new relationships had its challenges. Some feedback was not positive. This statement was from an ADM, a high school teacher who supported the high school leadership program that was coordinated by two student leaders. "There needed to be more touching base. The girls [two HSS IPAL+ leaders in charge of the school's IPAL+ leadership team], felt like they were left alone. They wanted more touching base [with the IPAL+ coordinator]. They wanted to see [name] more". This feedback is crucial in addressing the feasibility question of the study. If the ADMs had not participated as fully as they did, the IPAL+ program may not have had such success in each school

Key support from stakeholders and participants can ultimately determine the feasibility and sustainability of a program or initiative. A quote from a HSS puts a different perspective on support stating, “I believe passing down knowledge is just as important as learning”. This quote ‘enveloped’ multiple themes and expressions such as leadership, shifts in attitudes, and support discovered through the qualitative data analysis. IPAL+ was much greater than the individual parts. IPAL+ was a phenomenon; it created a lived experience for individuals who reported on individual instances that were impactful. Those individual instances became collective instances that helped to create a situation where the IPAL+ program could be deemed feasible and sustainable.

IPAL+ was about the community coming together from multiple locations, mixed generations, and combinations of experiences to create something that would have an impact.

The support for IPAL+ was consistent. “I love the concept” commented an ADM from a high school; “It was an awesome idea” remarked an ADM high school leadership teacher; and an ADM from an OA activity centre said, “I thought it was a wonderful project and just really beneficial for everybody involved”. These affirmations lead me to challenge means of sustainability. Why would we not continue a program so well received? When asked about barriers an ADM in the role of an elementary school vice-principal said, “It would be so nice to have that [IPAL+] all the time, it’s unfortunate I think that’s it, you say barriers, I think how do we have that [IPAL+] happen again and something that’s magic.”

When discussing support for a program such as IPAL+, we also need to address the internal operations of the program. Chorn Dunham and Casadonte (2009) found that

although post-test proved positive significant changes in IG attitudes introducing the OA leaders first to the kids in the classroom where their study took place was important. One ESS was confused when being asked about IPAL+, “High school? Ummm, yeah. Sorry, I am confused. What did you mean by the adults are they the high school kids?” This is another important finding. Formal introductions were done only at one school and only to a portion of their school body. In the future, the recommendation would be to have an IPAL+ celebration kick off assembly and introduce all of the team players.

We had approval and support from multiple levels of ADMs (elementary school teacher, high school teacher, community recreation coordinator) to have HHSs and OAs on a playground during lunch recess but we did not introduce the leaders to the full teaching staff, support staff or student body at all of the schools.

This theme has strong connections with the sub-theme of communication. I think back to the ESSs that suggested we “have an assembly” to tell the entire student body about IPAL+. This would be a good opportunity to introduce the IPAL+ leadership team. With all the concerns and issues around strangers in school settings this pre-IPAL+ program introduction is a must. Community recreation departments invest time, money, and resources training all staff and volunteers in best practices evolving around issues to do with child protection. These best practices need to be instilled in the future of the IPAL+ training portion of the program and introduction to all the partners of the program, including the ESSs.

## **Leadership Opportunities**

**Sub-theme - new experience and responsibilities.** IPAL+ was a new program for two of the three elementary schools that participated. McConnell and Naylor's 2016 study piloted the IPAL+ program at the location of one of the tri-pods used in this study. Although many IPAL+ leaders identified with having leadership experience, being an IPAL+ leader was a first 'experience' for everyone. ESSs, HSSs, and OAs all made statements alluding to the fact that "this was new"; "I had never done anything like this before"; "it provided me an opportunity to be a leader". This new leadership experience was not the 'norm'. Due to the new experience, new friendships developed throughout the leader's participation in the IPAL+ program. These new leadership experiences led to new friendships which in turn led to a sense of social connectedness and a shift in IG attitudes. Participants said; "I wish they could just stay"; "it's like having a big sister"; "I think working with the OA participants the games were more fun, it brought a different energy to them".

Along with new experiences, new responsibilities were undertaken. HSSs acknowledged the leadership opportunity through their interaction with the ESSs; "helping teach the students new games gave us a chance to work on important leadership skills". One HSS IPAL+ leader suggested "I think the program would work better if the sessions were a bit smaller. After a certain point, the children start to lose their attention".

## **Leadership Opportunities**

**Sub-theme - increased self-confidence.** IPAL+ leaders were observed by ADMs as doing a great job, taking control, and displaying leadership confidence. Comments

made that contributed to this sub-theme were important for the researcher as they connected to the research question that wanted to measure changes in leadership confidence. Qualitative data alluded to observations of confident leadership made by ADMs of the HSSs and the ESSs. The OAs spoke highly in regards to the HSSs noting they were ‘impressed’ by the HSSs. The combination of ‘new experience’ and ‘responsibility’ could have an effect on leadership confidence according to the data gathered qualitatively, however, there was no indication directly from leaders that they felt more confident as a leader as a result of the IPAL+ program within the qualitative data reporting nor was significance found in the quantitative data gathered.

This sub-theme was not isolated to the main cluster – Leadership Opportunities. This sub-theme is inter-connected to the sub-themes ‘community and school support’ and ‘new experiences and responsibilities’. As accolades were received about the IPAL+ program, more IPAL+ leaders expressed an interest in their role as a leader. Additional elementary schools also contacted me through my recreation department inquiring how they could be a part of the IPAL+ program. The success of the program was experienced with all stakeholders with numerous comments of support and inquiry to repeat the IPAL+ program in the next year. There was one high school that was not interested in continuing however, this was due to a combination of factors; “finding volunteers was too hard” (ADM); “balancing academics” (HSS) or “stressful because you got there and it wasn’t organized at that end” (HSS) and “It was a big-time commitment”, (HSS).

There are multiple themes expressed within these statements that are also embedded in the major theme of structure and sub-themes of communication and location. Although, this was not all positive, these comments also demonstrate

confidence. As IPAL+ leaders, partners, stakeholders, there was an increase in confidence to speak to the successes and the challenges of the IPAL+ program.

#### **Theme Cluster Four: Enjoyment**

The IPAL+ program provided enjoyment for all ages. Participants of the IPAL+ program commented on the enjoyment they experienced and those associated with the participants (family members), and those witnessing the program in action (ADMs) acknowledged the joy the program brought to all involved.

#### **Enjoyment**

**Sub-themes - fun and positive experience.** The findings were consistent. The IPAL+ program was fun, the IPAL+ leaders enjoyed it, and the IPAL+ program created a positive experience for most involved.

ESSs stated: “It was just fun to help out”; “It was fun to hang out with some of my other friends”; “It was very fun”; “Now we have something fun to do”. They also noted their opinions about the OAs: “It brought a lot of joy to the older people”.

HSSs stated: “It was nice to have all the students work together”; “It was super fun”; “You can have fun at any age”; “I enjoyed it”; “It was fun being involved in this program”. And they noted that the “younger kids as well seemed like a positive role model to the older kids”.

OAs stated: “I enjoyed it very much”; “I really enjoyed myself”; “I felt good”.

They also identified joy in the ESSs: “The kids were wholehearted into it, they enjoy it and that’s the main thing”. Another OA noted: “four weeks later, you see the same person and you’re going to have fun and they all came together better”.

And those around noticed too. An ADM from an OA facility noted: “Definitely joy I would say, some joy”; another commented, “it was really good, really positive”; and an ADM from a high school said, “They had fun, they really enjoyed themselves” in regards to his grade ten students.

IPAL+ brought joy and positive experiences to the participants.

### **Unique findings**

I would like to briefly discuss some unique findings; stereotyping, collaboration, and reminiscing arose as special findings. Although individually unique, I identified an underlying connection between the themes that perhaps may lend itself to the development of future IG program offerings.

Gaggioli (2014) found that children’s attitudes changed in a positive way towards OAs as a result of the OAs sharing stories with the children in the classroom. I think this theme has underlying connections to IG relationships and shifts in IG attitudes; by simply forming relationships positive changes begin to happen.

Stereotyping, collaboration, and reminiscing are themes that are interconnected. In the study described above, the opportunity was presented to share a life story (to reminisce) by the OA to a child. Through this process the children’s perception of the OA changed. In our study, the OAs were not the only ones telling stories from their past. One HSS commented on his own childhood, “playing these [games] brought me back to elementary school”. How did they have the opportunity to do this? Through a collaborative process; IPAL+. This is supported by another HSS who said that the IPAL+ program experience was a “chance to collaborate with some seniors”.

I found these three unique findings powerful. Although they were mentioned by only one participant in each demographic, I thought that they were important and something that I could pay attention to in future considerations of IG program planning. Bringing together OAs and children of all ages may bring out the stereotypes but also dissipate them through a collaborative process that may include something as simple as reminiscing by ‘telling a story’.

## **Section two – Quantitative Discussion**

**Leadership Confidence.** Unexpectedly, pre- and post-test scores revealed no significance in change between the pre- and post-mean scores however, a negative shift was moving towards significance with the ESSs in their leadership confidence. The length of the survey and comprehending the survey could have had an effect on the results. A ceiling effect may be present with IPAL+ participants scoring their level of leadership confidence as high in the pre-test survey allowing them little or no room for improved scoring (a ceiling effect). Following the experience of leading children may have changed the IPAL+ leaders’ leadership confidence; whereas, in their pre-test survey they confidently evaluated themselves as being able to lead the children, but after experiencing the challenges of actually leading the children, they may have lost confidence in their leadership skills. The theme cluster of leadership opportunities speaks briefly to leadership confidence and acknowledges that other people saw the IPAL+ leaders as displaying levels of confidence. The descriptive information provided information about the background of leadership training. Future ideas may include asking the participants if they are actively in a leadership role at the present time.

Participants could then be separated into different study groups representing those with past experience, no experience, and those currently leading to evaluate the intervention.

