

An Exploratory Study of Collaboration between Youth and Local Organizations working on
Sustainable Development Projects in Canada

by

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Author's Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

Abstract

The international community recognizes the importance of partnerships and collaboration across multiple institutions and stakeholders to implement sustainable development goals (SDGs). The SDGs are a global framework of targets adopted by 193 countries in September 2015 within the 2030 Agenda for sustainable development to attain a sustainable future for all by 2030. Canada is committed to the implementation of SDGs and is currently ranked 21 on the SDG index. Canada's National strategy of implementing the SDGs is "Moving Forward Together" by involving all levels of government, municipalities, civil society, the public and private sectors.

Youth and local organizations are recognized as important stakeholders in the implementation of SDGs. Youth are important actors for their implementation as well as the impacted. Young people are referenced in more than one-third of SDG targets. According to the United Nations, youth play vital roles as critical thinkers, change-makers, innovators, communicators & leaders in the implementation and success of the SDGs. Literature in the field of sustainable development has captured the capacity of youth to strongly contribute to various SDGs in various roles across different parts of the world .

Apart from youth, local organizations also play important roles in the implementation of the SDGs by promoting sustainable development at the local level. Some key areas include mobilizing resources, generating and interpreting specific local knowledge, local monitoring, forming community norms and common expectations. Strong local organizations are needed to mobilize people to utilize technologies for innovation that increase productivity and

sustainability of resources. Locally centered sustainable development thus is recognized as a key developmental opportunity for the implementation of the SDGs by the United Nations.

Since research on the SDGs is relatively recent, specific literature on the collaboration between youth and local organizations working on sustainable development projects is lacking. Though collaboration is an extensively researched topic across multiple disciplines and situations, it has not been studied in the context of sustainable development, especially the intergenerational collaboration between adult organizational staff and the youth who are not employed by the collaborating organizations. The aim of this study is to explore the attributes of such intergenerational collaboration on projects aiming to have a positive impact on SDGs, their positive elements, challenges, and perceived success factors. The study is qualitative in nature and uses a grounded theory approach. Data are collected through semi-structured key informant interviews (KIIs) and analyzed using NVIVO software. This study contributes to both practitioner and academic literature on collaboration between youth and local organizations working on the SDGs. Theoretically, the study contributes to the broader literature on collaboration by exploring specific intergenerational collaboration attributes, challenges, and impacts on projects carried out by local organizations in collaboration with youth. Practically, the study contributes to the literature on sustainability development by exploring intergenerational collaboration between local organizations and youth who serve as external stakeholders of the former on projects achieving SDGs. The insights can be useful for designing more effective projects involving youth and local organizations collaborating on projects that intend to have a positive effect on sustainable development goals.

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Dedication

I dedicate this thesis to my lovely boys Togh and Aaron. They gave up most of their mummy time during the final months of my research. I hope that this dedication will make up just a little bit for that.

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CHAPTER 1: INTRODUCTION

1.1 Introduction to the Study

Canada is dedicated to the implementation of the United Nations Sustainable Development Goals (SDGs) under the 2030 Agenda and currently ranks 21 on the 2021 SDG index scores (Sachs et al., 2021). Canada launched its 2030 Agenda National strategy, which aims at involving multiple stakeholders from all levels of the government, the public sector, the private sector, municipalities, the civil society, youth, and Canadians at large for the successful implementation of SDGs (ESDC, 2019).

Collaborative work on pressing social problems and economic development, which cannot be achieved by a single organization, is embraced in various parts of the world (Clarke & Crane, 2018; Mandell, 2001; Manaf et al., 2018; Vangen & Huxham, 2003; Williams, 2002). Partnerships connecting multiple stakeholders, including national and local governments, multinational corporations, NGOs, youth, and other members of global civil society, are a vital action theme implemented by the United Nations for the successful execution of SDGs (Abraham & Iyer, 2020). Locally focused sustainable development is identified as a major developmental opportunity that needs backing, commitment, and coordination from communities and local governments (MacDonald et al., 2018; SDSN, 2015).

