



The 4-H Resilience Research Study:

Sport for positive youth development through rural and resilience lenses.

Published on the 4-H Ontario website: November 2017

Based on research for the following Doctoral thesis:

**Rural Recreation for Resilience: Positive Youth Development
and Therapeutic Outcomes through Green Physical Activity
in 4-H Ontario Horse Clubs**

Answering the following questions:

Can resilience be measured for 4-H members?
How does 4-H participation build resilience for rural youth?
How else does it contribute to positive youth development?
What practices & processes can be replicated in other clubs?

Findings are applicable to:

- ✓ Other 4-H club types
- ✓ Other youth development programmes
- ✓ Sport for youth development
- ✓ Animal assisted activities
- ✓ Inclusion of youth with different needs

Report by: Heather Sansom, doctoral research candidate, University of Guelph

Table of Contents

Project Summary.....	3
Introduction.....	4
Research Methodology.....	5
What is Resilience?.....	6
Why Other Youth Development Outcomes?.....	8
Study Results.....	9
Demographics.....	9
Resilience Scores.....	10
Other Factors.....	11
Factors that Didn't Matter.....	12
Factors that Mattered.....	12
Beneficial Outcomes & Facilitating Processes	14
Quotes & Images Illustrating Outcomes.....	20
Quotes & Images Illustrating Facilitating Elements	23
Participant Feedback About 4-H.....	26
Conclusion.....	27
References.....	28
Appendix A: Phase One Survey.....	29
Appendix B: Leader Interview.....	32
Appendix C: Youth Interview.....	33

Project Summary¹

In Canada there is a widely acknowledged mental health and physical fitness crisis, especially for marginalised populations such as rural Canada. There is broad-based societal need to increase healthy living trends in the population, and to equip the population for resilience in changing economic times. Physical activity and positive youth development are widely accepted strategies for addressing both physical and mental health needs, as well as life skills for thriving in adulthood. Physical activity and life skill training are often combined in the field of sport for youth development, but there is little research on programmes applicable specifically to rural communities.

Against this backdrop of need to support wellbeing, rural populations are even more challenged. Rural populations experience higher levels of poverty, sedentariness and obesity, and lower levels of youth post-secondary education. Rural communities face different development challenges. There is a need for trade, agriculture and entrepreneurial skills within the rural community, yet trends in out-migration of educated youth. There are also community sustainability challenges related to affordable housing and infrastructure for healthy living and youth development. Simply, rural youth are not thriving as well, and need even more support. At the same time, they are needed to help build sustainable rural communities.

Rural communities may lack some resources, such as funds for urban-type recreation access or groups to meet specialized youth needs. However, they are rich in other unique assets for promoting healthy youth development. There is a need for understanding youth programming options which address these concerns specifically in a rural context.

This study examined whether and how resilience and other life-skills are developed through participation in 4-H horse clubs. 4-H is a well-established Canadian youth development organization that leverages recreation activities for developmental benefit, often inclusive of persons with different abilities. 4-H was selected because of its unique use of a positive youth development approach to specifically rural activities for youth. Horse clubs were targeted because of the wealth of information available on therapeutic and development benefits of nature and equine activity. This study contributes to understanding how resilience and life skill benefits occur in a sustainable, community-based club structure.

The study used a three-phase, mixed method approach to study resilience, while also investigating other life skill benefits. The second layer of the research questions asked if resilience and benefits are present, what is it about participation that brings them about? What can we learn from the 4-H horse clubs that would be helpful for running effective youth development programmes (with or without horses, with or without animals)?

The three phases included an online survey to 400 members and leaders across Ontario, interviews with 10 club leaders, and interviews with 30 youth in 5 clubs. The youth interviews included an activity where youth were invited to speak about their experience using photos or items which represented their feelings and thoughts. The survey used the Child and Youth Resilience Measure (CYRM-28) and Schwarzer and Jerusalem Self-Efficacy Scales.

Results showed scores which were notably higher when compared with general data-sets. Participants also described resilience and other outcomes such as confidence, social and workforce transferrable skills. Many processes which facilitated the development of resilience and other skills were also described. Also, youth with different mental and physical needs and socio-economic status were included. The findings are relevant to other 4-H clubs, sport for youth development, therapeutic recreation, positive youth development, animal and nature based programming generally. They are also relevant to recreational, educational and therapeutic programming with horses.

¹ This summary rephrases the thesis research abstract, (Sansom, 2017).

Introduction²

Why do a 4-H resilience research project? 4-H is the leading youth development organization focused on programmes for rural youth for over 100 years. Many 4-H members have gone on to be leaders in their communities or industry. We sometimes forget that the biggest impact youth development programmes can have is on the ‘non-star’ kids: the kids whose family circumstances can’t provide advantages, or who may not be among the few that go on to run companies or large farms; the kids that might otherwise fall through the cracks. Activity that encourages all kids to discover their strengths, engage in learning, and have goals for adult life contribute to quality of life for the individuals involved, as well as for their communities and future generations. It also saves society money in social and health care costs.

In communities which do not have the resources to run specialized programmes for each need group, programmes which are accessible to lower income-brackets and inclusive of a diversity of youth are especially important. Also, even though we take post-secondary education, and its meaning for adult thriving, for granted in Canada, the formal school system is not meeting the needs for skill training relevant to rural communities. Fewer rural youth attain post-secondary diplomas or degrees, and many of those who do, are educated for jobs not available in rural areas, creating significant youth out-migration trends. The backbone of rural economies was and still is, very entrepreneurial, even though rural economies are much more diverse than the traditional mainstays of agricultural production and natural resource extraction.

Since almost 30% of the Canadian population is non-urban, and rural economies are a significant portion of the national economy, healthy development of rural youth affects everyone. The lower wellbeing status and inadequate education of rural youth flag the rural environment as under-serving its population.

Despite the contribution that 4-H is making in rural areas to youth development and education, and in providing alternative physical activity and healthy lifestyle support suitable to rural areas, 4-H’s funding is not guaranteed, and there is a growing rural population that could benefit from more access. To grow support for rural youth, the positive benefits need to go beyond nice stories about wonderful individuals. While we know that kids enjoy their 4-H experience, it’s not always clear what parts of the program are having the most impact on the knowledge, leadership and social skills at the core of the 4-H purpose.

Many other players in the youth development field (rural and urban) struggle with similar questions. While it is easy to gauge whether kids are enjoying their experience, measuring outcomes and understanding how they occur is harder. There are gaps in the research in these areas. There is less information available to help youth development organizations know how best to support development and promote health and resilience. Research helps turn the tacit knowledge of volunteers and members with direct experience, into shareable information that can explain what works so it can be repeated and improved, and so funders and other stakeholders know where to invest resources.

Why were only horse clubs included in this research? In any project, there are funding and time limitations. Of all the possible club topics to select, horse clubs were a

² This section is adapted from the project preliminary update.

strategic selection. First, horse activity is one of the club options that straddles both farm skill and physical activity. 4-H Ontario horse clubs are one of the top ten most popular club topics, providing an activity option that has a lot of appeal for some youth (especially girls), keeping them physically active. Physical activity levels for rural youth and girls are currently a major Public Health concern.

4-H horse club also brings youth into contact with the farm experience and the 4-H community, whether their family lives on a farm or not, or has had any prior 4-H experience. Where there are horses, they come. And then they get drawn into the greater 4-H community and even more opportunities for learning, growth and connection.

Second, through the popularity of horse activity as therapy or experiential learning, we know that work with horses can be beneficial for teaching leadership and other skills, especially for kids that face different challenges- if it's done a certain way. Even though sport is often used as a vehicle for youth development, and horse activities are used as therapy, equestrian- or any sport- doesn't necessarily teach those life skills or have therapeutic outcomes. We suspected that there was a '4-H difference'. By studying a physical activity for which there was already a wide body of research literature (equine activity), we could see whether the '4-H difference' had an impact.

The goal of the research study was to get grassroots participants to share what they know about how the club experience helps grow resilient kids that are better prepared for the challenges of adult life. Although this study included only 4-H horse clubs, the results can be applied to many other 4-H, animal-activity and youth leadership programmes. The study obtained important feedback about:

- ✓ barriers and motivations for member participants and volunteer leaders
- ✓ understanding who club members are and what they value
- ✓ what resilience looks like in a 4-H member, and how a club helps make it happen
- ✓ what other youth development outcomes occur, and how they are facilitated
- ✓ what members and leaders appreciate the most about their experience, and where they would like to see improvement
- ✓ how animals and the 'green' farm environment make specific contributions to resilience and beneficial life skill outcomes for youth members who may or may not live rurally or live on farms

Research Methodology

Quantitative and qualitative data was collected and compared in three phases:

1. An online survey sent to 400 4-H Ontario horse club members and leaders. The survey asked demographic questions and for feedback about 4-H, and incorporated the Jerusalem and Schwarzer Self-Efficacy Scale, and the Liebenberg and Ungar Child and Youth Resilience Measure (CYRM-28).
2. Phone interviews with 10 horse club leaders around the Province.
3. Group interviews with 30 youth at 5 clubs in Eastern and Western Ontario. The youth had a public speaking opportunity with the researcher, and were invited to also share images or items which helped them present their thoughts.