**Intergenerational Attitudes.** IG attitudes shifted in a positive significant direction in the ESSs demographic as a result of this program, although the qualitative data appeared to suggest positive IG attitudes changed among all groups. The lack of significance in the HSSs and OAs may have been a result of the reverse coded questions. Reverse coded questions may have led to confusion for some participants resulting in inaccurate scoring. In a study by van Sonderen, Sanderman, and Coyne, (2013) that looked at response bias and reverse questions, the researchers found there was no evidence that reverse wording a question stopped people from completing surveys with a bias, however, their data suggested “respondent inattention and confusion” (p. 1). Could the language of the reverse coded questions have confused the participant? This is a consideration that needs to be looked at for future.

**Social connectedness.** Social connectedness was measured using three different scales according to age. The School Connectedness – School Experience Scale Elementary School Youth survey was used for ESSs (Anderson-Butcher, Amorose, Iachini, & Ball, 2013). ESSs group showed significant changes in social connectedness.

Ten sub-scales of the Hemingway Measure of Adolescent Connectedness Scale (Karcher, 2001) were used for the HSSs survey however, only seven scales were used in the data analysis but there were no significant differences in these measures over time.

The Measuring Belongingness: The Social Connectedness and the Social Assurance Scales survey (Lee & Robbins, 1995) was used for the OAs. There also were no significant differences in these measures.

Similar considerations need to be taken into account in regards to all of the instruments used to gather our quantitative results:

- The possibility of a ceiling effect; if participants answered five on a one to five Likert Scale, change can only be noted in one direction.
- The length of the survey was commented on by several participants. One HSS stated: “The only change I would recommend is making the work sheet things to give your feedback about us shorter and not as repetitive”.
- Due to the length of the survey, assumptions can be made that participants completing the form would become bored, lose focus, and have the urge to rush to complete the survey.
- Response bias. Were participants being truthful?
- Data entry error.

### **Section three – Applying Bolman and Deal’s Theoretical Framework**

Bolman and Deal’s 1997 Four-Frame organizational model was the theoretical framework I chose to help guide me as I interpreted the findings to answer the first research question – Is the IPAL+ program feasible? Moving forward with subsequent IPAL+ programs, I may consider applying Bolman and Deal’s organizational model from the planning stages to the implementation stage to assist in the operation of the program. It has been discovered in the research that there is not an IG theoretical framework and that structure and a better understanding could assist others in providing an IG experience. I am also considering formulating my own theoretical framework which has developed from the information learned through this study.

Bolman and Deal's Organizational Framework (1997) is presented as four-frames; Structural, Human Resource, Political, and Symbolic. Attention to all four-frames is paramount in an organizational structure for success, growth, and sustainability, (Bolman & Deal 1992).

**Structural Frame.** "The Structural Frame emphasizes goals, specialized roles, and formal relationships" (Bolman & Deal, 1997, p. 13) which require planning and evaluation. I noted that the development of the IPAL+ program and the need for structure, aligned with Dellman-Jenkins (1999) findings and compliments their proposed seven-step model.

The information letter provided to potential IPAL+ participants by the research team offered details about the IPAL+ program and established a start line and time frame (Appendix E). The theme communication was identified as an integral component of the structure of the program. An OA provided indirect feedback about the impact of handing out typed information as one means of communication when he said: "Actually I had real no concerns which was nice because on reading the description of what we were supposed to be doing."

The Structural Frame involved all participants; ESSs, HSSs, ADMs, the research team, and stakeholders. It was imperative that everyone was a part and aware of their individual commitment to the IPAL+ program from the training session moving forward through six weeks of IPAL+. The coordination between the organizations and IPAL+ leaders was key in the success of the program. An ADM from a high school responded to the question "What made it easier?" with this response: "What made it easier? Um, well having someone from [name], someone from [name], and a team of people from [name]

and your seniors and having those players in place and willing to participate, that [was] key.”

**Human Resource Frame.** The Human Resource Frame plays a vital role in the IPAL+ program. As noted earlier and heard through the one-on-one interviews and focus groups, IPAL+ was about bringing people together. Bolman and Deal (1997) suggest that key words that describe this frame include supporting the needs, skills, abilities, and feelings of the participants. “From a human resource perspective, the key challenge is to tailor organizations to people – to find a way for individuals to get the job done while feeling good about why they are doing” (p. 14).

As the researcher and member of the research team, I needed to be available for the IPAL+ leaders and attentive to the needs of the partners. I attended as often as I could and on days when a member of the research team was not present, things didn’t always go as smoothly; toys were left out, ID bands were not worn, and leaders missed the support of an experienced leader to assist them with leading the children. Moving forward we may consider a leader team forum prior to the onset of the IPAL+ program to provide a platform for all participants to share their questions or concerns and then consider scheduling check-in points over the span of the 6-week program. The human resource frame would attend to the individual needs of all of the people affected by the IPAL+ program. Future implementation of a daily on-site IPAL+ supervisor is recommended.

**Political Frame.** The Political Frame represents the everyday struggles for power, survival, and leadership. “Bargaining, negotiation, coercion, and compromise are part of everyday life” (Bolman & Deal, p. 14). It is within the political frame where

stakeholders of the IPAL+ program came together to present their own needs. I discovered barriers such as accessibility challenges, inexperience in IG leadership, and ensuring positive IG attitudes were parallel to Ayala's et al. (2007) findings. Adjustments to personal agendas were made to avoid dead end power struggles and mediation happened many times throughout the program to best prepare for success. Attention to mix-matched schedules was important. Would an elementary school be able to shift their lunch recess time in the future to better accommodate a partnering high school?

**Symbolic Frame.** The fourth frame is the Symbolic Frame. This frame “sees organizations as cultures, propelled more by rituals, ceremonies, stories, heroes, and myths than by rules, policies, and managerial authority” (p. 14). Although not formally reported as part of this thesis, the IPAL+ program culminated in a celebratory health fair that brought together all stakeholders and IPAL+ leaders. (Appendix I).

**Applying the Four-Frames.** Use of a theoretical framework is important as it can help the researcher to better answer the research questions. During this study, formative assessment provided the flexibility to make necessary changes to ensure all stakeholders had the opportunity to provide input. Examples of adjustments that occurred ‘along the way’ provide examples of how all four-frames of Bolman and Deal’s organizational model were addressed.

In considerations to Bolman and Deal’s Four-Frame Organization Model (1997), I have created Table 13 utilizing the names of the four-frames as the column titles and the descriptors of the cell content as the row titles. Using this as a template, I was able to identify how IPAL+ fits into their organizational model and where gaps may exist. I am

suggesting that this new IPAL+ organizational model be used as a future template for the operations of the IPAL+ program.

Table 13

*Adapted from Bolman and Deal's Four-Frame Organization Model in Consideration of the IPAL+ Program*

Bolman and Deal break down the four frames by:	Frame			
	<i>Structural</i>	<i>Human Resource</i>	<i>Political</i>	<i>Symbolic</i>
<i>Metaphor for organization</i>	The playground	The Leadership team	The ADM teams	The celebration health fair
<i>Central Concepts</i>	The program layout	Leadership training	Organizational challenges; lack of communication	Culture of the partners
<i>Image of leadership</i>	IPAL+ leader	Fun and confident	Advocate for the program; ask for what is needed	A confident leader
<i>Basic leadership challenge</i>	Thorough communication with all channels	To ensure all IPAL+ leaders' needs are being met	Scheduling of the leaders	Leaders are identified and need to be introduced to the ESSs

After interpreting the data, I realized that the four emerging main theme clusters were gravitating to work within Bolman and Deal's Four-Frame Model. Through processes including triangulation, dissemination, and evaluation, with reason I aligned the operation of the IPAL+ program to their model, as summarized in Table 13.

By focusing on the four main theme clusters I discovered these themes organically mirrored Bolman and Deal's (1997) Four-Frame organizational model. This

finding demonstrates the power of the generation of the emerging themes and speaks to the strength of this study as shown in Table 14.

Table 14

*Bolman and Deal's Four-Frame Organization Model in Cross Examination of the IPAL+ Program's Four Emerging Themes*

Bolman and Deal's Four-Frame	Frame			
	<i>Structural</i>	<i>Human Resource</i>	<i>Political</i>	<i>Symbolic</i>
<i>Four emerging IPAL+ themes</i>	Structure	Intergenerational Opportunities	Leadership Opportunities	Enjoyment

The IPAL+ program provided me, the researcher and graduate student an opportunity to be a part of a study that not only brought people together to answer two questions, but to develop forward thinking recommendations for growth and development in an area of research that is growing in interest world-wide.

Yes, the IPAL+ program is feasible. We can bring ESSs, HSSs, and OAs together in a leadership role to teach games to ESSs on the playground, but we need to be attentive to detail. We need structure. We have found through our emerging themes that the IPAL+ program presented IG and leadership opportunities and overall, people experienced joy through the process.

In answer to the second research question, there were significant positive changes with ESSs in IG attitudes and significant negative changes in social connectedness over time. There were shifts moving towards significance with ESSs in leadership confidence in a negative direction, with HSSs in the sub-scale 'school' in a positive direction, and in a positive direction with OAs in social connectedness. However, for multiple reasons

listed in Chapter Five, the Discussion, measuring these variables differently in the future may provide an opportunity to gather significant data.

### **Benefits and challenges of applying a mixed methodology**

Applying both qualitative and quantitative data gathering methods enabled me, as the researcher, to discover a truer story. A greater understanding was embraced by interpreting both qualitative data through one-on-one interviews, focus groups, and written replies concurrently with quantitative data gathered through pre- and post-surveys. Almalki (2016) summed up his investigation of the challenges and benefits of applying a mixed methodology:

The conclusion that was drawn provided that mixed methods research was a suitable approach to any given project, its use would yield positive benefits, in that the use of differing approaches has the potential to provide a greater depth and breadth of information which is not possible utilizing singular approaches in isolation. (p. 288)

Discoveries in the data that would have been missed if the study design applied was limited to qualitative or quantitative data gathering would include; significance found in the ESSs group within the variables of IG attitudes and social connectedness. On the contrary, limiting data gathering through the survey process (quantitative approach) would have overlooked discovering that IG attitudes did shift between the demographics and that OAs did feel more connected through their increased sense of purpose which was revealed through the one-on-one interviews and focus groups. Applying qualitative data gathering methodology also disclosed information that was not initially intended for study, such as; the ‘sides’ of the playground, the integral pieces of

the feasibility of the IPAL+ program, and the enjoyment experienced by all of the participants. This lends to a potential challenge presented by mixed methodology; reconciling diverse findings that emerge between the two methods.