This study explores the attributes, positive elements, challenges, and perceived success factors of the collaboration between the youth recruited from youth-serving organizations and the adult staff from local organizations working on sustainable development projects. Both youth and local organizations are identified as important stakeholders within the nine sectors of the document “Major Groups and other stakeholders (MGoS)” issued by the UN

on the participation in sustainable development (UN, n.d.). Existing literature on collaboration emphasizes the engagement of stakeholders who are necessary for tackling the issue and those who can contribute to solutions as a collaborative advantage (Butler & Adamowski, 2015; Balestrini et al., 2017; Newton & Elliott, 2016; Waddell, 2005; Ordonez-Ponce et al., 2021). Stakeholders are individuals who are accountable for the issues; are influenced by them; have the perspectives and knowledge to develop solutions, and have control of resources for implementation (Richards, 2004; Freeman, 2010; Hemmati, 2012). Engaging diverse individuals who bring different perspectives and educating them with important information can create opportunities to tackle critical problems (Chrislip & Larson, 1994; Patterson, 2015).

Youth and local organizations are identified as important stakeholders in the implementation of sustainable development goals. According to the United Nations, youth play important roles as critical thinkers, change-makers, innovators, communicators & leaders in the implementation of Sustainable Development Goals (UN, n.d.). The capacity of youth to add value to a variety of Sustainable Development Goals in various roles is captured in existing literature (Fien, Neil, & Bentley, 2008; Ogamba, 2018; Khan et al., 2016). Local organizations play important roles in mobilizing sustainable development at the local level (Yan et al., 2018). Some key areas include mobilization of resources, generation, and interpretation of specific local knowledge, local monitoring, formation of community norms and common expectations (Uphoff, 1992). Strong local organizations are needed to mobilize people to utilize technologies and adopt new technologies for innovation (Lovejoy et al.,

2000). It is largely recognized that the participation of communities is critical to increasing productivity and sustainable use of resources (Dash et al., 2011).

This is an exploratory study that adopts a qualitative approach to research the attributes, positive elements, challenges, and perceived success factors of the collaboration between youth and local organizations working on the organizations' sustainable development projects. The study was conducted as part of the Youth and Innovation Project at the University of Waterloo in partnership with three host organizations- The Canadian Wildlife Federation, Ocean Wise Conservation, and the YMCA. Youth participants from the three host organizations were placed in their partner local organizations. Youth participants and local organizations collaborated on the organizations' sustainable development projects.

1.2 Purpose of the Study

Firstly, the current study is conducted to contribute to the literature and practice of sustainable development. The insights provide a deeper understanding of stakeholder collaboration for the implementation of sustainable development goals involving youth and local organizations. Stakeholder engagement in sustainable development should be considered as a central aspect of any sustainable development program (Uitto, 2019; Bal et al., 2013) because it can lead to more effective work, decision making, and solutions (Leal Filho & Brandli, 2016). The study provides specific insights on collaborative stakeholder engagement.

Secondly, this study aims to contribute to the broader literature on collaboration. Though collaboration is extensively examined in multiple studies across disciplines, it cannot be

standardized, and there is a lack of unified interpretation of the concept (Reilly, 2001). Different studies have outlined important aspects of collaboration and certain common themes, but they cannot be considered complete in themselves. The outcomes of collaboration cannot be generalized because they depend on the intended results of collaboration (Wood & Gray, 1991). The topic of collaboration lacks coherence because the factors that affect collaborative working relationships like objectives, available resources, the commitment of stakeholders, interactions, and the project are unique to the situation (Huxham & Vangen, 2005; Thomson et al., 2009). This study is situated in a specific context to understand the collaboration between youth and local organizations as stakeholders within the premise of implementation of SDGs in Canada. Youth participants from the Canadian Service Corps are collaborating with local organizations in an inter-organizational context. This is different from the collaboration from an internal employee context in which both parties are bound by employment rules and commitments (Litz & Kleysen, 2001; Edelman et al., 2016; Miller et al., 2003; Wolf et al., 2018).

1.3 Research Questions

The study is an exploratory investigation of the collaboration between youth and local organizations working on sustainable development projects in Canada. For this purpose, it is guided by the following research questions-

1. What are the attributes of the collaboration between youth participants and adults from the local organizations working on sustainable development projects?

2. What are the positive elements of the collaboration between youth participants and adults from the local organizations working on sustainable development projects from the organization's perspective?
3. What are the challenges associated with the collaboration between youth participants and adults from the local organizations working on sustainable development projects from the organization's perspective?
4. What are the local organizations' perceived success factors for designing youth involvement in their sustainable development projects?