What is Resilience?

Resilience in a living organism involves its connection to resources in its environment which equip it to encounter difficulty and continue to thrive afterwards. An example might be the health of a crop, which depends on healthy factors in its environment such as the soil. When it is hit by adverse circumstances such as a blight, bug or weather, a resilient crop will be more likely to rebound. A person with a resilient immune system might encounter a cold or flu virus, but either not become sick, or else recover more quickly. Neither the individual nor the stalk of wheat are isolated. They are always connected to their environment and to others. A person without social connection and positive physical and mental health is less likely to have a good immune system. A crop without good soil and good management, is less likely to weather adverse circumstances. So, resilience is not only about a quality in individuals. It is also about what is available around them, and how they work within their environmental system to thrive. This research project used the work of Dr.'s Linda Liebenberg and Michael Ungar who define resilience as:

The capacity of an individual to navigate their way to resources that sustain wellbeing, plus the capacity of their physical environment to provide those resources; plus the capacity of the individual, their family and the community to create resources which are culturally relevant. (Liebenberg & Ungar, 2008, p.22)

Within this view of resilience, researchers do not measure resilience per se. They also do not measure specific lifestyle behaviours which we might think indicate resilience since many such proxy indicators are culturally specific. Instead, they measure the presence of protective factors for resilience: those aspects which cross-culture research has shown increase the likelihood of a person's resilience under adversity. Since this is the only known sport for youth development study looking specifically at resilience in rural youth, research outcomes that crossed cultural barriers were a really important choice. Rural culture is not a backward version of mainstream urban culture. It is a different cultural context in Canada which is often overlooked in research.

Liebenberg and Ungar refer to seven protective factors of resilience specifically. Some of them relate more to internal resources, and some to the connection that a person has with their family, community and life outlook. The seven protective factors are:

Access to material resources: Availability of financial, educational, medical and employment assistance and /or opportunities, as well as access to food, clothing and shelter.

Relationships: with significant others, peers and adults within one's family and community.

Identity: Personal and collective sense of purpose, self-appraisal of strengths and weaknesses, aspirations, beliefs and values, including spiritual and religious identification.

Power and control: Experiences of caring for one's self and others; the ability to affect change in one's social and physical environment in order to access resources.

Cultural adherence: Adherence to one's local and/or global cultural practices, values and beliefs.

Social justice: Experiences related to finding a meaningful role in community and social equality.

Cohesion: Balancing one's personal interests with a sense of responsibility to the greater good; feeling a part of something larger than one's self socially and spiritually. (Ungar et al., 2007, p.295)

This study used the seven protective factors, and added an eighth: self-efficacy. While youth programme self-esteem studies are fairly common, self-efficacy goes one step further. Self-efficacy is like self-esteem with feet.

Self-efficacy: A person's self-perception that they can have agency (make their own choices), and have an impact.

Self-efficacy is an important predictor of health-promoting behaviour, quality of life and expectations later in life. It is also precursor skill to work ethic, desire to learn and succeed, and to entrepreneurialism. Even though it is embedded in the Liebenberg and Ungar factors, it was drawn out specifically because of the expected role that 4-H and other youth development programmes have in impacting youth to take initiative and carve out a sustainable living in challenged rural communities.

Resilience and self-efficacy have been developed in psychology and research out of the positive psychology stream. In positive psychology, the emphasis is on people's strengths and abilities, and encouraging them to build on them or to develop them. Positive psychology does have application to mental illness. It has also had a strong influence on education (particularly experiential education) and youth intervention. The phrase *positive youth development* is an application of positive psychology to youth support.

4-H teaches youth to value their strengths and to build on them, and also to be persistent in finding solutions and reaching objectives. We hoped that the study participant results for the resilience and self-efficacy measures would fit within a normal range. If they did, then it might indicate that 4-H was doing something to address the wellbeing deficits in the general rural population. We knew from anecdotes that people who are committed to 4-H are convinced that it does make a difference. There have been American positive youth development studies in which 4-H was used as a case to explain elements of effective positive youth development programmes. However, there was no concrete, empirical data about resilience, or about 4-H and positive youth development in Canada.

Why Other Youth Development Outcomes?

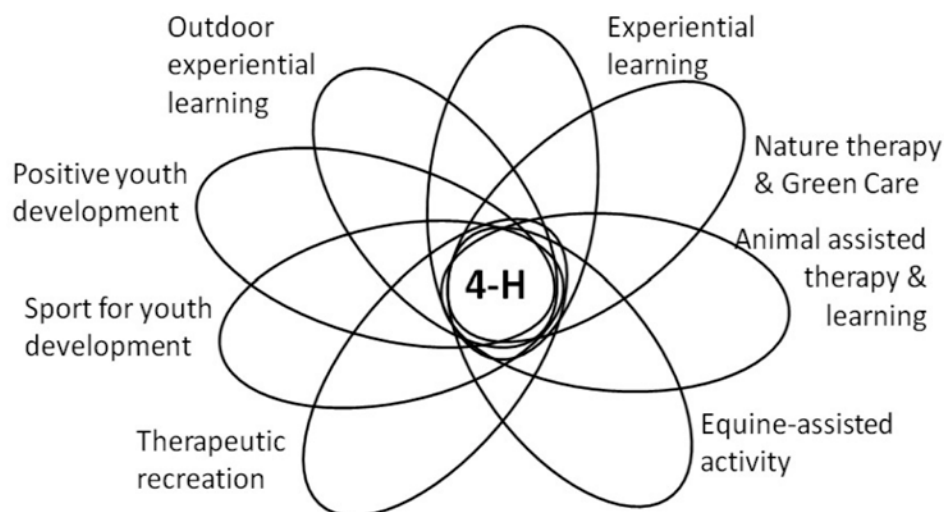
4-H horse clubs represent an interesting intersection of several fields where youth development or therapeutic outcomes are typically a goal of the activity. Many of these fields have long traditions in Canada and North America, such as outdoor experiential education and therapeutic recreation. Some of them are newer, such as sport for youth development and animal-based therapies. Based on the research in these fields, it was reasonable to expect to see a wide range of self-management skills, mental health indicators, inter-personal skills, and other skills more directly transferrable to workplace settings and adult life roles. What we did not know, was whether we would see them in 4-H.

Also, if we did see some of these outcomes, we did not know which ones we would see, or what aspects of the programme would appear to facilitate them. For example, if youth in the study showed confidence, how would we know whether it came from being inspired by their leader, or the experiential learning process of trial/ error/ achievement- or having a very encouraging parent? If youth felt connected emotionally, how would we know whether it was due to making age-group friends, mentoring by a supportive adult, or having a relationship with an animal? If they felt more connected to nature, how would we know whether it was because they observed life-cycle with the animals, or enjoyed the outdoor and green aspects of the farm spaces where club happened? Is it important to have non-ag clubs on farms?

In a 4-H horse club, there are several categories of distinct types of factors: it is a green-space, there is physical activity with certain physical and psychological/ neurological benefits, there are mentoring adults, friends and interesting activities. There are also 4-H specific activities and ways of doing things which are a little different from other youth development organizations. Which if these would be factored in? The contributing disciplines each had their own set of explanations which did not necessarily connect. For example, equine-therapy literature favours explanations about special features of horses. How would we know that a benefit of working with the horses could not also be obtained through working with cattle? Working with a horse is also encountering nature. Would learning theory from outdoor experiential learning be relevant?

Fortunately, most participants were also members in other 4-H clubs, as well as other sport, equestrian and youth activity clubs either at the time of the research, or at some other period. They were able to compare their 4-H horse club experience with these other experiences. Also, many of the leaders and older youth had several years of experience in 4-H. They were able to comment on how 4-H participation had an impact on their own or someone else's life into adulthood (as opposed the other many factors which might also have had an influence such as family or schooling).

4-H Horse Clubs at Intersecting Fields



Study Results

Demographics

In total, there were 70 completed surveys and 40 interviews which ranged from a few minutes to an hour and a half. Participants spanned education, socio-economic and age categories. The study documented inclusion of youth members with various cognitive, behavioural and physical disabilities. Member age range was 10-21 years with an average age of 14 years. Leader ages ranged from the 20's to the 70's with an average of 44 years. While most participants lived rurally (85%), less than half lived on farms (45.3%). Slightly less than half of the members owned their own horses (49%), and slightly more borrowed horses from club leaders or other members to use (51%).