A greater scope of understanding and exposure of both benefits and challenges of an investigation will be discovered when applying “words and numbers” (qualitative and quantitative data) to research, Almalki (2016, p. 288). This study echoed this statement and demonstrated that by applying both qualitative and quantitative data gathering methodology, a deeper understanding of the IPAL+ program was learned.

## **Chapter Six**

### **Epilogue**

This chapter will summarize the major findings and results of this research, provide considerations for future IG research, and reflect back on the researcher's personal experiences with IG programming, growth, and future development. This Chapter will be presented in three sections; conclusion, future recommendations, and closing remarks from the researcher.

#### **Section one – conclusion**

Thematic analysis drew attention to the feasibility of the IPAL+ program and the need to attend to details for successful operation. Emerging themes were clear and consistent focusing on structure, IG opportunities, leadership opportunities, and enjoyment. The descriptor 'fun' was reported throughout data collection during one-on-one interviews, focus groups, and written questionnaires along with expressions of positive experiences by all participants of the IPAL+ program. Constructive feedback was provided enabling the development of future considerations to be identified for the next session of IPAL+. An awareness of the importance of personal connection made by me, the researcher, was introduced throughout the discussion. I had opportunities to suggest future practical application from the lessons that I had learned through the study of the IPAL+ program.

The quantitative findings showed significant changes in IG attitudes and social connectedness with the ESSs. Although significance was not proven in other areas of the study, results were moving towards significant levels in a negative direction with ESSs in

leadership confidence and in a positive direction with HSSs in the sub-scale 'school' under social connectivity and with the OAs in social connectedness. There were no other levels of significance discovered in the data between pre- and post-mean scores however, as mentioned in the discussion, there are other variables that may have accounted for this such as the length of the survey, rushing through the survey just to finish it, not understanding the scoring system of the survey, and potential data entry error.

Attending to detail for the success of any operation is key. The use of a theoretical framework to guide the interpretation of the findings drew attention to detail. Bolman and Deal's Four-Frame organizational model (1997), provided a way to compare their four frames to the integral structure of the IPAL+ program identifying what worked well, what needed attention, and what was missed.

## **Section two - future recommendations**

This study has provided many opportunities to look at IG programming under a different lens, identify potential opportunities, and acknowledge the importance of applying a framework to research.

Considerations for future could include study design; increasing IG exposure time, being creative in the physical location and setting, and integrating OAs with disabilities as an additional group, multi-cultural OAs, or non-speaking English OAs. A multiple group design can provide the opportunity for adding a control group while keeping integrity in mind; intervention if proven significant, would be offered to all participants following the study. Multiple variations could be considered; PA, reading, playing cards, and other activities. Many variations in the location of the IG program

were discussed in this thesis and more considerations could be suggested such as offering the IPAL+ program at a high school or in a recreation centre setting.

ESS IPAL+ leaders suggested methods of spreading the word about IPAL+ and suggested 'try-out' times where the kids from the 'other side' of the playground could play on the playground structures that are in the primary wing of the playground or the intermediate wing of the school property. HSSs suggested smaller groups of children and to run the activities over a shorter amount of time. OAs were concerned about scheduling and wanted more lead-up time to plan their schedules. With the evolution of social media communication and information sharing, future recommendations may include a closed Facebook page restricted to members of the IPAL+ program. This would provide a place for posting IPAL+ schedules, IPAL+ photos, and encourage an open dialogue between the Facebook page members.

It is my intention, as the researcher and the recreation coordinator, to continue to disseminate the lessons learned from the IPAL+ project to colleagues, stakeholders involved in IPAL+, recreation professionals, and to future schools and OA activity centres showing interest in the program. This will be accomplished by presentations to local and provincial recreation organizations. I would like to co-author an IPAL+ manual with the other members of the research team and make it accessible to other recreation professionals that would benefit from the findings of this study. This manual would provide a template to follow should they decide to offer IG programs such as IPAL+ within their agency.

Other future considerations of action include:

- Submit a publication to the Journal of Intergenerational Relationships

- Find other journals that lend themselves to this area of research and submit academic articles to them such as provincial and national recreation publications. An example of this is Recreation and Parks BC Magazine, The Canadian Parks and Recreation Magazine (CPRA), and the National Recreation Parks and Recreation (NRPRA) (USA)
- Prepare a presentation for the provincial BCRPA annual conference to promote IG programming with recreation systems
- Prepare a presentation for School District 61, 62, and 63 to share the findings from this study and to encourage more collaboration between schools and local municipal recreation agencies
- Contact the UVic Institute on Aging and Lifelong Health to explore the possibility of having my recreation department become affiliated – should more IG programs be offered within your agency. Offer to present the findings of this study to members of the Institute.
- Consider contacting the UVic Division of Student Affairs to share this research and begin a conversation about university student volunteering opportunities with regard to IG offerings on campus
- Consider contacting the office of International Student Services to share this research and begin a conversation about the possibility of connecting international students with OAs in the community that might assist in their transition to their Canadian university experience

### **Section three - closing remarks from the researcher**

As a community recreation coordinator, the IPAL+ program connected visions of my organization's community development plan, goals in our youth development strategy, and future intentions of our OA strategy. I submitted an intention of continuation of the IPAL+ program and a proposal of a request for funding for IG programs to continue integrated into our OA strategy over the upcoming five-year plan. This request has been approved.

I continued to manage the IPAL+ program following the year of the study with adaptations. Due to the dismantling of the research team, the coordinating roles were limited to two program coordinators; me and one additional recreation coordinator. With this reduction in human resources, the IPAL+ program continued with two tri-pods each combining an elementary school, a high school, and a cohort of OA participants. The OA population changed too. Two OA activity centres found it too difficult to find available engagement of their members due to their busy travel and volunteer schedules. The OA resident facility was very keen to participate and continued with the IPAL+ relationship. I did a presentation of the IPAL+ project to a neighboring church OA lunch group and to a local women's walking group in attempts to recruit participation. These two public information sessions drew the attention of a group of OAs to fulfill this cohort needed to sustain the IPAL+ program with the elementary and high schools in this area. The addition of two hired on-site recreation program attendants filled the need of having a daily supervisor; someone to assist with overseeing the operation of IPAL+ during lunch recess. This position evolved as a result of the feedback gathered in the study and during

a follow-up meeting with stakeholders brainstorming on ideas of how I could best address contentious issues.

The IPAL+ program is slated to continue in the upcoming school year at two locations and to continue to include a recreation program attendant on-site daily at each elementary school. The inclusion of OAs with disabilities and OA immigrants are being explored. It is exciting to be engaged in emerging research originated as the brainchild of Dr. Patti-Jean Naylor. The legacy she has left in our community for the betterment of the health and wellness of our citizens is legendary.

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## **Appendix A**

### **Qualitative Questions**

#### **ESSs and HSSs – questions for qualitative data**

1. What was it like being involved in the IPAL+ program?
2. What were your favourite activities in the IPAL+ program? Why?
3. What were your least favourite activities in the IPAL+ program? Why?
4. Tell us about the any changes that might have happened because of the IPAL+ program Prompt: at your school, on yourself? Can you describe for me some examples?
5. What do you think about working with the older adult participants?
6. What did you think about leading the students in activities?
7. Is there anything else we forgot that you feel is important to say?
  - a. Any changes we should make?

#### **OAs – questions for qualitative data**

1. What was your experience like participating in the IPAL+ program?
  - a. What went well? (what made it easy?)
  - b. What didn't go well? (what made it hard?)
2. What were your favourite activities in the IPAL+ program? Why?
3. What were your least favourite activities in the IPAL+ program? Why?
4. Tell us about the any changes that might have happened because of the IPAL+ program

a. at the 55+ Centre, on yourself?

b. Can you describe for me some examples

5. What do you think about learning from the student leaders?

6. What did you think about leading the students?

Is there anything else we forgot that you feel is important to say?

a. Any changes we should make?

**ADM – questions for qualitative data**

1. What do you think about the IPAL+ project? (benefits to school, students, issues/negative impacts)
2. What factors do you think facilitated the implementation of the IPAL+ project?
3. What factors do you think were barriers to the implementation the IPAL+ project?
4. What do you think of the role of the Older Adult Participants on the playground?
5. What do you think of the role of the student leaders? (High school and grade 4/5)
6. What improvements could be made to the IPAL+ Initiative to enhance its chances of success in other schools and communities?
7. Would you support your school in continuing in the IPAL+ project? If so why?  
And If not why?
8. What have we missed that you feel is important to say?

## Appendix B

### Pre-survey Questions

ESSs – Pre-survey, p. 1

The purpose of this survey is to collect information about your knowledge and confidence in [REDACTED] physical activity in your school prior to the Action Schools! BC Leadership workshop.

This survey is part of the research component of IPAL participation, completion of this survey is optional, the data will be anonymous, and by completing this survey you are consenting for the use of the data as described in the original consent form.

Thank you for taking the time to help with this important evaluation.

Pre-Workshop

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ESSs – Pre-survey, p. 2

### A. QUESTIONS ABOUT YOU

1. What is your date of birth? (day/month/year)

\_\_\_\_\_

2. What grade are you in?

\_\_\_\_\_ Grade

3. Have you been involved in any leadership training at your school before?

*Please tick the box*

Yes

No

If YES, please tell us what training?