1.4 Thesis Roadmap

This thesis is structured in six chapters; the current introduction chapter is followed by a literature review, methods, results, discussion, and conclusion chapters. The literature review chapter (Chapter 2) comprehensively outlines the background of sustainable development, stakeholder collaboration for sustainable development, and collaboration as it reviews the existing academic and practitioner literature in these areas. The methods chapter (Chapter 3) summarizes the research partnership, research design, and documents the process of inquiry and analysis used in the study. This is a qualitative study that adopts a key informant interview approach for primary data collection. This chapter further extends into a discussion on the limitations, reliability, and validity of the study. The results chapter (Chapter 4) presents the research findings of the four research questions and some emergent relationships

that surfaced during the analysis. The discussion chapter (Chapter 5) describes the research findings with reflections on the existing literature. Finally, the conclusions chapter (Chapter 6) reviews the contributions of this study, the opportunities for future research, and the limitations of the study.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The literature review chapter covers three topic areas related to the scope of the study. The first part covers topics related to sustainable development, specifically its background, definition, ethical implications, spatial aspects, SDGs, and SDGs in Canada. The second part analyzes the individual and collective roles of youth and local organizations in sustainable development, and the third section reviews existing literature in the field of collaboration and intergenerational collaboration.

2.2 Sustainable Development

2.2.1 Background

The term "Sustainable Development" has experienced an evolution in its definition and conceptual implications over the last 49 years. The concept, though not explicitly used, received international attention during the UN Conference on the Human Environment held in Stockholm in 1972, where the international community acknowledged that development and environmental issues could be treated in conjunction (Handl, 1992). During this conference, the UN created United Nations Environmental Programme (UNEP), its first exclusive program on environmental issues (UN, 2017). Subsequently, sustainable development appeared as a term in policy discussion in 1987 in the Brundtland Commission's report titled "Our Common Future" (Redclift, 2005). World Commission on Environment

and Development (i.e., the Brundtland Commission) defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their needs." Further, the report connected economic, social, and environmental matters as the three pillars of sustainability (WCED, 1987).

Sustainable development gained global attention during the Earth Summit in Rio de Janeiro, Brazil, in 1992, where it was recognized that environmental protection required global collaboration leading to Agenda 21, an official global consensus on development and environmental cooperation (UN, 2017). In 2000, Millennium Development Goals (MDG's) were established during the Millennium Summit; these were eight international development goals as a blueprint for development activities in member states until 2015 (UN, 2016). The MDG's triggered exceptional international efforts in the areas of poverty, hunger, disease, and environmental destruction but were not completely successful (Williams, 2014; Wysokińska, 2017).

The next step in the global collective effort to achieve concrete economic, environmental, and social development was the adoption of 17 SDGs of Agenda 2030 by the UN General Assembly. This latest development agenda extends responsibility more universally to the entire international community, including developed countries, developing countries, and international organizations (Wysokińska, 2017). The year 2020 observed the opening of the Decade of Action to achieve tangible success on the Sustainable Development Goals by 2030 (UN, n.d.).

2.2.2 Ethical Implications of Sustainable Development

In essence, the development of the concept of sustainable development is not an outcome of scientific inquiry; it is rather based on ethical grounds (Michelsen et al., 2016; Čiegis et al., 2005; Pawłowski, 2008). Ethics in the context of development implies equity by providing benefits to all involved as opposed to focusing only on the parties conducting development (Maldonado, 2003). Since sustainable development is a broad and normative concept with high stakes encompassing an array of perspectives based on its application, it becomes critical to assess the ethical implications (Michelsen et al., 2016).

Firstly, the fundamental idea of equity and justice is partially addressed in the WCED (1987) definition of sustainable development, "development that meets the needs of the present without compromising the ability of future generations to meet their needs." It concentrates on intergenerational equity but does not pay much attention to intragenerational equity. Intragenerational equity is driven by the idea of reducing inequalities among individuals of the living generations (Gallopín, 2003). In terms of intergenerational duties, it should be justified that there exist duties towards future generations (Doring & Muraca, 2010).