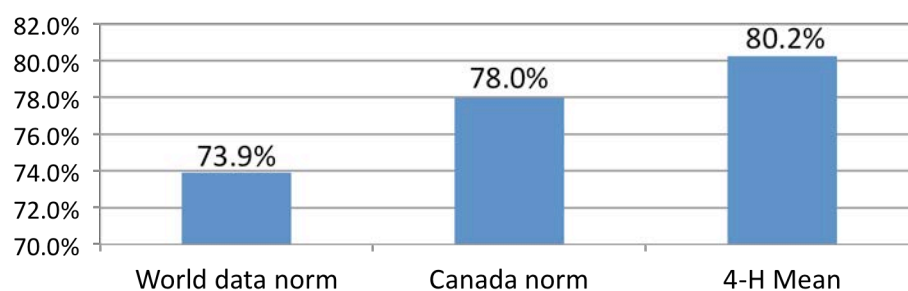
Other demographic data shows more homogeneity. The rural Canadian population does not reflect the same outwardly visible multi-culturalism as urban Canada. Outside of reservations, rural Canada is 96% European-descent Caucasian. Just under 91% of study participants selected 'white' as their ethnic identity, with almost 96% indicating that they were born in Canada, 91% living with both parents, and another 6.6% living with at least one parent. The lack of public transit and safe active transport options in rural areas was reflected by the finding that no youth used public or active transit. Instead, 87% were driven by a parent or other adult to club events while the remaining 13% drove themselves. A large majority of both members and leaders were female (87%).

	Boy/male	Girl/female	No Answer
Youth	6	72	11
Leaders	1	12	1

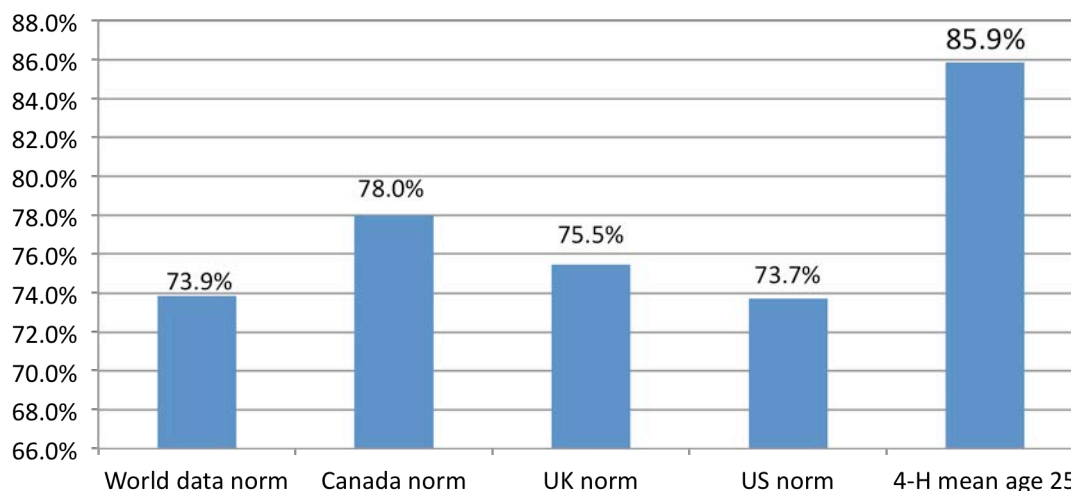
Resilience Scores

Participant scores on the quantitative Scales used to measure protective factors for resilience and self-efficacy were notably high. The study used a shortened version of the original CYRM-28 which only included 25 questions. Once data from other studies and this study was calculated as a total percentage of possible score, the study results could be compared. Similarly, the version of the Jerusalem and Schwarzer Self-Efficacy scale used in this study had a range of 5 possible answers to make it similar to all the other questions. The original version had 4 possible answers. This difference meant that total possible scores were different, so they were converted to percentages as well for comparison. Furthermore, the general population data for self-efficacy was based on a higher average age. Self-efficacy scores for participants with a matching mean age were significantly higher.

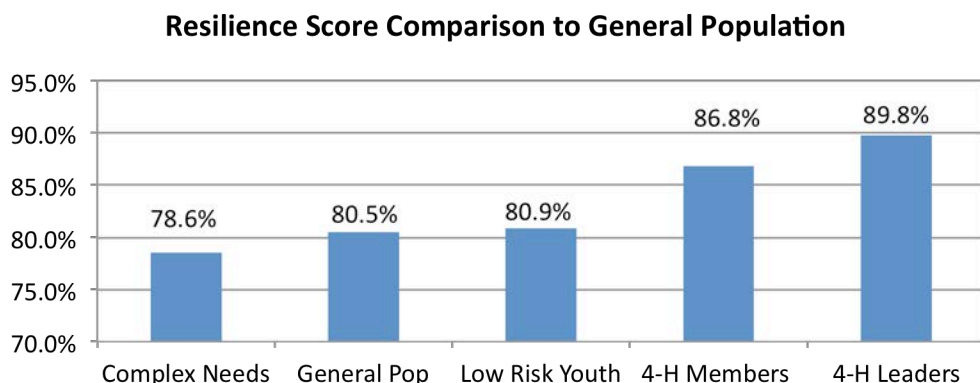
Self-Efficacy Scores Compared



Self-Efficacy Scores With Similar Mean Age Compared Internationally

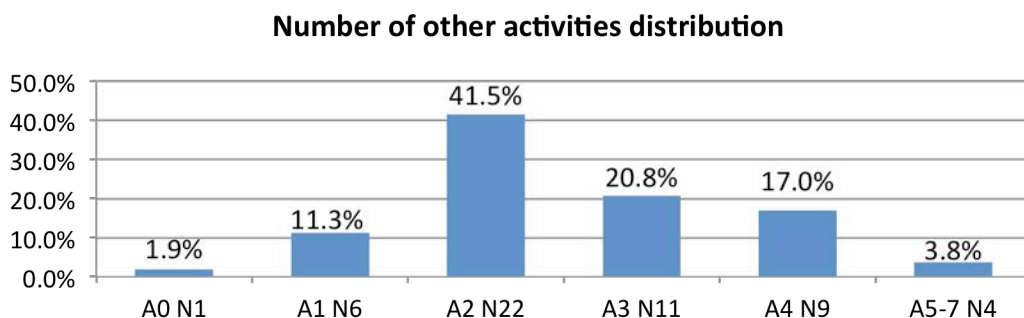


In the graph below, the general population resilience scores are also broken down into 'complex needs' (youth with extra need for support) and 'low risk' (youth with more advantages). If 4-H scores were related to stable family situation, income or other factors shared with the general population of 'low risk' youth, the resilience scores would be expected to be closer to the 'low risk' general population scores. Instead, they were significantly higher.

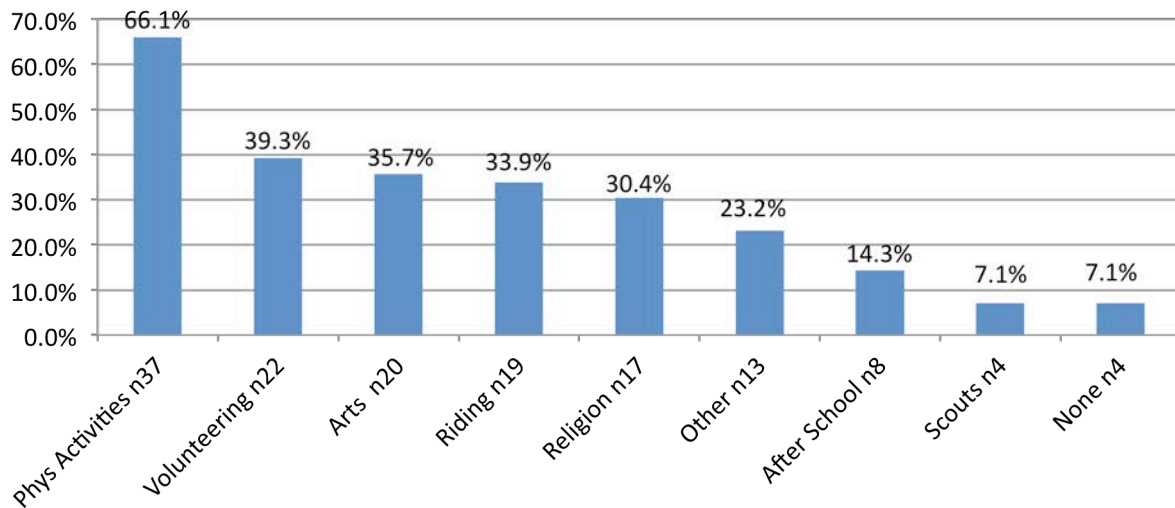


Other Factors

In addition to the resilience scores, participants also showed a wide range of other life skill outcomes. Most of these are discussed further below. However, participant involvement in other activities outside of 4-H is presented here because it can also be considered a variable which might impact the resilience and life-skill outcomes. Involvement in other activities appeared to be more of an *outcome* than an influencing variable. Activity involvement had no impact on resilience scores, except for a drop for participants indicating engagement in five or more activities. This suggests that being over-programmed has a negative impact. Most engaged in an average of 2.6 other extra-curricular activities (79% participating in 2-4 other activities), with two-thirds also engaging in healthy lifestyle habits through participation in other physical activities. While general population data for number of extra-curricular activities was not available for comparison, the high percentage of members involved in other physical activities is notable. First, it is estimated that less than 10% of the general population reaches physical activity guidelines. Second, the study population was primarily adolescent females who have even lower than average physical activity levels in the general population. The graphs below show the number of extra-curricular activities (A) and the number of survey responses associated with it (N). For example, A1N6 means that six respondents indicated participating in one other activity.