\_\_\_\_\_

### PLEASE CIRCLE THE BEST ANSWER TO THE SENTENCES BELOW

4. I play physically active games during recess

Everyday    Most days    A few days/wk    Less than 2 days/wk    Not at all

5. I am physically active in my free time (e.g. play sports, exercise, dance, etc.)

Everyday    Most days    A few days/wk    Less than 2 days/wk    Not at all

Pre-Workshop

# \_\_\_\_\_

ESSs - Pre-survey, p. 3

**B. QUESTIONS ABOUT LEADERSHIP**

Please circle the number that best describes what you think.

	Not at all true		Not sure		Very true
I know several active games to play on the playground	1	2	3	4	5
My actions impact others at school	1	2	3	4	5
I can be a good leader	1	2	3	4	5
I can lead activities that teach other children about healthy eating	1	2	3	4	5
I have the power to help make school a healthier place	1	2	3	4	5
I am a leader in my school	1	2	3	4	5
I'm confident I can lead active games on the playground.	1	2	3	4	5
I am confident I can be a role model for healthy eating at school	1	2	3	4	5
I know how to get children's attention if I am teaching a game or a lesson about healthy eating	1	2	3	4	5
I am confident that I can lead other students in fitness activities in the classroom	1	2	3	4	5
I am confident that I can help students feel safe about joining in games on the playground	1	2	3	4	5

Pre-Workshop

# \_\_\_\_\_

ESSs – Pre-survey, p. 4

**C. QUESTIONS ABOUT INTERGENERATIONAL ACTIVITIES**

Please circle the number that best describes what you think.

	Strongly Disagree	2	Not sure	4	Strongly agree
I like visiting old people.	1	2	3	4	5
Old people are out of step with the times	1	2	3	4	5
Old people get mad easily.	1	2	3	4	5
Old people are friendly.	1	2	3	4	5
It is fun to talk with an old person	1	2	3	4	5
Old people are in their second childhood.	1	2	3	4	5
Old people have a happy life.	1	2	3	4	5
Old people can be mean.	1	2	3	4	5
Old people have poor coordination.	1	2	3	4	5
Old people can teach younger people new things.	1	2	3	4	5
Old people like to boss everybody around.	1	2	3	4	5
Old people don't do much.	1	2	3	4	5
Old people laugh a lot.	1	2	3	4	5
Old people are stubborn.	1	2	3	4	5
Old people don't talk very much.	1	2	3	4	5
I think old people are funny.	1	2	3	4	5
Old people are sick a lot of the time.	1	2	3	4	5
Old people are very intelligent.	1	2	3	4	5
Old people are full of energy.	1	2	3	4	5

Pre-Workshop

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ESSs – Pre-survey, p. 5

**D. QUESTIONS ABOUT SCHOOL LIFE**

Please circle the number that best describes what you think.

	NO!	No.	Yes.	YES!
I enjoy coming to school.	1	2	3	4
I have good relationships with teachers and other adults at my school.	1	2	3	4
I am proud to be at my school.	1	2	3	4
I feel like I belong at my school.	1	2	3	4

Pre-Workshop

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HSSs – Pre-survey, p. 1

The purpose of this survey is to collect information about your knowledge and confidence related to promoting physical activity in your school prior to the [REDACTED] Leadership workshop.

This survey is part of the research component of IPAL participation, completion of this survey is optional, the data will be anonymous, and by completing this survey you are consenting for the use of the data as described in the original consent form.

Thank you for taking the time to help with this important evaluation.

Pre-Workshop

# \_\_\_\_\_

HSSs – Pre-survey, p. 2

**A. QUESTIONS ABOUT YOU****1. What is your date of birth? (day/month/year)**

\_\_\_\_\_

**2. What grade are you in?**

\_\_\_\_\_ Grade

**3. Have you been involved in any leadership training at your school before?***Please tick the box* Yes No**If YES, please tell us what training?**

\_\_\_\_\_

**PLEASE CIRCLE THE BEST ANSWER TO THE SENTENCES BELOW**

**4. I am physically active in my free time (e.g. play sports, exercise, dance, etc.)**  
Everyday   Most days   A few days/wk   Less than 2 days/wk   Not at all

Pre-Workshop

# \_\_\_\_\_

HSSs – Pre-survey, p. 3

**B. QUESTIONS ABOUT LEADERSHIP**

Please circle the number that best describes what you think.

	Not at all true		Not sure		Very true
I know several active games to play on the playground	1	2	3	4	5
My actions impact others at school	1	2	3	4	5
I can be a good leader	1	2	3	4	5
I can lead activities that teach other children about healthy eating	1	2	3	4	5
I have the power to help make school a healthier place	1	2	3	4	5
I am a leader in my school	1	2	3	4	5
I'm confident I can lead active games on the playground.	1	2	3	4	5
I am confident I can be a role model for healthy eating at school	1	2	3	4	5
I know how to get children's attention if I am teaching a game or a lesson about healthy eating	1	2	3	4	5
I am confident that I can lead other students in fitness activities in the classroom	1	2	3	4	5
I am confident that I can help students feel safe about joining in games on the playground	1	2	3	4	5

Pre-Workshop

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HSSs – Pre-survey, p. 4

**C. QUESTIONS ABOUT INTERGENERATIONAL ACTIVITIES**

Please circle the number that best describes what you think.

	Strongly Disagree		Not sure		Strongly agree
I like visiting old people.	1	2	3	4	5
Old people are out of step with the times	1	2	3	4	5
Old people get mad easily.	1	2	3	4	5
Old people are friendly.	1	2	3	4	5
It is fun to talk with an old person	1	2	3	4	5
Old people are in their second childhood.	1	2	3	4	5
Old people have a happy life.	1	2	3	4	5
Old people can be mean.	1	2	3	4	5
Old people have poor coordination.	1	2	3	4	5
Old people can teach younger people new things.	1	2	3	4	5
Old people like to boss everybody around.	1	2	3	4	5
Old people don't do much.	1	2	3	4	5
Old people laugh a lot.	1	2	3	4	5
Old people are stubborn.	1	2	3	4	5
Old people don't talk very much.	1	2	3	4	5
I think old people are funny.	1	2	3	4	5
Old people are sick a lot of the time.	1	2	3	4	5
Old people are very intelligent.	1	2	3	4	5
Old people are full of energy.	1	2	3	4	5

Pre-Workshop

# \_\_\_\_\_

## HSSs – Pre-survey, p. 5

**D. QUESTIONS ABOUT SOCIAL CONNECTEDNESS**

Please circle the number that best describes what you think.

	Not at all true	Not really true	Sort of true	True	Very true	? Unclear
I like hanging out around where I live (like in my neighborhood)	1	2	3	4	5	6
Spending time with friends is not so important to me.	1	2	3	4	5	6
I can name 5 things that others like about me.	1	2	3	4	5	6
My family has fun together.	1	2	3	4	5	6
I have a lot of fun with my brother(s) or sister(s). (leave blank if you have none)	1	2	3	4	5	6
I work hard at school.	1	2	3	4	5	6
My classmates often bother me.	1	2	3	4	5	6
I care what my teachers think of me.	1	2	3	4	5	6
I will have a good future.	1	2	3	4	5	6
I enjoy spending time by myself reading.	1	2	3	4	5	6
I spend a lot of time with kids around where I live.	1	2	3	4	5	6
I have friends I'm really close to and trust completely.	1	2	3	4	5	6

Pre-Workshop

# \_\_\_\_\_

## HSSs – Pre-survey, p. 6

	Not at all true	Not really true	Sort of true	True	Very true	? Unclear
There is not much that is unique or special about me.	1	2	3	4	5	6
It is important that my parents trust me.	1	2	3	4	5	6
I feel close to my brother(s) or sister(s). (leave blank if you have none)	1	2	3	4	5	6
I enjoy being at school.	1	2	3	4	5	6
I like pretty much all of the other kids in my grade.	1	2	3	4	5	6
I do not get along with some of my teachers.	1	2	3	4	5	6
Doing well in school will help me in the future.	1	2	3	4	5	6
I like to read.	1	2	3	4	5	6
I get along with the kids in my neighbourhood.	1	2	3	4	5	6
Spending time with my friends is a big part of my life.	1	2	3	4	5	6
I can name 3 things that other kids like about me.	1	2	3	4	5	6
I enjoy spending time with my parents.	1	2	3	4	5	6
I enjoy spending time with my brothers/sister. (leave blank if you have none)	1	2	3	4	5	6

Pre-Workshop

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## HSSs – Pre-survey, p. 7

	Not at all true	Not really true	Sort of true	True	Very true	? Unclear
I get bored in school a lot.	1	2	3	4	5	6
I like working with my classmates.	1	2	3	4	5	6
I want to be respected by my teachers.	1	2	3	4	5	6
I do things outside of school to prepare for my future.	1	2	3	4	5	6
I never read books in my free time.	1	2	3	4	5	6
I often spend time playing or doing things in my neighbourhood.	1	2	3	4	5	6
My friends and I talk openly with each other about personal things.	1	2	3	4	5	6
I really like who I am.	1	2	3	4	5	6
My parents and I disagree about many things.	1	2	3	4	5	6
I try to spend time with my brothers/sisters when I can. (leave blank if you have none)	1	2	3	4	5	6
I do well in school.	1	2	3	4	5	6
I get along well with other students in my classes.	1	2	3	4	5	6
I try to get along with my teachers.	1	2	3	4	5	6

**Pre-Workshop**

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## HSSs – Pre-survey, p. 8

	Not at all true	Not really true	Sort of true	True	Very true	? Unclear
I do lots of things to prepare for my future.	1	2	3	4	5	6
I often read when I have free time.	1	2	3	4	5	6
I hang out a lot with kids in my neighbourhood.	1	2	3	4	5	6
I spend as much time as I can with my friends.	1	2	3	4	5	6
I have special hobbies, skills, or talents.	1	2	3	4	5	6
My parents and I get along well.	1	2	3	4	5	6
I try to avoid being around my brother/sister(s). (leave blank if you have none)	1	2	3	4	5	6
I feel good about myself when I am at school.	1	2	3	4	5	6
I am liked by my classmates.	1	2	3	4	5	6
I always try hard to earn my teachers' trust.	1	2	3	4	5	6
I think about my future often.	1	2	3	4	5	6
I usually like my teachers.	1	2	3	4	5	6
My neighbourhood is boring.	1	2	3	4	5	6
My friends and I spend a lot of time talking about things.	1	2	3	4	5	6

Pre-Workshop

# \_\_\_\_\_

## HSSs – Pre-survey, p. 9

	Not at all true	Not really true	Sort of true	True	Very true	? Unclear
I have unique interests or skills that make me interesting.	1	2	3	4	5	6
I care about my parents very much.	1	2	3	4	5	6
What I do now will not affect my future.	1	2	3	4	5	6
Doing well in school is important to me.	1	2	3	4	5	6
I rarely fight or argue with the other kids at school.	1	2	3	4	5	6

Pre-Workshop

# \_\_\_\_\_

OAs – Pre-survey, p. 1

Appendix C – Pre-workshop Survey

The purpose of this survey is to collect information about your knowledge and confidence related to promoting physical activity prior to the [REDACTED] Leadership workshop

Thank you for taking the time to help with this important evaluation.