Secondly, unbalanced inclination towards either anthropocentric or ecocentric views of sustainable development has clear ethical implications. The anthropocentric objective of intergenerational justice stated in the definition of sustainable development by the WCED (1987) raises ethical concerns as it suggests a long-term scope for planning and evaluation, which is subjective and does not clearly aim for a period that is long enough for clear consideration of future generations to include the next generation after the present generation

vanishes (Bergh, 1996). Moreover, anthropocentrism focuses on only human-related values as the focal point for environment-related policies and decisions (Norton, 2005). On the other hand, the ecocentric objective of preserving biodiversity poses its own ethical concerns; this perspective raises the argument that the approach can interfere with development, especially in developing countries, because it may be argued that some human problems are more critical than bioethical considerations (Bergh, 1996). While the need for preserving biodiversity can be reinforced based on concern for future generations and potential economic benefits (WCED, 1987), but this viewpoint does not include a detailed consideration of non-human species and their rights (Redclift, 2005). Thus, the claim weakens when it comes to protecting species and systems that are not assigned a significant value (Opschoor & Reijnders 1991). The ecocentric view focuses on all ecosystems and species, while an economic perspective limits its focus to ecosystems and species related to certain economic interests (Bergh, 1996). Considering the ethical implications of viewing environmental, economic, and anthropocentric objectives in an unbalanced manner, it is apparent that there should rather be certain stability and complimentary relationships between humans, the economy, and the environment for sustainable development.

Thirdly, there exist certain biases in the interpretation and implementation of sustainable development because different actors focus on divergent aspects based on their needs. For instance, business and industry groups pay more attention to waste elimination and health and safety improvements, while marginalized groups pay more attention to equal access to environmental resources (Egelston, 2013). While developed countries mainly view sustainable development as conservation of the environment, the view of developing

countries is largely different as they see sustainable development as means to reducing poverty and inequalities with modern societies (Purvis & Grainger, 2004). Universal solidarity is considered the most important ethical principle for social justice (SRU, 2002).

Sustainability is an ethical principle for development that discusses the ideal state as opposed to the current state (Čiegis et al., 2005). There exists an extensive focus on the importance of ethical implications of sustainable development in literature (Engel, 1990; Brown, 1995; Gruen et al., 2013). It is argued that there should be a continual critique on aspects of development to view sustainable development as an ethical ideal.

The intragenerational and intergenerational justice aspects within ethical implications of sustainable development are particularly relevant to this research. The study explores the collaboration between young participants and adult staff from local organizations working on sustainable development projects. In this structure, stakeholders from different age groups or generations who receive equitable impacts of sustainable development participate collectively as active players towards attaining sustainable development goals. Further discussion on the participation of concerned stakeholders is included in section 2.3 of the literature review.

2.2.3 Spatial Aspects of Sustainable Development

The spatial aspect has received limited attention in sustainable development (Shearlock et al., 2000; Bergh, 1996; Nijkamp et al., 1990). However, there exists a reciprocal relationship between sustainability at local and global levels. It can be said that local practices have global impacts, and global developments lead to local effects (Höjer & Wangel, 2014).

Climate change demonstrates this relationship; ecological degradation in some regions may have a sizable effect on global climatic conditions (Bergh, 1996; Nijkamp et al., 1990).

Sustainable Development in the context of region implies analysis at the local or single ecosystem level (Nijkamp et al., 1990). However, it is important to mention that regional sustainable development is multi-dimensional in nature, and several types of regions can be distinguished. Some examples are developed regions, densely populated regions, urban regions, industrial areas, environmentally protected areas, backward areas, islands, and recreational areas (Nijkamp et al., 1990). In this study, the spatial unit for regional sustainable development is the local communities across Canada.

Spatial analysis at the regional level is important because specific regions may experience distinct outcomes of environmental processes as opposed to being uniformly impacted (Alcamo et al., 1991; Nijkamp et al., 1990). Thus, a region's sensitivity to environmental and economic factors is determined by its specific structure and processes (Bergh, 1990 & 1996). Regional sustainable development should secure an adequate level of regional welfare, which is sustainable, and it should not conflict with sustainable development beyond the region (Shearlock et al., 2000; Nijkamp & Ouwersloot, 1997; Bergh, 1996).

An integrated global study of economic and natural systems is complex on account of diverse economies, ecosystems, and interests. A regional level analysis presents certain benefits over a global analysis. Firstly, the analysis of complex systems is simplified when the analysis is limited to a smaller number of interactions within a narrow range of ecosystems and economic systems (Shearlock et al., 2000; Nijkamp & Ouwersloot, 1997; Bergh, 1996). Regional level indicators are easier to accomplish as compared to aggregation of information

on a global scale which may lead to loss of information. Secondly, collection and access to data is easier at the regional level, mitigates certain challenges related to aggregation and incomparability of data at the global level (Bergh, 1996). Thirdly, the regional level analysis presents uniformity and consistency in political and public interests (Nijkamp & Ouwersloot, 1997; Bergh, 1996).