Member Involvement by Type of Activity



Factors that Didn't Matter

Other factors that had no significant impact on resilience scores or the resilience and outcome data collected in the interviews were:

- domestic situation
- age
- living location (rural/non rural, on a farm, not on a farm)
- family involvement
- number of meetings held in a season
- ability/disability
- type or size of horse
- type of activity done with the horse

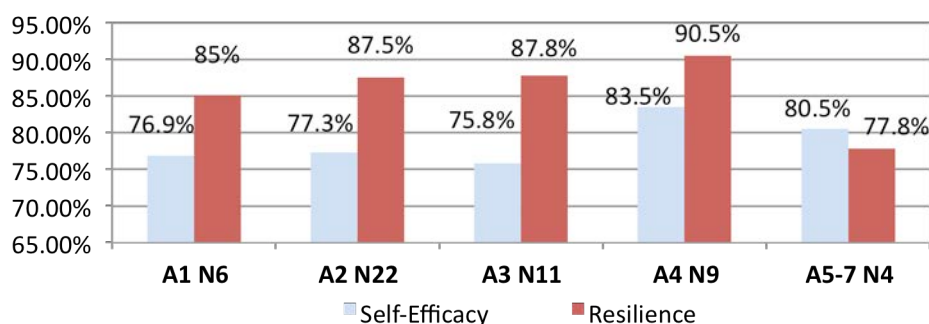
In other words, the programme seemed to be as effective and important to farm and non-farm kids from any family background. The interview data also showed that many participants come from lower socio-economic backgrounds, or have different learning and physical abilities. Instead of their different needs and abilities excluding them from life-skill benefits, their participation gave them access to these benefits. Also, participating clubs used different sizes and types of horses for different activities but with similar outcomes.

Factors That Mattered

Factors that appeared to have an impact on resilience scores and other life-skill outcomes included:

- being over-booked (as mentioned)
- amount of time with 4-H (in years)
- the amount of time with the horses

Self-Efficacy, Resilience and Being Over-Booked

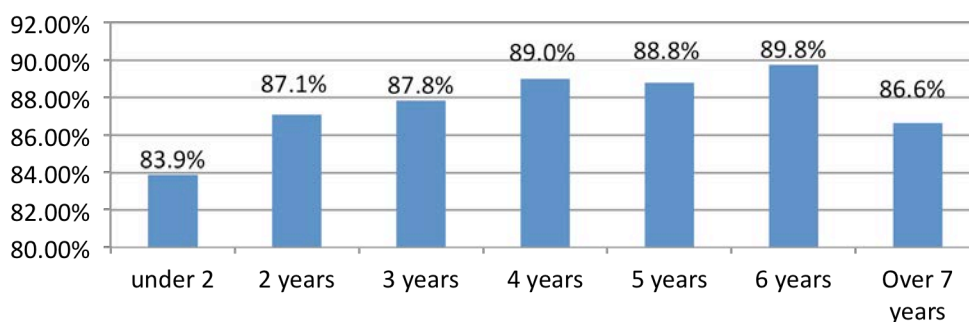


There was a very slight difference in distribution of resilience scores between members who owned their own horses (88.4% resilience score, 80.3% self-efficacy), versus those who didn't (85.3% resilience, 75.8% self-efficacy). Most of the horse owning youth were also farm dwelling, however, there was no significance difference based on farm dwelling. This suggests that the difference was related to the amount of time that youth could spend with the horses when they owned them, verses when they didn't.

Since the non-owning scores are still quite high, it is clear that youth who do not own horses are not significantly disadvantaged with regard to the benefits they get out of participation in 4-H horse clubs when compared to their horse-owning peers. On the contrary, they gain access to experiences they wouldn't otherwise have. The interview data supported an interpretation of the difference in scores as related to time the youth could spend with the horses, and the connection the time had for their personal responsibility for the horse and relationship development with it. Also, besides the desire to see more youth join 4-H, the second leading way that leaders felt 4-H could be improved was to give youth more time with horses.

With regard to time in 4-H, youth development and outdoor experiential learning theory and research suggest that exposure and re-exposure to new challenges in the supportive youth development context helps to solidify life skill acquisition, and ensure its transfer to other spheres of life. This information aligned with the study results showing a general increase in resilience scores with time in 4-H, and of self-efficacy scores with age. Age and time in 4-H were strongly correlated. The drop in resilience scores at the seven year mark corresponds to the typical age at which youth transition from high-school and living in a known support network, to the new world of post-secondary education and living away from home. The data suggests that the capacity for resilience which they build up before-hand, helps them stay resilient despite life change.

Resilience Scores and Time in 4-H



Beneficial Outcomes and Facilitating Processes

The heart of the study was the qualitative data which was obtained through the leader and youth interviews. When they were able to describe their experience in their own words, share stories and images, participants of all ages made valuable and detailed contributions. They experienced the resilience factors in ways which were unique to the 4-H context. They also described a number of other important soft-skills and practical skills which they attributed to 4-H participation. When asked how they thought their 4-H experience contributed specifically (as opposed to their other involvements, family life etc..), they described a range of elements which were involved. All of the outcomes are in alignment with what could be expected based on the different fields reviewed beforehand (youth development, outdoor learning, sport for youth development, animal therapies, etc...). Most of the elements which seemed to facilitate the resilience and other outcomes were elements which could be present in other (non-horse) 4-H clubs. Many of them could easily be present in non-4-H programmes.

While the horses were critically important as an attraction feature and bridge to participation and to participant access to the other facilitating elements, other youth attracted to a different activity might experience that activity in a similar way.

The one way that horses were unique to this experience was that they seemed to provide a very important and special emotional relationship. Since relationships are a protective factor for resilience, the horses made a unique contribution in that area, which participants did not attribute to other species that they worked with in other clubs. Members and leaders did attribute certain species characteristics of horses (herd and flight animal with proclivity for relating closely to humans) to the degree of importance of the human-animal relationship, and to the ways in which the horses accelerated feedback loops when members were learning to do challenging tasks with them. The horses seemed particularly well suited to empathic response and immediate feedback in the experiential learning cycle.

The ways in which participants experienced the resilience factors (and self-efficacy) are organized with the sub-themes that participants described below.

Resilience Factors With Sub-Themes

Material Resources (types experienced)	Access to facility and equipment Space for active healthy living Access to practical help Access to education and learning
Power and Control (ways it is experienced)	Safety (physical and emotional) Respect (self, others, for animal, for people in authority) Choice Empowerment
Identity (ways it is expressed)	Choice and voice: diversity Similarity as horse-people / aggies Girl-ness: Beauty is strong and confident

Relationships (type of relationship)	Self Friendships (peers, adults, horses) Family (of origin, by 'adoption' (virtual 4-H 'family')) Mentoring Resourcing & learning (community, horses) Ecologically connecting (nature, animals, horses)
Cohesion and Belonging (types of belonging)	Team (people and horses) Community Country
Cultural Adherence (ways it is expressed)	Appearance and common interest Values Practices
Social Justice (spheres of experience)	Cultural validation Opportunity within 4-H Ontario Social, physical and neuro-diversity within club
Self-Efficacy (ways it is expressed)	Agency and contribution Competence Confidence/ Can-do attitude Perseverance Problem Solving and critical thinking Leadership

Other skill outcomes are organized below by soft-skill and practical skills categories:

Soft Skills	Practical Skills
Self-esteem Self-care Responsibility Self-regulation Self-calming Focus Patience	Time management Organizing and planning Logical argument Speaking Holding meetings Budgeting Farm competence

The resilience and other outcomes were also analysed in relationship to the facilitating elements that participants attributed them to. When the themes and sub-themes were re-organized in this way, four key categories were identified.