Pre-Workshop

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OAs – Pre-survey, p. 2

**A. QUESTIONS ABOUT YOU****1. What is your date of birth? (day/month/year)**

\_\_\_\_\_

**2. Have you been involved in any leadership training before?***Please tick the box*  Yes No**If YES, please tell us what training?**

\_\_\_\_\_

**3. Have you been involved in any physical activity training before?***Please tick the box*  Yes No**If YES, please tell us what training?**

\_\_\_\_\_

**4. Have you ever taught children before?***Please tick the box*  Yes No**PLEASE CIRCLE THE BEST ANSWER TO THE SENTENCE BELOW****5. I am physically active in my free time (e.g. walking, hiking, exercise, dance, etc.)**

Everyday    Most days    A few days/wk    Less than 2 days/wk    Not at all

Pre-Workshop

# \_\_\_\_\_

OAs – Pre-survey, p. 3

**B. QUESTIONS ABOUT LEADERSHIP**

Please circle the number that best describes what you think.

	Not at all true	Somewhat True	Not sure	Mostly True	Very true
I know several active games	1	2	3	4	5
I can lead activities that teach other children about physical activity	1	2	3	4	5
I'm confident I can teach children active games for the playground.	1	2	3	4	5
I am confident I can be a role model for physical activity	1	2	3	4	5
I know how to get children's attention if I am teaching a game	1	2	3	4	5
I am confident that I can teach students about fitness activities in the classroom	1	2	3	4	5
I am confident that I can help students feel safe about joining in games on the playground	1	2	3	4	5

Pre-Workshop

# \_\_\_\_\_

OAs – Pre-survey, p. 4

**C. QUESTIONS ABOUT INTERGENERATIONAL ACTIVITIES**

Please circle the number that best describes what you think.

	Strongly Disagree		Not sure		Strongly agree
I like visiting young people.	1	2	3	4	5
Young people are noisy.	1	2	3	4	5
Young people are friendly.	1	2	3	4	5
It is fun to talk with a young person	1	2	3	4	5
Young people spend too much time with technology.	1	2	3	4	5
Young people have a happy life.	1	2	3	4	5
Young people can be mean.	1	2	3	4	5
Young people aren't polite	1	2	3	4	5
Young people can teach older people new things.	1	2	3	4	5
Young people laugh a lot.	1	2	3	4	5
Young people are sloppy.	1	2	3	4	5
Young people talk too much.	1	2	3	4	5
I think young people are funny.	1	2	3	4	5
Young people are lazy.	1	2	3	4	5
Young people are very intelligent.	1	2	3	4	5
Young people are full of energy.	1	2	3	4	5

Pre-Workshop

# \_\_\_\_\_

OAs – Pre-survey, p. 5

**D. QUESTIONS ABOUT SOCIAL CONNECTEDNESS**

Please circle the number that best describes what you think.

-	<b>Strongly Disagree</b>	-	-	-	<b>Strongly agree</b>	
<u>I feel disconnected from the world around me.</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
<u>Even around people I know, I don't feel that I really belong.</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
<u>I feel so distant from people.</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
<u>I have no sense of togetherness with my peers.</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
<u>I don't feel related to anyone.</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
<u>I catch myself losing all sense of connectedness with society.</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
<u>Even among my friends, there is no sense of brother/sisterhood.</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
<u>I don't feel I participate with anyone or any group.</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>

Pre-Workshop

# \_\_\_\_\_

## Appendix C

### Post-Survey Questions

ESSs – Post-survey, p. 1

Appendix 3 – Post-workshop Survey

The purpose of this survey is to collect information about your knowledge and confidence related to promoting physical activity in your school prior to the [REDACTED] Leadership workshop

This survey is part of the research component of IPAL participation, completion of this survey is optional, the data will be anonymous, and by completing this survey you are consenting for the use of the data as described in the original consent form.

Thank you for taking the time to help with this important evaluation.

Post-Workshop

# \_\_\_\_\_

ESSs – Post-survey, p.2

### A. QUESTIONS ABOUT YOU

**A. Rate your overall level of satisfaction with the Action Schools! BC leadership workshop**

1	2	3	4	5
Not		Somewhat		Extremely
Satisfied		Satisfied		Satisfied

**2. How useful do you feel this training will be to you?**

1	2	3	4	5
Not		Somewhat		Extremely
Useful		Useful		Useful

**3. After taking this workshop, how confident are you that you can use what you learned in the workshop in your school?**

1	2	3	4	5
Not		Somewhat		Very
Confident		Confident		Confident

**4. Do you intend to use what you learned today during the next month?**

YES     MAYBE     NO

Post-Workshop

# \_\_\_\_\_

ESSs – Post-survey, p.3

**B. QUESTIONS ABOUT LEADERSHIP**

Please circle the number that best describes what you think after taking the workshop.

	Not at all true	Somewhat True	Not sure	Mostly True	Very true
I know several active games to play on the playground	1	2	3	4	5
My actions impact others at school	1	2	3	4	5
I can be a good leader	1	2	3	4	5
I can lead activities that teach other children about healthy eating	1	2	3	4	5
I have the power to help make school a healthier place	1	2	3	4	5
I am a leader in my school	1	2	3	4	5
I'm confident I can lead active games on the playground.	1	2	3	4	5
I am confident I can be a role model for healthy eating at school	1	2	3	4	5
I know how to get children's attention if I am teaching a game or a lesson about healthy eating	1	2	3	4	5
I am confident that I can lead other students in fitness activities in the classroom	1	2	3	4	5
I am confident that I can help students feel safe about joining in games on the playground	1	2	3	4	5

Post-Workshop

# \_\_\_\_\_

ESSs – Post-survey, p.4

**C. QUESTIONS ABOUT INTERGENERATIONAL ACTIVITIES**

Please circle the number that best describes what you think.

	Strongly Disagree		Not sure		Strongly agree
I like visiting old people.	1	2	3	4	5
Old people are out of step with the times	1	2	3	4	5
Old people get mad easily.	1	2	3	4	5
Old people are friendly.	1	2	3	4	5
It is fun to talk with an old person	1	2	3	4	5
Old people are in their second childhood.	1	2	3	4	5
Old people have a happy life.	1	2	3	4	5
Old people can be mean.	1	2	3	4	5
Old people have poor coordination.	1	2	3	4	5
Old people can teach younger people new things.	1	2	3	4	5
Old people like to boss everybody around.	1	2	3	4	5
Old people don't do much.	1	2	3	4	5
Old people laugh a lot.	1	2	3	4	5
Old people are stubborn.	1	2	3	4	5
Old people don't talk very much.	1	2	3	4	5
I think old people are funny.	1	2	3	4	5
Old people are sick a lot of the time.	1	2	3	4	5
Old people are very intelligent.	1	2	3	4	5
Old people are full of energy.	1	2	3	4	5

Post-Workshop

# \_\_\_\_\_

ESSs – Post-survey, p. 5

**D. QUESTIONS ABOUT MY SCHOOL LIFE**

Please circle the number that best describes what you think.

	<u>NO!</u>	<u>No.</u>	<u>Yes.</u>	<u>YES!</u>
I enjoy coming to school.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
I have good relationships with teachers and other adults at my school.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
I am proud to be at my school.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
I feel like I belong at my school.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>

Post-Workshop

# \_\_\_\_\_

## HSSs – Post-survey, p. 1

## Appendix 3 – Post-workshop Survey

The purpose of this survey is to collect information about your knowledge and confidence related to promoting physical activity in your school prior to the [REDACTED] Leadership workshop

This survey is part of the research component of IPAL participation, completion of this survey is optional, the data will be anonymous, and by completing this survey you are consenting for the use of the data as described in the original consent form.

Thank you for taking the time to help with this important evaluation.

Post-Workshop

# \_\_\_\_\_

HSSs – Post-survey, p. 2

**A. QUESTIONS ABOUT YOU****A. Rate your overall level of satisfaction with the Action Schools! BC leadership workshop**

1	2	3	4	5
Not		Somewhat		Extremely
Satisfied		Satisfied		Satisfied

**2. How useful do you feel this training will be to you?**

1	2	3	4	5
Not		Somewhat		Extremely
Useful		Useful		Useful

**3. After taking this workshop, how confident are you that you can use what you learned in the workshop in your school?**

1	2	3	4	5
Not		Somewhat		Very
Confident		Confident		Confident

**4. Do you intend to use what you learned today during the next month?**

YES     MAYBE     NO

Post-Workshop

# \_\_\_\_\_

## HSSs – Post-survey, p. 3

**B. QUESTIONS ABOUT LEADERSHIP**

Please circle the number that best describes what you think after taking the workshop.