Regional sustainable development, its discussion, and analysis are subject to some challenges as well. It is important to clearly define the problem and the process of finding solutions (Bergh, 1996). Lack of sufficient information on the region's carrying capacity in terms of the size of population and economy may lead to overshooting (Bergh, 1996). Lack of regional control on negative external factors such as cross-boundary pollution and global phenomena such as climate change can be a hurdle in regional sustainable development (Bergh, 1996).

The spatial aspect of sustainable development is important to this study since the research focuses on collaboration between youth and participatory local organizations on projects that contribute to sustainable development goals in their regions of practice. Other than that, the research focus is limited to this collaboration on sustainable development projects within Canada. The importance and benefits of a focus on the local level are outlined in this section. There is further discussion on the role of youth and local organizations in section 2.3 of the literature review.

2.2.4 UN Sustainable Development Goals

The UN sustainable development goals are a global framework of targets adopted by 193 countries in September 2015 within the 2030 Agenda for Sustainable Development. The 2030 agenda is a global outline for 15 years and includes a set of 17 SDGs and 169 targets. The aim of this global framework is to stimulate action for people, prosperity, peace, and partnership (Statistics Canada, 2020; UNDESA, n.d.). It combines social, economic, and environmental elements of sustainable development alongside peace, governance, and justice aspects (Global Affairs Canada, 2018; UNDESA, n.d.). The overarching vision behind these goals is to achieve a sustainable future for all. The 17 SDGs are listed in Table 1.

Table 1. Sustainable Development Goals (SDGs)

Goal 1	No Poverty	Goal 9	Industry, Innovation, and Infrastructure
Goal 2	Zero Hunger	Goal 10	Reduced Inequalities
Goal 3	Good Health and Well-being	Goal 11	Sustainable Cities and Communities
Goal 4	Quality Education	Goal 12	Responsible Consumption and Production
Goal 5	Gender Equality	Goal 13	Climate Action
Goal 6	Clean Water and Sanitation	Goal 14	Life Below Water
Goal 7	Affordable and Clean Energy	Goal 15	Life on Land
Goal 8	Decent Work and Economic Growth	Goal 16	Peace, Justice, and Strong Institutions
		Goal 17	Partnerships for the Goals

Source: (UNDESA, n.d.)

The SDGs also set out opportunities for development in five key areas: Inclusive Development, Universal Development, Integrated Development, Locally- focused, and

Technology-driven (SDSN, 2015; Abraham & Iyer, 2020). These key action and developmental opportunity areas are briefly described in Table 2.

Table 2. Key Action and Developmental Opportunity Areas of SDG Framework

Key Action Themes of SDG Framework	Key Developmental Opportunity Areas of SDG Framework
People – Commitment to eradicating extreme poverty, hunger, and inequalities (economic and gender).	Inclusivity – Engagement of stakeholders across all levels of society to efficiently recognize and respond to the needs and interests of all.
Planet – Commitment to conserve the planet from degradation through sustainable development, optimal production, consumption, and natural resource management practices and to focus on the causes and effects of climate change.	Universality – Suitability of SDGs on the global level through adaptation to local situations. Successful development of SDGs requires the global involvement of developed as well as developing countries; the development contexts may vary.
Prosperity – Embracing consumption and production patterns that are sustainable for future generations and lead to equitable economic development and membership for all members of society.	Integration – SDGs involve complex long-term solutions, development policies, and investments along with stakeholder relationships across economic, social, and environmental dimensions of sustainable development are interlinked.
Peace – Promotion of good governance, the rule of law, anti-corruption, human rights, and equal protection under the law for everyone in society.	Technologically driven – Technology advancements and data availability apprise sustainable development policy and investment by improving global communication and connexion and bring forth data that explain and evaluate development needs, challenges, and progress.
Partnerships – Coordination among multiple stakeholders, including national and local governments, multinational corporations, NGOs, youth, and other members of global civil society for the transparent and accountable implementation of SDGs.	Locally focused – Local success in sustainable development and the SDGs requires backing, engagement, and coordination from communities and local governments.