Four Key Categories of Outcome Impact

Resilience	same seven factors and self-efficacy
Psycho-emotional Competencies	critical thinking/problem solving self-esteem responsibility self and other care self-regulation focus patience

Workplace Skills	organization/planning self work with others plan/manage/ teach others farm/agri industry literacy
Life Trajectory	desire to engage/learn environmental sensitivity healthy/productive adult goals

The four key categories of facilitating elements are listed below with the sub themes that participants identified. Although many of them are specific to the way that the 4-H clubs are run, similar approaches and activities could be adopted in other youth development programmes. Also, while the farm space, animals and horses do play significant roles, most of the facilitating processes could be accomplished through other green spaces or animals which enabled similar learning experiences and relationship connecting opportunities.

Categories of Processes Facilitating Outcome Acquisition and Transfer

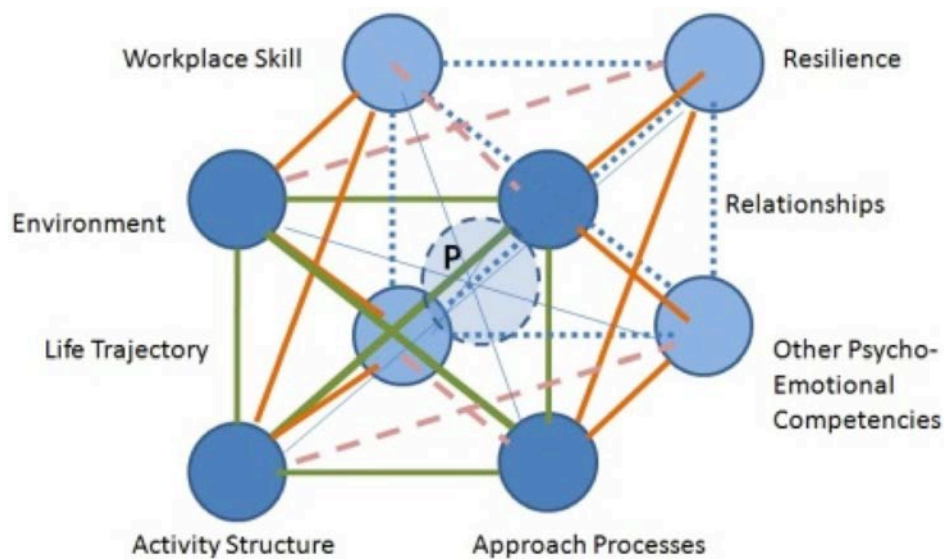
4-H Structure	public speaking parliamentary meeting procedure judging overt pledge/motto/values community connection experiences/outings inter-club/region activity variety of activity/club mentoring structure projects competition/demo opportunity
4-H Approaches	hands-on learning learner-centred learning leader freedom to interpret practice of debrief ok to fail/learn at own pace strengths focus accessible to diverse needs learning in group/teamwork free time to try/with animal encounter with challenge fun and enjoyment privilege of voice
Relationships	adult mentors peer mentors family involvement friendships horses
Environment	Greenspace Farmspace/animals

When the facilitating processes and outcome connections were analysed, it was found that there was a clear systems interaction. Instead of linear, causal connections, youth might experience many different benefits, via several facilitating elements over time. More detailed descriptions of the outcome experience, and how the facilitating processes worked together is in the full doctoral dissertation. The following visuals summarise the pattern of relationship between the facilitating element categories. The chart on the next page summarises the connections between outcomes and processes.

Simple Relational Connections in the Programme System³



Complex Relational Model for the 4-H Horse Club System⁴



³ Originally published in the doctoral thesis.

⁴ Also originally published in the thesis.

In the following chart, the shaded boxes represent a point of connection between an outcome, and a facilitating element or process as described by participants.

Map of Process and Outcome Connections

		Resilience								Psycho-emotional Competencies								Workplace Skill				Life Trajectory		
		Material Resources	Power and Control	Identity	Relationships	Belonging	Cultural Adherence	Self-Efficacy	Social Justice	Critical Thinking/ Problem Solve	Self-Esteem	Responsibility	Self/Other Care	Self-regulation	Focus	Patience	Organization/ Planning Self	Work with Others	Plan/ Manage / Teach Others	Farm/Agri Industry Literacy	Desire to Engage /Learn	Environmental Sensitivity	Healthy Productive Adult Goals	
4-H Structure	Public Speaking																							
	Parliamentary Procedure																							
	Judging																							
	Overt Pledge/Motto / Values																							
	Community Connection																							
	Experiences/Outings																							
	Inter-club/region Activity																							
	Variety of Activity/club																							
	Mentoring Structure																							
	Projects																							
	Competitions/demo																							
Approach Processes	Hands-on Learning																							
	Learner-centred Learning																							
	Leader Freedom to Interpret																							
	Debrief (journal, discussion)																							
	Encounter with Difference																							
	Ok to fail/Learn at own pace																							
	Strengths Focus																							
	Accessible to diverse needs																							
	Learning in group/ teamwork																							
	Free Time to Try/with Animal																							
	Encounter with Challenge																							
	Fun & Enjoyment																							
	Privilege of Voice																							
Relationships	Adult Mentors																							
	Peer Mentors																							
	Family Involvement																							
	Friendships																							
	Horses																							
Enviro	Greenspace																							
	Farmspace/animals																							

Many of the processes in the preceding graph took specific forms in the 4-H horse club. For example, an encounter with difference might have included learning how to work with a horse, which has a different body-language from house-hold pets. Or, in other cases it meant meeting 4-H members from other clubs, or other horse clubs, and learning that there are different points of view and different perspectives. Or, it could be connected to the group-work activities within the club, where teamwork skills, negotiating, compromise and other social skills are learned through accomplishing challenging tasks with a group ranging in age from peers to adults. Or, it could include learning to appreciate and support a peer member with a disability.

Several elements stood out as critical to the processes for developing protective factors for resilience and learning life skills and applying them to life. Most of these elements could be fostered in any 4-H club or other youth development programme. The elements are presented more at length in the thesis which can be obtained through 4-H Ontario. In summary, they were:

1. Opportunity to lead another, and to share leadership
2. Working together in a group
3. Leaders willing to learn alongside members
4. Leaders willing to adapt activities to the needs of individuals
5. Many different experiences to keep engagement over time (coming back year after year to learn something different)
6. Overt moments of reflection on 'life lessons' and their application to other parts of life (school, work, future, home)
7. Constant new challenge in different circumstances
8. Opportunity to learn new skills and demonstrate them to larger groups or compete. Leaders commented that older youth without those opportunities, dropped out. If 4-H is not in a position to run large equine and industry learning events, then partnering with other events is an option. Opportunity to have a public presentation or competition was a key driver in motivation to learn and sense of accomplishment.
9. Unstructured time for relationship building, and for experimenting (safely) with peers or on one's own with the animal (or topic of the club)
10. Support to make mistakes and learn by them; support for an attitude of learning as a process.
11. Support to branch out of comfort zones to learn new skills and discover strengths and interests
12. Connection with the wider community through fundraising, guest speakers or outings
13. Removal of technology and structural support for standing and moving more than sitting
14. Time to be outdoors
15. Formal encouragement of mentoring between leaders, leaders and senior youth, senior and junior youth
16. Mixing all age groups and genders together
17. If using horses, emphasis on learning co-operation with the horse rather than focus on sport tasks
18. Formal tasks that teach and use critical thinking and organizational skills
19. Involvement of family members and creation of an alternate 'family' environment
20. Inclusion of youth in decision making as appropriate, combined with demonstration of leadership by leaders who lead youth out of comfort zones

Quotes and Images Illustrating Outcomes

The following quotes and images are a small selection of the data showing participant expressions for the outcomes with some reference to facilitating processes.