	Not at all true	Somewhat True	Not sure	Mostly True	Very true
I know several active games to play on the playground	1	2	3	4	5
My actions impact others at school	1	2	3	4	5
I can be a good leader	1	2	3	4	5
I can lead activities that teach other children about healthy eating	1	2	3	4	5
I have the power to help make school a healthier place	1	2	3	4	5
I am a leader in my school	1	2	3	4	5
I'm confident I can lead active games on the playground.	1	2	3	4	5
I am confident I can be a role model for healthy eating at school	1	2	3	4	5
I know how to get children's attention if I am teaching a game or a lesson about healthy eating	1	2	3	4	5
I am confident that I can lead other students in fitness activities in the classroom	1	2	3	4	5
I am confident that I can help students feel safe about joining in games on the playground	1	2	3	4	5

Post-Workshop

# \_\_\_\_\_

HSSs – Post-survey, p. 4

**C. QUESTIONS ABOUT INTERGENERATIONAL ACTIVITIES**

Please circle the number that best describes what you think.

	Strongly Disagree		Not sure		Strongly agree
I like visiting old people.	1	2	3	4	5
Old people are out of step with the times	1	2	3	4	5
Old people get mad easily.	1	2	3	4	5
Old people are friendly.	1	2	3	4	5
It is fun to talk with an old person	1	2	3	4	5
Old people are in their second childhood.	1	2	3	4	5
Old people have a happy life.	1	2	3	4	5
Old people can be mean.	1	2	3	4	5
Old people have poor coordination.	1	2	3	4	5
Old people can teach younger people new things.	1	2	3	4	5
Old people like to boss everybody around.	1	2	3	4	5
Old people don't do much.	1	2	3	4	5
Old people laugh a lot.	1	2	3	4	5
Old people are stubborn.	1	2	3	4	5
Old people don't talk very much.	1	2	3	4	5
I think old people are funny.	1	2	3	4	5
Old people are sick a lot of the time.	1	2	3	4	5
Old people are very intelligent.	1	2	3	4	5
Old people are full of energy.	1	2	3	4	5

Post-Workshop

# \_\_\_\_\_

HSSs – Post-survey, p. 5

**D. QUESTIONS ABOUT MY SOCIAL LIFE**

Please circle the number that best describes what you think.

	<u>Not at all true</u>	<u>Not really true</u>	<u>Sort of true</u>	<u>True</u>	<u>Very true</u>	<u>? Unclear</u>
<u>I like hanging out around where I live (like in my neighborhood)</u>	1	2	3	4	5	6
<u>Spending time with friends is not so important to me.</u>	1	2	3	4	5	6
<u>I can name 5 things that others like about me.</u>	1	2	3	4	5	6
<u>My family has fun together.</u>	1	2	3	4	5	6
<u>I have a lot of fun with my brother(s) or sister(s). (leave blank if you have none)</u>	1	2	3	4	5	6
<u>I work hard at school.</u>	1	2	3	4	5	6
<u>My classmates often bother me.</u>	1	2	3	4	5	6
<u>I care what my teachers think of me.</u>	1	2	3	4	5	6
<u>I will have a good future.</u>	1	2	3	4	5	6
<u>I enjoy spending time by myself reading.</u>	1	2	3	4	5	6
<u>I spend a lot of time with kids around where I live.</u>	1	2	3	4	5	6
<u>I have friends I'm really close to and trust completely.</u>	1	2	3	4	5	6

Post-Workshop

# \_\_\_\_\_

## HSSs – Post-survey, p. 6

	Not at all true	Not really true	Sort of true	True	Very true	? Unclear
<u>There is not much that is unique or special about me.</u>	1	2	3	4	5	6
<u>It is important that my parents trust me.</u>	1	2	3	4	5	6
<u>I feel close to my brother(s) or sister(s). (leave blank if you have none)</u>	1	2	3	4	5	6
<u>I enjoy being at school.</u>	1	2	3	4	5	6
<u>I like pretty much all of the other kids in my grade.</u>	1	2	3	4	5	6
<u>I do not get along with some of my teachers.</u>	1	2	3	4	5	6
<u>Doing well in school will help me in the future.</u>	1	2	3	4	5	6
<u>I like to read.</u>	1	2	3	4	5	6
<u>I get along with the kids in my neighbourhood.</u>	1	2	3	4	5	6
<u>Spending time with my friends is a big part of my life.</u>	1	2	3	4	5	6
<u>I can name 3 things that other kids like about me.</u>	1	2	3	4	5	6
<u>I enjoy spending time with my parents.</u>	1	2	3	4	5	6
<u>I enjoy spending time with my brothers/sister. (leave blank if you have none)</u>	1	2	3	4	5	6

Post-Workshop # \_\_\_\_\_

## HSSs – Post-survey, p. 7

	Not at all true	Not really true	Sort of true	True	Very true	? Unclear
<u>I get bored in school a lot.</u>	1	2	3	4	5	6
<u>I like working with my classmates.</u>	1	2	3	4	5	6
<u>I want to be respected by my teachers.</u>	1	2	3	4	5	6
<u>I do things outside of school to prepare for my future.</u>	1	2	3	4	5	6
<u>I never read books in my free time.</u>	1	2	3	4	5	6
<u>I often spend time playing or doing things in my neighbourhood.</u>	1	2	3	4	5	6
<u>My friends and I talk openly with each other about personal things.</u>	1	2	3	4	5	6
<u>I really like who I am.</u>	1	2	3	4	5	6
<u>My parents and I disagree about many things.</u>	1	2	3	4	5	6
<u>I try to spend time with my brothers/sisters when I can. (leave blank if you have none)</u>	1	2	3	4	5	6
<u>I do well in school.</u>	1	2	3	4	5	6
<u>I get along well with other students in my classes.</u>	1	2	3	4	5	6
<u>I try to get along with my teachers.</u>	1	2	3	4	5	6

Post-Workshop

# \_\_\_\_\_

## HSSs – Post-survey, p. 8

	Not at all true	Not really true	Sort of true	True	Very true	? Unclear
<u>I do lots of things to prepare for my future.</u>	1	2	3	4	5	6
<u>I often read when I have free time.</u>	1	2	3	4	5	6
<u>I hang out a lot with kids in my neighbourhood.</u>	1	2	3	4	5	6
<u>I spend as much time as I can with my friends.</u>	1	2	3	4	5	6
<u>I have special hobbies, skills, or talents.</u>	1	2	3	4	5	6
<u>My parents and I get along well.</u>	1	2	3	4	5	6
<u>I try to avoid being around my brother/sister(s). (leave blank if you have none)</u>	1	2	3	4	5	6
<u>I feel good about myself when I am at school.</u>	1	2	3	4	5	6
<u>I am liked by my classmates.</u>	1	2	3	4	5	6
<u>I always try hard to earn my teachers' trust.</u>	1	2	3	4	5	6
<u>I think about my future often.</u>	1	2	3	4	5	6
<u>I usually like my teachers.</u>	1	2	3	4	5	6
<u>My neighbourhood is boring.</u>	1	2	3	4	5	6
<u>My friends and I spend a lot of time talking about things.</u>	1	2	3	4	5	6

Post-Workshop

# \_\_\_\_\_

## HSSs – Post-survey, p. 9

	Not at all true	Not really true	Sort of true	True	Very true	? Unclear
<u>I have unique interests or skills that make me interesting.</u>	1	2	3	4	5	6
<u>I care about my parents very much.</u>	1	2	3	4	5	6
<u>What I do now will not affect my future.</u>	1	2	3	4	5	6
<u>Doing well in school is important to me.</u>	1	2	3	4	5	6
<u>I rarely fight or argue with the other kids at school.</u>	1	2	3	4	5	6

Post-Workshop

# \_\_\_\_\_

OAs – Post-survey, p. 1

Appendix 3 – Post-workshop Survey

The purpose of this survey is to collect information about your knowledge and confidence related to promoting physical activity prior to the [REDACTED] Leadership workshop

Thank you for taking the time to help with this important evaluation.

Post-Workshop

# \_\_\_\_\_

OAs – Post-survey, p. 2

**A. QUESTIONS ABOUT YOU****1. Rate your overall level of satisfaction with the Action Schools! BC leadership workshop**

1	2	3	4	5
Not		Somewhat		Extremely
Satisfied		Satisfied	Satisfied	

**2. How useful do you feel this training will be to you?**

1	2	3	4	5
Not		Somewhat		Extremely
Useful		Useful		Useful

**3. After taking this workshop, how confident are you that you can teach children about what you learned in the workshop?**

1	2	3	4	5
Not		Somewhat		Very
Confident		Confident		Confident

Post-Workshop

# \_\_\_\_\_

OAs – Post-survey, p. 3

**B. QUESTIONS ABOUT LEADERSHIP**

Please circle the number that best describes what you think after taking the workshop.

	Not at all true	Somewhat True	Not sure	Mostly True	Very true
<i>I know several active games</i>	1	2	3	4	5
<i>I can lead activities that teach other children about physical activity</i>	1	2	3	4	5
<i>I'm confident I can teach children active games for the playground.</i>	1	2	3	4	5
<i>I am confident I can be a role model for physical activity</i>	1	2	3	4	5
<i>I know how to get children's attention if I am teaching a game</i>	1	2	3	4	5
<i>I am confident that I can teach students about fitness activities in the classroom</i>	1	2	3	4	5
<i>I am confident that I can help students feel safe about joining in games on the playground</i>	1	2	3	4	5

Post-Workshop

# \_\_\_\_\_

OAs – Post-survey, p. 4

**C. QUESTIONS ABOUT INTERGENERATIONAL ACTIVITIES**

Please circle the number that best describes what you think.