Source: (Adapted from Abraham & Iyer, 2020; SDSN, 2015)

Achieving the SDGs entails coordination and governance across sectors and societies (Dalby et al., 2019; Abraham & Iyer, 2020). According to the World Economic Forum, one of the

main barriers facing the UN's Sustainable Development Goals is the challenge of bringing different stakeholders together (Patterson, 2015). Sustainable development fundamentally entails many different stakeholders working at various levels; this may include federal governments, transnational corporations, local and international NGOs, communities, and more. When solving complex sustainability problems, it can be challenging to assemble relevant stakeholders at the right place and the right time (Patterson, 2015). Successful implementation of SDGs requires various actors, from local communities to national governments and international partners, to actively work towards the implementation of goals by recognizing their needs (Dalby et al., 2019; Ordonez-Ponce et al., 2021).

2.2.5 Sustainable Development Goals in Canada

Canada is dedicated to the implementation of the United Nations' SDGs. According to Bertelsmann Stiftung's report, Canada ranks 21 on the 2021 SDG index scores with an overall score of 79.2 (Sachs et al., 2021). Among the 34 OECD countries on the United Nations' Sustainable Development Goals Index, Canada currently ranks 11th (Canada Beyond 150, 2018). While Canada is placed on higher ranks on several indicators, it is weak in some areas, such as greenhouse gas emissions, carbon dioxide emissions, primary energy intensity, and domestic material consumption (Sachs et al., 2021; Canada Beyond 150, 2018).

Despite progress on many goals and targets of the SDGs, there are some domestic challenges that slow down the pace of progress (ESDC, 2019). Firstly, inclusion is a barrier as social and economic inequalities continue to exist. While most Canadians have a good standard of living, a significant number of Canadians struggle to meet their basic needs (ESDC, 2019).

Secondly, Canada contributes to relatively higher energy and transportation costs despite a relatively small population because it has a large landmass, with most of it located in the northern half of the northern hemisphere. Rapid action is required to reduce greenhouse gases, improve climate resilience, and protect the natural environment (ESDC, 2019). Thirdly, Canada has the world's longest coastline that must be preserved, and responsible use of ocean and marine resources is critical (ESDC, 2019).

The Canadian government is involved in multiple dimensions of the implementation of the SDGs (Office of the Auditor General of Canada, 2018). A voluntary national review (VNR) was conducted in 2018 (ESDC, 2019). Sixty national indicators have been identified to monitor the implementation of the SDGs (Sachs et al., 2021). The Government of Canada declared in Budget 2018 that it would deliver \$ 49.4 million over a period of 13 years to establish an SDG unit and fund supervising and reporting activities by Statistics Canada (ESDC, 2019). It is also proposed that the government will provide up to \$ 59.8 million from existing departmental resources to support the implementation of SDGs (Global Affairs Canada, 2018). The Government of Canada is managing the development of a national strategy to accelerate progress on the SDGs through engagement with Canadians (ESDC, 2019; Sachs et al., 2021).

Canada's 2030 Agenda National Strategy "Moving Forward Together" was launched on February 17, 2021, and it endorses whole-of-society efforts to make progress on SDGs (CISION, 2021). The national strategy seeks to bring the opinions and action of all levels of government, the private sector, civil society, and all Canadians, including indigenous peoples, together for the implementation and progress of SDGs (ESDC, 2019).

2.3 Role of Youth and Local Organizations in Achieving the Sustainable Development Goals

2.3.1 Youth and Sustainable Development Goals

Youth is defined as a time of transition from childhood to adulthood (UNDESA, 2013). However, the overall environment within which individuals undergo this transition is not homogeneous (Valentine, 2003). This makes the definition and categorization of youth more fluid based on situational variables (UNDESA, 2013). UNESCO emphasizes the importance of context in the definition of youth because the experience of this life stage is significantly different between countries and regions of the world (UNESCO, 2020). Youth can be recognized as a time of transition from childhood which is characterized by dependence, to adulthood which is characterized by independence and awareness of interdependence as a member within the community (UNDESA, 2013). The construct of independence varies across time and between societies as young people become independent at an earlier age in some societies as compared to others (Woodman, 2012).

Youth is often defined as a biological stage because young people experience hormonal and physical changes at puberty (Blakemore et al., 2010). Despite the physical changes, youth is not just a biological stage due to the strong impact of social influences (Kreatsoulas et al., 2015). Social researchers consider youth as a stage of social transition that can be affected by factors like the timing of marriage, economic opportunities, and post-secondary education, whether individually or in combination with other factors (Gutman et al., 2002). Social anthropologists have a more cultural outlook as they examine the concept of youth by

studying their behavior, cultural beliefs, family lives, social, political organizations, and their relationships with each other (Kehily, 2007). From a psychological perspective, youth is a stage when individuals develop the self-concept, which is influenced by peers, lifestyle, gender, and culture (Prester, 2003).