Material Resources

It's a way for them to interact with (horses). It gives them that opportunity they wouldn't otherwise have at a lower financial burden to the parents than some of the other options in the equine industry. *Leader*



Power and Control

Oh man, there are many things that I've learned in 4-H.... Learning how to express myself....I can be an individual within a group, with this group. I can be myself and people can accept that, even though not everybody else will (horse neighing in background). *Member*

Identity

In high school you have a bigger spectrum of different people that peer pressure is greater. If you're in 4-H whether it's bigger or smaller, they all have at least one common thing that they want to learn about horses, cattle or whatever. So you're all on the same spectrum on stuff. So even when you go out to the other activities it's all ag kids. *Leader*



Relationships

And then I have the last photo which is a chain of people....For me this represents the many friendships and the many great people that I have met in 4-H that have the same interests as me. *Member*



My horse is my best friend and I don't know it would just be so plain and boring without a horse because like when I go to the barn and just be with my horse it's nice to just get away from people because people can be so annoying. *Member*



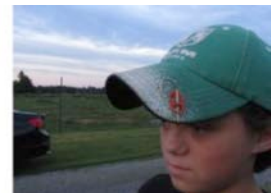
Cohesion and Belonging

What we did is decide to get 5 shirts for our club. Someone else brought up that other clubs had nice jackets. So we thought a T-shirt would be less expensive and you could still feel part of the club. *Leader*



Cultural Adherence

Because of the country atmosphere or farm atmosphere. Knowing what values and morals that will instill in those young people. *Leader*



Self-Efficacy

You have to do a budget and you have to figure out how much it costs to take care of a miniature horse for a year. We went to like (the horse supply store) and...it felt kind of like a shopping trip except that I wasn't actually buying anything....I asked the (store clerk) if she could help me a little bit....I was nervous....Whenever mom makes me order my own food at restaurants, I used to be like mumbling really quiet but I've gotten used to it now....so I've gotten better at that. I still feel a lot more responsible when I'm able to do that. I don't feel as much as a kid. I feel more like a teenager that I'm able to be responsible with that. *Member*

The opportunities are out there that these kids would never get otherwise. They learn to run a meeting and then as adults, they can see when a meeting is poorly run and they can step forward and handle things. They build confidence. And they know they can do anything. *Leader*

Social Justice

We had one young lad who had a handicap and there's no way we could get him on a horse, the horse would have been uncomfortable. And the boy who wasn't able to get up- he was in a terrible car accident, we noticed that he brushed the horse. He built his confidence brushing the horse....He learned to brush the horses and get them tacked up. And he was able to drive. the day that he drove he cheered and all the other kids cheered with him. It was a good experience...he brought himself slowly forward and all the other kids worked

with him. Nobody isolated him....And his speech is better and his walking is improved. You tell me what it is, but it all happened about the same time. It's just that he matured all of a sudden, or that he gained confidence and did it. But he was so happy. His speech at the start was really difficult, but you could hear him laughing and trying to tell everybody how much fun he was having....therapeutic. No fees, just us....I think we need to do more at the ground level with our kids that are just...at the bottom levels....They're not all going to be Eagle Scouts, ok. They're going to be an awful lot of the foot people, the ground people....These are the foundations and this is where we should be putting our energy and our dollars. *Leader*

Soft Skills

You have to take care of yourself in order to take care of something else. And also the habit of nurturing like teaches you how to nurture and it's easier to turn that in on yourself once you have those skills....I mean like nurturing and taking care is a skill you learn and some people never learn it. You can like as a kid or as a teenager be learning to take care of something ELSE..... but once you become an adult....you've already to this toolbox because you know HOW to take care of something. *Member*



I was successful at some things but we've got to keep trying and going...not giving up because like you're not going to move on and learn anything else if you give up...Patience. Having patience. You have to have patience to work with people every day. *Member*

Practical Skills

They learn time management skills...4-H is a youth development programme so a lot of the things we do is pushing them to be leaders, to develop. *Leader*

There's a lot of things in 4-H that I feel like a lot of other kids are missing out onLike, we get taught like money kind of thing...stuff they don't teach I like taxes and...entry fees. Like we have to pay money to show our cows to compete in that class. *Member*

I've heard many employers say they'd rather hire a 4-H kid than any other kid. They have the understanding of what it means to get up at 3 in the morning and bath the calf and get it ready. *Leader*

Quotes and Images Illustrating Facilitating Elements

Facilitating Environment

There've been a lot of changes since I was little. Like we didn't walk around with cellphones...we didn't have all those distractions, and we were forced to go out and be involved in recreational activities where you actually have to get out and do something. And for me that is a big challenge. I've had to tell girls to put away cell phones.

Leader

One of the big things that brought me back to 4-H was the chance to get away from the concrete...be out where there is space... you need a lot of space to make big mistakes and not hurt anybody.... being out in the green space being out in the country, being away from the city and the concrete and the glass is always going to be beneficial. *Member*



Facilitating Relationships

Dialogue, 2 Leaders and 2 Members :

Leader 2: "You know it's a conversation I have with these guys. I came from a very strict and straight background, and I make a lot of mistakes and I say to them, this is a learning process...cause you can't fix the holes you've made but you can certainly explain them and understand them and learn."

Leader 1: "Learn a different perspective."

Leader 2: "Learn from them and do it differently. And so we're having those conversations...I think that 4-H more than everything else that I've done in the past (Guides and Cadets)...it's giving you the perspective of that because it's not professionals, cause it's not experts in their field. It's people developing..."

Member 1: "People"

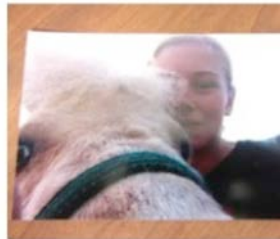
Member 2: "Strengths"



A lot of our senior members are really good at demonstratingThey look up to them in their riding abilities as well as, well, what they're doing in life, you know? *Leader*

And then the interaction with the horses of course, their own self-control. With the animal, seeing how they react. And...the kids aren't often leaders so it gives them some leadership skills....as they get better at communication with the horse, the horse will respond better. Different from riding lessons because riding lessons is very structured in order to get the horse to do exercises. ..you don't get to really see how the animal's responding...there's a different perspective from the ground...if you give kids a task...they'll try all kinds of different things....It takes communication skills in a language. *Leader*

Other animals is a bit more hands-on 'cause you capture them, you hold them, you FEEL them more. Let's say lambs, you have to feel them for which parts are good with them. With horses it's a bit more visual, though you do have to feel them a lot...horses are smarter animals so you don't have to be as forceful...and they're bigger animals...Lambs you have to use force to get them in pens and stuff, but horses you have to GUIDE them. *Member*



Facilitating Structure

We have the 4-H pledge for respect before, at the beginning of everything. I like it because it's a sign of respect and that you promise to try your hardest and not just quit. *Member*

They'll build a barn out of shoe boxes and labelled stuff. Last year a member did a project on anatomy so she brought in a toy horse and did it that way and had done a whole Power-Point presentation and stuff, because achievement day is about...doing something in front of other people, getting out of your comfort zone. *Leader*

I always enjoyed judging, critical thinking. I felt important. I loved judging because you give your personal opinion, but you have to back up what you're saying. It's not just 'oh I like this cow', you had to back it up, think about it. You can't just pull things off the top of your head, so it was the critical thinking. *Leader and Former Member*

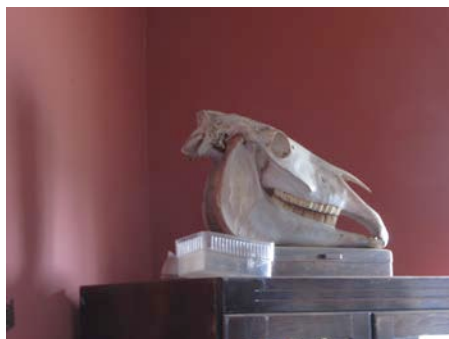
One of the things I've learned is how to be a good leader in 4-H. And how to be confident with myself and the people around me. At the beginning of 4-H I kept to myself, but by the end of the year I had broken out of my shell. In 4-H you have many opportunities to lead and state your opinion on what you are learning. *Member*

Facilitating Approach

I would say they probably enjoy the activity as opposed to the lesson plan. We try and make the activities tie into the lesson plan as much as possible. Some of them get tired of hearing S or myself talk. They get bored of hearing us talk and sometimes the topic's nutrition and they're not overly interested in it. They've got to hear it but then they get to the activity at the end, and I think that's much more exciting for them. They get more out of that. There's more camaraderie with that as well. *Leader*

Riding lessons are more like tell you what to do, do it and teach you what to do..4-H is more like try things and they'll like tell you what you're doing wrong and help you fix it. *Member*

Leadership and confidence, because you are constantly in a group environment instead of just doing projects where you are alone, you are constantly in environments where you have to speak your opinion in order...other people to understand. I find that I've gotten more confident that way because you don't work alone - you're with the group, and you're constantly hands-on and you have to be confident in yourself in order to do those things in 4-H and you just learn automatically because of the environment....I remember getting on the horse and being confident because everybody else was confident and I thought well if they can do it, I guess I could try doing it, so I think it was easier with everyone else having faith in me too. *Member*



Participant Feedback About 4-H

Participants were also asked to comment on what they thought the best parts of 4-H were, and ways they thought the programme could be improved. The differences in their emphasis on what was best is interesting, because it illustrates a difference of perspective that was also reflected in the study. For example, youth did not generally lead in their commentary on 4-H in the interviews, with all the life skill benefits they thought it brought to them. As was expected, they talked about horses and friends. As they had opportunity to illustrate their points with stories and respond to further questions, then would reflect more on the outcomes and processes that emerged in the research. The leaders on the other hand, are clearly more intentional about the bigger picture benefits. They do not invest time in 4-H only so that youth can have access to horses (though that is one reason). They invest because they have seen the bigger picture and longer term benefits in their own lives, the lives of their own children in 4-H, and the lives of members they have been connected with in the community over time.