	Strongly Disagree		Not sure		Strongly agree
I like visiting young people.	1	2	3	4	5
Young people are noisy.	1	2	3	4	5
Young people are friendly.	1	2	3	4	5
It is fun to talk with a young person	1	2	3	4	5
Young people spend too much time with technology.	1	2	3	4	5
Young people have a happy life.	1	2	3	4	5
Young people can be mean.	1	2	3	4	5
Young people aren't polite	1	2	3	4	5
Young people can teach older people new things.	1	2	3	4	5
Young people laugh a lot.	1	2	3	4	5
Young people are sloppy.	1	2	3	4	5
Young people talk too much.	1	2	3	4	5
I think young people are funny.	1	2	3	4	5
Young people are lazy.	1	2	3	4	5
Young people are very intelligent.	1	2	3	4	5
Young people are full of energy.	1	2	3	4	5

Post-Workshop

# \_\_\_\_\_

OAs – Post-survey, p. 5

**D. QUESTIONS ABOUT SOCIAL CONNECTEDNESS**

Please circle the number that best describes what you think.

	<u>Strongly Disagree</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>Strongly agree</u>
<u>I feel disconnected from the world around me.</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	
<u>Even around people I know, I don't feel that I really belong.</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	
<u>I feel so distant from people.</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	
<u>I have no sense of togetherness with my peers.</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	
<u>I don't feel related to anyone.</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	
<u>I catch myself losing all sense of connectedness with society.</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	
<u>Even among my friends, there is no sense of brother/sisterhood.</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	
<u>I don't feel I participate with anyone or any group.</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	

Post-Workshop

# \_\_\_\_\_

## Appendix D

### Ethics Certificate



Office of Research Services | Human Research Ethics Board  
 Administrative Services Building Rm B202 PO Box 1700 STN CSC Victoria BC V8W 2Y2 Canada  
 T 250-472-4545 | F 250-721-8960 | uvic.ca/research | ethics@uvic.ca

### Certificate of Renewed Approval

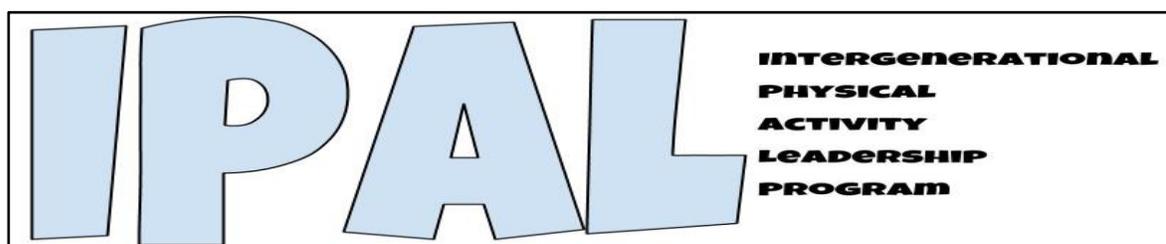
PRINCIPAL INVESTIGATOR: <b>Jennifer McConnell</b>	<b>ETHICS PROTOCOL NUMBER</b> <b>13-505</b> Minimal Risk Review - Delegated
UVic STATUS: <b>Ph.D. Student</b>	ORIGINAL APPROVAL DATE: 20-Jan-14
UVic DEPARTMENT: <b>SDH</b>	RENEWED ON: 31-Jan-17
SUPERVISOR: <b>Dr. Patti-Jean Naylor</b>	APPROVAL EXPIRY DATE: 19-Jan-18
<b>PROJECT TITLE: The Intergenerational Physical Activity Leadership (IPAL) Program</b>	
<b>RESEARCH TEAM MEMBER</b> Community Partner: David Docherty (President, Cordova Bay 55+ Association); Elementary School Partner: Kelly Urarii (Principal, Cordova bay Elementary); Community Partners (Saanich Parks & Recreation): Chris Filler. Mena Westhaver (UVic), Dr. Lara Lauzon (UVic).	
<b>DECLARED PROJECT FUNDING: Doctoral Fellowship (2014-pending); Island Health Collaboration Grant (2015-pending); Saanich Parks &amp; Recreation (2015)</b>	
<b>CONDITIONS OF APPROVAL</b>	
<p>This Certificate of Approval is valid for the above term provided there is no change in the protocol.</p> <p><b>Modifications</b> To make any changes to the approved research procedures in your study, please submit a "Request for Modification" form. You must receive ethics approval before proceeding with your modified protocol.</p> <p><b>Renewals</b> Your ethics approval must be current for the period during which you are recruiting participants or collecting data. To renew your protocol, please submit a "Request for Renewal" form before the expiry date on your certificate. You will be sent an emailed reminder prompting you to renew your protocol about six weeks before your expiry date.</p> <p><b>Project Closures</b> When you have completed all data collection activities and will have no further contact with participants, please notify the Human Research Ethics Board by submitting a "Notice of Project Completion" form.</p>	
<b>Certification</b>	
<p>This certifies that the UVic Human Research Ethics Board has examined this research protocol and concluded that, in all respects, the proposed research meets the appropriate standards of ethics as outlined by the University of Victoria Research Regulations Involving Human Participants.</p>	
<p>_____          Dr. Rachael Scarth          Associate Vice-President Research Operations</p>	

Certificate Issued On: 16-Feb-17

13-505  
McConnell, Jennifer

## Appendix E

### Recruitment Letter



#### **Program Information Letter for High School Students**

[Name of school] is participating in an Intergenerational Physical Activity Leadership (IPAL+) project in partnership with the [name of older adult facility], [name] Elementary School, [leadership training name], and The University of name.

The IPAL+ project offers compelling benefits including increased physical activity for elementary and secondary students and older adults, leadership training, and encourages community connectedness and relationship building. Students can receive credit for volunteer or service hours related to participating in IPAL+ activities.

#### **Activities:**

- Students will take part in two leadership workshops in partnership with the older adult participants facilitated by [leadership team] where they will learn leadership skills related to playground games and engaging and managing the elementary students.
- In partnership with the older adult participants students will support the elementary students in facilitating games and activities on the playground during lunch recess at [name] Elementary School. Students can sign-up for as many recess days as they are interested in throughout the fall semester.
- Students can participate in leading and teaching chair aerobics routines with the elementary students for the [name of older adult facility].

- Students can develop and lead a physical activity or nutrition station as part of a health fair afternoon at [name of school] Elementary.
- Students can participate in the evaluation component of the project which includes surveys and a focus group.

If you have any questions please feel free to contact [name], University of [name] PhD student at [email] or [phone number].

## IPAL+ SECONDARY STUDENT PROGRAM COMMITMENT

### PROGRAM CORE 10+ PARTICIPANTS

### PHYSICAL ACTIVITY LEADERSHIP WORKSHOP AND SUPPORT



TIME	Activity
2-4 HOURS	Outdoor games and indoor physical activity leadership workshop with the older adult participants. Last 2 weeks of [month, year].
2 HOURS	Secondary students and older adults teach the outdoor games and indoor physical activity leadership workshop to elementary students. Last 2 weeks of [month] (based on schedule)
30 MINUTES X VARYING NUMBER OF DAYS	Secondary students in groups of at least 2, and older adults in groups of at least 2 support the trained elementary student leaders with outdoor games on the playground during the elementary school lunch period. 2-6 weeks of support (based on availability of students). Beginning first week of [month] if possible.

### EVALUATION



TIME	Activity
15 MINUTES	Secondary students will complete a survey before they begin IPAL+ activities.

<b>1.25 HOURS</b>	<b>Secondary students will complete a survey and participate in a focus group at the end of IPAL+ activities.</b>
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### **PROGRAM OPTIONS 5-10 PARTICIPANTS**

#### **CHAIR AEROBICS**



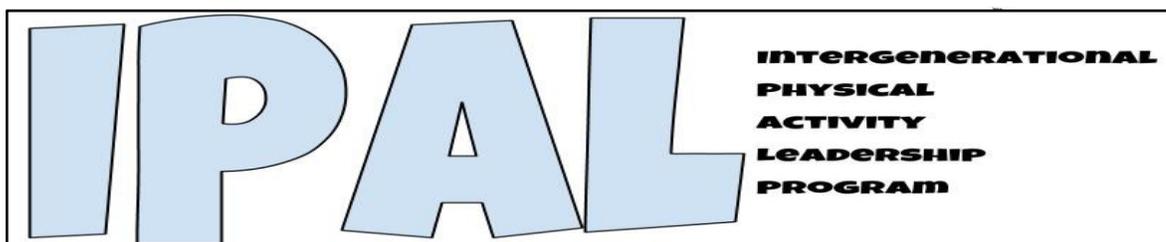
TIME	Activity
1 HOU	Secondary students develop chair aerobics routines in groups of 2-3 with groups of 4-5 elementary school leaders.
1 HOUR	Secondary students and elementary student leader groups lead chair aerobics routines for the older adults. One group at a time will lead their routine at the beginning of a meeting or activity where the older adults are gathered.

#### **HEALTH FAIR**



TIME	Activity
2 HOURS	Secondary students and older adults will plan and develop health fair stations for elementary students to visit during a health fair afternoon.
4 HOURS	Secondary students and older adults will prep and run health fair stations for elementary students during a health fair afternoon.

- Secondary students will receive a completion certificate and credit for the volunteer hours spent in IPAL+ activities.
- IPAL+ participants will never be alone with the students or responsible for their supervision. Activities will take place in regularly supervised school environments such as recess, lunch, and classroom time.



### **Program Information Letter (for older adult participants)**

The [name of older adult facility] is participating in an Intergenerational Physical Activity Leadership (IPAL+) project in partnership with [name] Elementary School, [name] Community High School, [leadership team name] and The University of [name].

The IPAL+ project offers compelling benefits including increased physical activity for elementary and secondary students and older adults, leadership training, and encourages community connectedness and relationship building. [Name] of older adult facility participants will need to have current criminal record checks done to participate in the IPAL+ program.