It is difficult to find universal consensus on the definition of youth, but age group is an easier way to define youth, particularly with respect to education and employment (UN, n.d.). The terms youth, adolescent, teenager, and young person are often used interchangeably around the world, implying a similar meaning without clear differentiation (Konopka,1973). According to the United Nations, "youth" are individuals within the age group of 15- 24 years. This definition was endorsed for statistical purposes by UN General Assembly through its resolution 36/28 of 1981. For this study, youth refer to young people from 15 to 30 years engaged in service programs of the Canadian Service Corps (CSC).

Youth are important stakeholders in the implementation of SDGs both as actors as well as the impacted. According to the United Nations Development Programme, "more than one-third of SDG targets reference young people explicitly or implicitly, with a focus on empowerment, participation and/ or well-being" (UNDP, 2017). SDGs include 20 targets spread over six key SDGs that are youth-specific- Goal 2- Hunger, Goal 4- Education, Goal 5- Gender Equality, Goal 8 -Decent Work, Goal 10- Inequality, and Goal 13- Climate Change. Further, youth membership is essential as participation, inclusion, and revitalized global engagement are rooted in Goal 16- Peaceful, just, and inclusive societies and Goal 17 -Partnership and implementation (UNDP,2017). Sustainable Development Goals closely focus on youth development. There is clear evidence that youth engagement in sustainable

development goals leads to youth development through their evolving roles while contributing to different SDGs (ADB, 2018; Bastien & Holmarsdottir, 2017; Castillo et al., 2020).

The contribution of youth in sustainable development projects is getting global attention (Dalibozhko & Krakovetskaya, 2018; Kim, 2020; Solís et al., 2018; Barber & Mostajo-Radji, 2020). In fact, young people's contributions are fundamental in the shaping and adoption of the 2030 Agenda for Sustainable Development (WFUNA, 2019). According to the United Nations, youth have critical roles as critical thinkers, change-makers, innovators, communicators & leaders in the Sustainable Development Goals (UN, n.d.). Table 3 describes the roles youth are expected to play in the implementation of SDGs as defined by the United Nations. Literature in the field has captured the capacity of youth to strongly contribute to various SDGs in various roles across different parts of the world (Fien et al., 2008; Ogamba, 2018; Khan et al., 2016).

Table 3. Role of Youth in SDGs

Critical thinkers: Youth make sense of personal experiences and ask questions about the world around them. Youth have the capability to recognize and question the status quo in existing power structures and hurdles to change and to uncover inconsistencies and biases.
Change-makers: Youth possess the power to act and activate others. Broader connectivity and access to social media have given rise to youth activism globally.
Innovators: Youth possess new perspectives, direct knowledge, and insights into concerns not comprehensible by adults. Young people present new ideas and innovative solutions based on their understanding of the problems they face.

Communicators: Youth can promote the outreach of SDGs and the 2030 global agenda. Currently, the awareness is limited to the international development sector. Young people can be allies in communicating the development agenda at the local level to their peers and communities, as well as internationally.

Leaders: Youth can lead change in their communities and countries when they are empowered with leadership skills along with knowledge of their rights. Youth-led organizations and networks contribute to the development of civic leadership skills among young people, especially marginalized youth, and thus should be promoted.

Source: (UN, n.d.)

Youth are demonstrating their willingness to contribute as we see a shift in their desired role from being heard to being active players (Zurba et al., 2020). Younger people are playing a stronger part in civic engagement and are asking for new roles and governance frameworks (Dalton, 2016). According to the World Youth Report 2018, youth are playing an active role in advocacy, building capacity, and raising awareness about the 2030 Agenda by running online and offline campaigns, events, workshops, and publications (UN, 2018). Youth hold a technological advantage and direct access to youth communities; they are contributing by collecting and analyzing quantitative and qualitative data on youth at the local level (UN, 2018). Youth are supporting sustainable development efforts by participating in local NGOs that are working to drive the progress of the SDGs (UN, 2018).