What members said was best about their 4-H horse club experience:

1. Learning experience
2. Access to horses
3. The people (adults & peers)
4. Hands-on
5. Being outdoors/on a farm

What leaders said was best about 4-H for the youth members:

1. Learning experiences
2. Personal skill development
3. Leadership opportunity
4. Program structure
5. Opportunity to engage

Ways that participants felt the programme could be improved:

1. More a time with horses
2. More members /volunteers
(More kids having more access to horses and more volunteers to help make it happen for all income brackets)
3. More diverse challenge experiences
(cattle have many, horse clubs have few)
4. More support to help leaders connect with knowledge that is out there, and peers

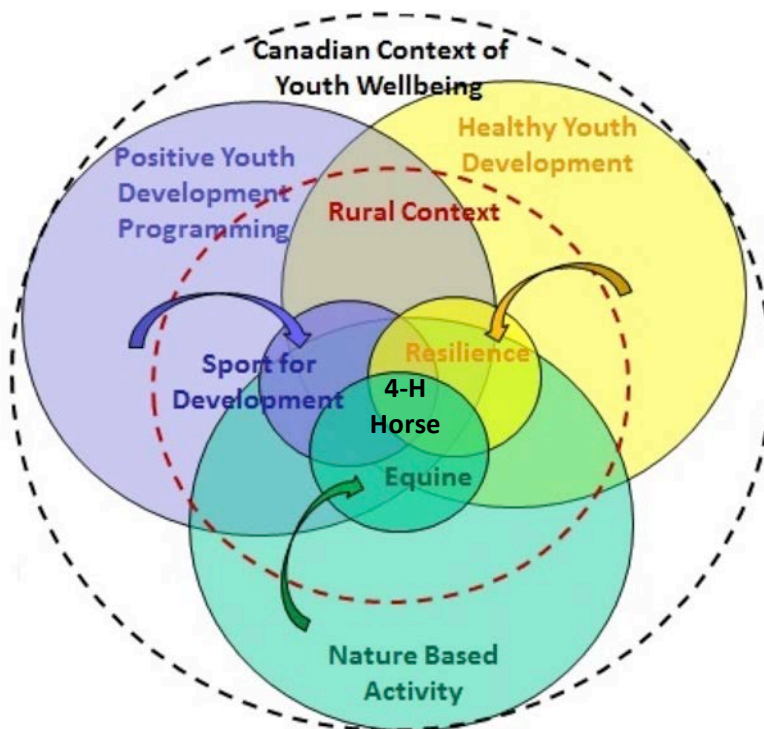
All comments for more resources ('more money') related to the above goals.

Conclusion

In summary, there was very strong evidence of protective factors for resilience which were above expected levels for a general population. There was also evidence of the development of many other social, emotional and practical skills applicable to adult thriving through healthy choices, healthy relationships, civic participation and workforce or entrepreneurial contribution. It is impossible to state that all youth participating in a 4-H programme or 4-H horse programme will have these experiences. However, this study does show that there is a wide range of benefit available, and that the programme lends itself well to integration of a wide range of needs.

The elements in the programme which facilitate the outcomes are quite typical of many of the disciplines which form the background for experiential learning and therapeutic recreation using green and animal-based activities. The 4-H horse club emerged out of this study as clearly being a rural version of a programme for:

- ✓ Outdoor adventure learning
- ✓ Therapeutic recreation
- ✓ Sport for youth development
- ✓ Positive youth development
- ✓ Animal-based learning



5

⁵ This diagramme has been originally published in several academic presentations and posters, and in the qualifying exam paper released online under the title "Rurality, Recreation and Youth in Canada" (Sansom, 2015)

References

- Bandura, A., Barbaranelli, C., Caprara, G.V., & Pastorelli, C. (2001). Self-Efficacy Beliefs as Shapers of Children's Aspirations and Career Trajectories. *Child Development*, 72(1), 187-206.
- Caldwell, W., Kraehling, P., Huff, J., & Kaptur, S. (2013). *Healthy Rural Communities: Strategies and Models of Practice*. Guelph, ON: University of Guelph. Retrieved from <https://www.uoguelph.ca/sedrd/new-resource-healthy-rural-communities-tool-kit-guide-rural-municipalities>
- Canadian Medical Association (CMA). (2013). *CMA Position Statement: Ensuring Equitable Access to Care: Strategies for Governments, Health System Planners, and the Medical Profession*. Ottawa, ON: Canadian Medical Association.
- Lerner, R.M., Lerner, J.V., Almerigi, J.B., Theokas, C., Phelps, E., Gestsdottir, S., Naudeau, S., Jelicic, H., Alberts, A., Ma, L., Smith, L.M., Bobek, D.L., Richman-Raphael, D., Simpson, I., DiDenti Christiansen, E., & von Eye, A. (2005). Positive Youth Development, Participation in Community Youth Development Programs, and Community Contributions of Fifth-Grade Adolescents: Findings from the first wave of the 4-H study of positive youth development. *Journal of Early Adolescence*, 25(1), 17-71.
- Liebenberg, L., & Ungar, M. (2008). *Resilience in Action*. Toronto, Ontario: University of Toronto Press.
- Liebenberg, L., Ungar, M., & Van de Vijver, F. (2012). Validation of the Child and Youth Resilience Measure-28 (CYRM-28) Among Canadian Youth. *Research on Social Work Practice*, 22, 219-226.
- Luszczynska, A., Scholz, U., & Schwarzer, R. (2005). The General self-efficacy scale: multicultural validation studies. *The Journal of Psychology*, 139(5), 439-457.
- Ontario Ministry of Rural Affairs. (OMRA) (2014). *Rural Roadmap: The Path Forward for Ontario*. Guelph, ON: OMRA. Retrieved from: <http://www.omafra.gov.on.ca/english/rural/roadmap-2014.pdf>
- Public Health Agency of Canada (PHAC). (2011). *Report on the State of Public Health in Canada 2011: Youth and Young Adults- Life in Transition*. Ottawa, ON: PHAC.
- Public Health Agency of Canada (PHAC). (2013). What Makes Canadians Healthy, Key Determinants of Health. Ottawa, ON: PHAC. Retrieved from: <http://www.phac-aspc.gc.ca/ph-sp/determinants/determinants-eng.php#unhealthy>
- Sansom, H. (2017). Community Recreation as Therapeutic: The 4-H Resilience Research Project. *Therapeutic Recreation Practice and Research: Journal of Therapeutic Recreation Ontario*, 12, 30-45.
- Sansom, H. (2017) *Rural Recreation for Resilience : Positive Youth Development and Therapeutic Outcomes through Green Physical Activity in 4-H Ontario Horse Clubs*. (Doctoral dissertation). Guelph, ON: University of Guelph.
- Seligman, M. (2011). *Flourish: A visionary new understanding of happiness and well-being*. New York, NY: Simon & Schuster, Atria Paperback.
- Ungar, M., Brown, M., Liebenberg, L., Othman, R., Kwong, W.M., Armstrong, M., & Gilgun, J. (2007). Unique pathways to resilience across cultures. *Adolescence*, 42(166), 287-310.