#### **Activities:**

- Older adult participants will take part in two leadership workshops in partnership with grade 10 students from [name] secondary school facilitated by [name of leadership trainer] where they will learn leadership skills related to playground games and engaging and managing the elementary students. The first workshop will take place **[date and time] and last approximately 2 hours**, and the second workshop will include the elementary school students from [name] Elementary and take place **[date and time]**.
- In partnership with the [name] School students, [older adult] participants will support the elementary students in facilitating games and activities on the playground during lunch recess [time] at [name] Elementary School. Older adult participants can sign-up for as many recess days as they are interested in, in groups of 2+ throughout the fall semester. Starting the week of **[date]**.
- Older adult participants can develop and lead a physical activity or nutrition station as part of a health fair afternoon at [name] Elementary.

- Older adult participants can take part in the evaluation component of the project which includes surveys and a focus group.

If you have any questions please feel free to contact [name], University of [name] PhD student at [email] or [phone number].

## IPAL+ OLDER ADULT PROGRAM COMMITMENT

### Program Core 5-10 participants

#### physical activity leadership workshop and support



TIME	Activity
2-4 HOURS	Outdoor games and indoor physical activity leadership workshop with the secondary student participants. [date and time], approximately 2 hours.
2 HOURS	Older adults and secondary students teach the elementary student leaders the outdoor games and indoor physical activity leadership workshop. [date and time]
30 MINUTES X VARYING NUMBER OF DAYS	Older adults in groups of at least 2, and secondary students in groups of at least 2 support the trained elementary student leaders with outdoor games on the playground during the elementary school lunch period. 2-6 weeks of support. Beginning [date].

#### Evaluation



TIME	Activity

<b>30 MINUTES</b>	<b>Older adults will complete a survey before they begin IPAL+ activities.</b>
<b>1.5 HOURS</b>	<b>Older adults will complete a survey and participate in a focus group at the end of IPAL+ activities.</b>

**Program options *Minimum 4 participants***

**health fair**



TIME	Activity
2 HOURS	Older adults and secondary students will plan and develop health fair stations for elementary students to visit during a health fair afternoon.
4 HOURS	Older adults and secondary students will prep and run health fair stations for elementary students during a health fair afternoon.

- Older adult participants will never be alone with the students or responsible for their supervision. Activities will take place in regularly supervised school environments such as recess, lunch, and classroom time.
- The IPAL+ program options are flexible and will be primarily based on the elementary school's calendar and needs.
- Older adult participants will need to have current criminal record checks done to participate in the IPAL+ program.

*Note:* The information to be shared with the ESS group, was combined in the Consent form for IPAL+ program because the elementary schools were required to send out detailed information as it was embedded into their school curriculum.

## Appendix F

### Consent Form

*This Consent Form was adjusted as needed for the participant/partner who was receiving it.*

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#### **The Intergenerational Physical Activity Leadership (IPAL+) Program**

You are invited to participate in a study entitled The Intergenerational Physical Activity Leadership (IPAL+) Program Evaluation that is being conducted by [name].

[Name] is a PhD student in the [department name] at the University of [name] and you may contact her if you have further questions by email at [email address] or [phone number].

**Purpose and Objectives** Through partnership with the [name of older adult partner], [name of high school partner], [name of leadership trainer], and [name of elementary school], the purpose of this project is to develop an effective model for intergenerational physical activity leadership programming that can be adapted to various communities and schools. The IPAL+ is based on an existing school leadership program delivered by Action Schools! BC (AS! BC). If an effective intergenerational physical activity leadership program can be developed there are important physical, social and mental health benefits for both children and older adults.

The primary objective is to evaluate changes in the attitudes, physical activity and social interactions among children and older adults following participation in IPAL+. The secondary objective is to examine the changes in physical activity promotion at the school level.

#### **Importance of this Research**

Research of this type is important because in Canada high rates of physical inactivity plague both children and older adults; contributing to increased levels of overweight and obesity and chronic diseases like heart disease and Type II diabetes. Only 7% of children and 11.3% of older adults meet the recommended daily physical activity guidelines for health. In children and youth physical activity improves cognitive development, mental well-being and contributes to academic performance and a diminished risk of type 2 diabetes. In older adult physical activity slows the decline in physical capabilities, independence, and quality of life that comes with aging. It is also associated with the prevention or delay of age related cognitive impairment. Social connections also contribute to health and wellbeing. Social relationships developed through physical activity can be as important to health benefits as the physical activity itself. Older adults that spend time with children experience better physical and mental health than their peers, and children in intergenerational activities have significantly improved personal and social development, and academic performance. Intergenerational physical activity programming is an approach that has largely gone unstudied.

#### **Participants Selection**

You are being asked to participate in this study because [name] Secondary School has been selected to partner with [name of older adult facility] and [name of elementary school] for this project.

**What is Involved**

If you consent to voluntarily participate in this research, your participation will include taking part in an interview at the end of the project. This can be completed in person where audio-recording and-written notes will be taken, or digitally where answers will be emailed directly to [name] at [email].

**Inconvenience**

Participation in this study may cause some inconvenience to you, including your time.

**Risks**

There are no known or anticipated risks to you by participating in this research.

**Benefits**

The potential benefits of your participation in this research include increased physical activity and mental health benefits for participants. Developing a viable intergenerational physical activity leadership program that can be adapted to other environments can benefit the health of older adults and children across Canada.

**Voluntary Participation**

Your participation in this research must be completely voluntary. If you do decide to participate, you may withdraw at any time without any consequences or any explanation. If you do withdraw from the study your data will be used with your permission.

**On-going Consent**

To make sure that you continue to consent to participate in this research, I will verbally confirm periodically throughout the 2-3-month program that you are willing to continue participating voluntarily.

**Anonymity**

In terms of protecting your anonymity, all disseminated results will not identify you.

**Confidentiality**

Your confidentiality and the confidentiality of the data will be protected by storing the data in a secure, locked lab at the University of [name] where only the research team will have access.

**Dissemination of Results**

It is anticipated that the results of this study will be shared with others in the following ways: through a celebration event and report directly to participants and interested partners, through published articles, and through presentation at scholarly meetings.

**Disposal of Data**

Data from this study will be disposed of after 7 years through confidential shredding of paper data and permanent erasing of digital data by the University of [name] IT department.

**Contacts**

Individuals that may be contacted regarding this study include [name] at [email] and [name] at [email].

In addition, you may verify the ethical approval of this study, or raise any concerns you might have, by contacting the Human Research Ethics Office at the University of [name], [phone number and email].

Your signature below indicates that you understand the above conditions of participation in this study, that you have had the opportunity to have your questions answered by the researchers, and that you consent to participate in this research project.

---

*Name of Participant*

---

*Signature*

---

*Date*

**Future Use of Data:**

I consent to the use of my data in future research: \_\_\_\_\_ (Participant to provide initials)

*A copy of this consent will be left with you, and a copy will be taken by the researcher.*

## Appendix G

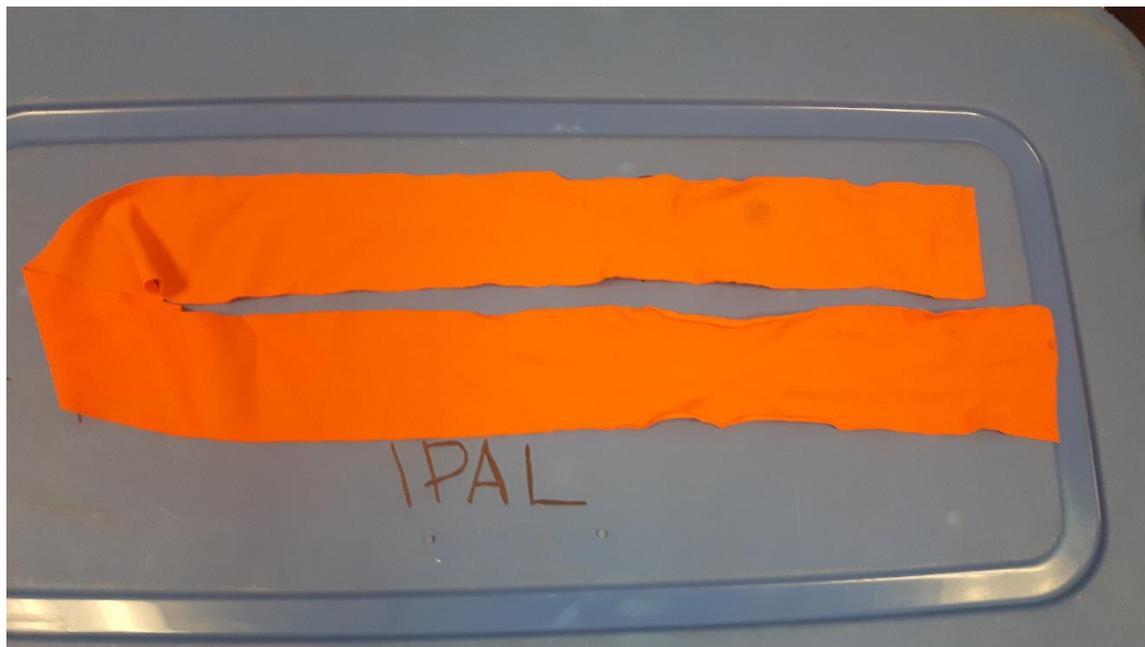
### IPAL+ Program Equipment box



IPAL+ Equipment box contents: 4 playground balls of varying sizes, 24 flags for capture the flags, 4 skipping ropes, 2 Chinese skipping ropes, 6 bean bags, rubber chickens (preferably with a squeaker); Not shown in photo: box of sidewalk chalk, 2 hacky sacks, 4 hula hoops

## Appendix H

### IPAL+ Program ID Band



## Appendix I

### IPAL+ Program Photo



Photo permission granted from local newspaper and photographer; photo release received from all IPAL+ members shown in this photo.

Photo caption: IPAL+ participants: ESSs, HSSs, and OAs enjoying the IPAL+ celebration day following the six-week IPAL+ program.