Appendix A: Phase One Survey & Recruitment

Basic Questions (Introduction):

1. I am a
 - a. Club member
 - b. Leader
 - c. Parent
 - d. Other
2. Permission question (all survey responses were 'yes', otherwise they did not complete the survey).
3. How many other clubs (not 4-H) did you participate in, in the past 2 years?
4. What community or school activities have you been involved in over the last year?
 - a. Organized physical activity
 - b. Church or Religious Clubs
 - c. After-School Program
 - d. Scouts, Guides, Cadets
 - e. Music, Arts, Drama
 - f. Other riding clubs
 - g. Volunteering
 - h. Other/Community
5. How long have you been a 4-H horse club member?
6. The horse I use is
 - a. My own/my family's
 - b. Borrowed/ Leased
 - c. A club horse
7. Pick the best description of where you live
 - a. On a farm
 - b. In the country but not on a farm
 - c. In town
 - d. In a city
 - e. Other
8. I get to 4-H meetings and events mostly by
 - a. Get a drive from parent or caregiver
 - b. Get a drive from another adult
 - c. I drive myself
 - d. Walking or riding my bike or horse
 - e. Taking public transit
 - f. Other
9. My club offers extra activities and get-togethers
 - a. Never
 - b. Sometimes
 - c. Regularly
10. About how many horse club meetings did you attend in the last season?
11. About how many other 4-H clubs (other than horse) have you participated in, in the past two years?
12. Select the best description of how you feel about this statement 'Participation in 4-H is very important to me.'. (5 point Likert: 1= Not at all, 2= a little, 3= somewhat, 4= Mostly, 5= Definitely, 9= Don't know)

Resilience Scales: Schwarzer and Jerusalem, and CYRM-28

Schwarzer& Jerusalem Self-Efficacy Scale (Schwarzer& Jerusalem, 1995)

Ten questions using a five point response scale where 1= Not at all, 2= a little, 3= somewhat, 4=mostly/quite a bit, 5= Definitely/A lot, 9= Don't Know

13. I can always manage to solve difficult problems if I try hard enough.
14. If someone opposes me, I can find the means and ways to get what I want or need.
15. It is easy for me to stick to my aims and accomplish my goals.
16. I am confident that I could deal efficiently with unexpected events.
17. Thanks to my resourcefulness, I know how to handle unforeseen situations.
18. I can solve most problems if I invest the necessary effort.
19. I can remain calm when facing difficulties because on can rely on my coping abilities or support system.* note: 'or support system' has been added by the researcher
20. When I am confronted with a problem, I can usually find several solutions.
21. If I am in trouble, I can usually think of a solution.
22. I can usually handle whatever comes my way.

Child and Youth Resilience Measure- 28 (CYRM-28) (Liebenberg & Ungar, 2012)

Modified with Twenty-five questions using a five point scale. 1= Not at all, 2= a little, 3= somewhat, 4=mostly/quite a bit, 5= Definitely/A lot, 9= Don't Know

23. I cooperate with people around me.
24. I aim to finish what I start.
25. People think I am fun to be with.
26. When things don't go my way, I can fix it without hurting myself or other people (for example, without hitting others or saying nasty things). *NB: This question replaced the original question "I solve problems without drugs or alcohol."*
27. I am aware of my own strengths.
28. Spiritual beliefs are a source of strength for me.
29. I think it is important to serve my community.
30. I feel supported by my friends.
31. My friends stand by me during difficult times.
32. I feel that my parents/caregivers are there for me when I need them. *NB: This question replaced two original questions "My caregivers watch me closely." And "My caregivers know a lot about me."*
33. I feel that my caregivers/parents provide what I need. *NB: this question replaced three of the original questions "I eat enough most days." "My caregivers stand by me during difficult times." And "I feel safe when I am with my caregivers."*
34. I talk to my caregivers / parents about how I feel.
35. I enjoy my caregivers' cultural and family traditions.
36. Getting an education is important to me.
37. I feel I belong at my school.
38. I have people I look up to.
39. I know how to behave in different social situations.
40. I am given opportunities to become an adult.
41. I know where to go to get help.
42. I have opportunities to develop job skills.
43. I am proud of my background.
44. I am treated fairly in my community.
45. I participate in organized religious activities.
46. I enjoy my community's traditions.
47. I am proud of my citizenship.

Closing Questions

48. I participate in 4-H mostly because...
- a. Family history
 - b. Learning new things
 - c. Meeting new people
 - d. Friends
 - e. My leader/other volunteers help me
 - f. Parents/caregivers told me I had to go to 4-H
 - g. Being outside
 - h. Being on a farm
 - i. I get to be with horses
 - j. Other (open, free-form response field)
49. My thoughts about 4-H
- 49a. I think the best things about 4-H are (open ended free-form response field)
- 49b. I wish there were more... (open ended free-form response field)
50. How old are you?
51. What grade are you in school?
- a. Not finished high school
 - b. Finished high school
 - c. Community college
 - d. Bachelor's degree
 - e. Graduate degree
 - f. Grade: (open box)
52. How do you describe your gender (ie: boy, girl)
53. I live with
- a. At least one of my own parents
 - b. Both of my parents
 - c. Other family members (but neither of my parents)
 - d. Independent adult
 - e. Other
54. I was born in
- a. Canada
 - b. Not in Canada
55. I am a Canadian Citizen
- a. Yes
 - b. No
56. The nearest town or city to where I live is... (open ended response form)
57. To which of the following groups do you belong?
- a. First Nations
 - b. South Asian
 - c. Southeast Asian
 - d. Asian
 - e. Middle Eastern
 - f. Black
 - g. White
 - h. Latin American
 - i. Mixed
 - j. Other

Appendix B: Leader Interview Guiding Questions

1. Getting to Know You: Can you start by telling me about your experience with 4-H?

(Guiding questions to draw on. Specific questions may arise for clarification based on the flow of the conversation, and material generated by the participant.)

- a. How long have you been a 4-H horse club leader?
- b. Why did you decide to become a horse club leader?
- c. How long have you been a 4-H member overall?
- d. Are or have you been involved with 4-H clubs other than horse? Which ones?
- e. Are or have you been involved with other youth clubs such as Scouts, Guides, church groups etc...?
- f. How old/how big is your club? How many events do you hold?

2. Details About Your Club

- a. How old is your club and how long have you been leading this one?
- b. Were you a member of this club before leading it?
- c. How many members are in this club?
- d. How many meetings and events happen in the season?: Regular meetings: Other events: (describe)
- e. What percentage of your members tend to also join other clubs or sport activities? (what types)
- f. Can you describe a typical club meeting?

3. As a 4-H leader/member, how does 4-H impact You?

(Guiding questions to draw on. Specific questions may arise for clarification based on the flow of the conversation, and material generated by the participant.)

- a. What are your reasons for involvement with 4-H? (What do you do this? What motivates you?)
- b. Are there ways that your 4-H involvement as a leader contributes to your life?
- c. What are some of the challenges you face as a 4-H leader?
- d. As a leader, what helps you in your role?

4. As a 4-H leader, how do you see participants' experiences?

(Guiding questions to draw on. Specific questions may arise for clarification based on the flow of the conversation, and material generated by the participant.)

- a. What do you think participants learn in 4-H horse program? (what do they get out of it) Can you give me some concrete examples, such as a particular kid and something specific that you observed them learning?
- b. How do you think members learn or are impacted by 4-H? (This question is more about what they do in the program or specific parts of being in the program which. For example, if you recall a participant learning a leadership skill in part a) above, this section is more about what were they doing or who was involved that contributed)
- c. Are there particular parts of the program that participants really enjoy? Or seem to benefit from?
- d. Are there ways that 4-H programs could impact participants in positive ways even more?
- e. Are there particular things that you are trying to get participants to learn or experience as part of the program?
- f. Are there particular things that you have been instructed to try and get participants to learn about or experience as part of the program?

Appendix C: Youth Group Image-Based Interviews

Instructions and Guiding Questions

Instructions:

1. Think about the topics below, then take pictures, or draw pictures, or write poems, or do something creative for each of the topics. If you prefer to do something creative, it needs to be something you can photograph. For example, topic three is about what parts of 4-H are important to you. Let's say that driving to 4-H with your parent is an important one-on-one time in the week with your parent. What could you take a photo of to represent this meaningful time?
Topics for photos: You can discuss anything you feel like about your participation, including people or things that happen outside 4-H but are somehow connected to your participation.
 1. What 4-H horse club means to me.
 2. What I learn in 4-H that helps me in the rest of life.
 3. What parts of 4-H participation are most important to me.
 4. Things that would make 4-H even better.
2. After you have photos or photos of your creative pieces, select photos (approx. 3, maximum 6) that you can use in your presentation to the group (usually 5-10 min, maximum 15 min including question time). You can use as many or as few as you like, but not more than six. If you cannot print them on paper to show, you can email them to your leader to get help printing them.
3. Take a few minutes to write down some notes about the picture. Your notes can be in point form, words on the page or full sentences and paragraphs. Whatever works for you. Preparing your ideas in advance will help you be more confident and ready to present. Here are some things you can write down:
 - a. What is it a picture of?
 - b. Why does it represent the topic for you?
 - c. How does it make you feel?
 - d. What do you want others to know about it?
4. When you get to the focus group interview, you can present your photos and talk about your responses to the topics in whichever order you like. You can present as many photos as you like, up to 10. Your presentation is not being judged or critiqued. The researcher and your peers may have questions for you, to help them understand your experience.
5. Give a copy of your photos and your notes for each photo to the researcher.

Guiding Themes for Researcher Questions

1. How would you describe your experience overall in the 4-H horse program?
2. How do your pictures explain your experience?
3. Has your experience in the 4-H horse project been similar or different to other 4-H projects, clubs or even non-4-H activities you have been involved with?
4. What are the most important parts about 4-H horse club?
5. Do you think you learn things in 4-H horse? Tell us about it.
6. Have you ever learned something in 4-H horse club that you've used somewhere else (like at school)?