2.3.2 Local Organizations and the Sustainable Development Goals

There is a range of local organizations in most regions that work towards developmental initiatives on the grassroots level (Alger, 1990; Bettencourt, 2019). Some examples of the areas of work undertaken by local organizations include delivering goods and services, management of local resources, or assisting low-income groups in being heard and gaining influence (Gittell & Wilder, 1999; Frisby & Millar, 2002). The term local organization applies to a wide variety of organizations such as local government organizations, local branches of supra-local government organizations, community-based organizations, local NGOs, and local private enterprises (Satterthwaite & Sauter, 2008).

As discussed in section 2.2.4, spatial aspects of sustainable development are critical to the implementation and success of sustainable development. Local organizations can lead sustainable development through commitment and participation at the local level (Clarke & Fuller, 2010; Clarke & Ordonez, 2017; MacDonald et al., 2018). The United Nations has placed importance on "Thinking globally, Acting Locally" for the success of SDGs (UNCTAD, 2018; Powell, 2009).

The importance of local organizations in sustainable development is multi-dimensional. Table 4 describes various advantages that local organizations present in the context of their role in sustainable development.

Table 4. Role of Local Organizations in Sustainable Development

Mobilizing and Regulating Resources: Local organizations are important actors for the mobilization and regulation of resources for long-term productivity.
Specific Local Knowledge: Local organizations possess specific knowledge about

resources in their area; this information can be effectively generated and interpreted by local organizations for sustainable use of available resources.
Local Monitoring: Changes in the status of resources can be monitored by involving local people. The process is quick and cost-effective and allows for making agile, adaptive modifications to resource usage through the institutionalization of local decision-making.
Resolution of Resource Management Conflicts: Local organization can speed up conflict resolution related to resource management; it can be taken to higher levels if local organizations are unable to solve, but the outcomes may be slower and relatively less appropriate in that case.
Community Norms: Local organizations play a key role in forming community norms and promoting unanimity that influences people's behavior. They can reinforce practices conducive to sustainable development.
Common Expectations: Local organizations promote common expectations and encourage long-term cooperation among people beyond individual interests. Compliance depends on the level of legitimacy established by the organization.

Source: (Uphoff, 1992)

Strong local organizations are needed to mobilize people to utilize technologies and adopt new technologies for innovation (Lovejoy et al., 2000). It is largely recognized that the participation of communities is critical to increasing productivity and sustainable use of resources. The institutional capacity of local organizations should be strengthened to improve their performance (Dash et al., 2011). The World Bank Report "Sustainable Development in a Dynamic World" emphasizes the need to focus on government, non-government, and private local organizations for supporting implementation by managing human, physical, environmental, and social assets (World Bank, 2003).

2.3.3 Stakeholder Collaboration for the Implementation of Sustainable Development Goals

Partnerships involving coordination among multiple stakeholders, including national and local governments, multinational corporations, NGOs, youth, and other members of global civil society, are a key action theme laid out by the United Nations for successful implementation of SDGs (Abraham & Iyer, 2020). Locally focused sustainable development is recognized as a key developmental opportunity that requires support, commitment, and coordination from communities and local governments (SDSN, 2015). This study focuses on the collaboration between youth and local organizations working on sustainable development projects.

Sustainable Development is complex, and its success involves coordination among multiple moving parts (Gavrilescu, 2011). Local organizations and youth are important stakeholders, and their participation is vital to sustainable development (UN, n.d.). The United Nations and international community have placed higher expectations on the success of SDGs as compared to MDG's on account of the incorporation of the private business sector and NGOs, alongside public-private partnerships, in the enactment of developmental assistance programs (Wysokińska, 2017).

According to Employment and Social Development Canada, several communities have expressed interest in participating locally with trusted and known organizations that are acting on concerns that directly affect them (ESDC, 2019). Civil society stakeholders emphasized the need for community-driven action to boost local impact on sustainable

development. Youth are strong advocates of sustainable development and have demonstrated commitment through direct engagement. They have unique perspectives and are looking for more access to participation. Canada recognizes the need for a collective and coordinated effort from all stakeholders for the successful implementation of the 2030 agenda (ESDC, 2019).

2.4 Review of Literature on Collaboration and Intergenerational Collaboration

This section includes existing literature in the field of collaboration. Collaboration is a widely studied concept applied in multiple contexts. The focus of this section is to identify common elements across the body of existing multidisciplinary literature in the field of collaboration. The section begins with defining and understanding the meaning of collaboration. It further expands to recounting the benefits, challenges, and success factors involved in collaborative processes.

Previous literature in the field of collaboration underlines the benefit of involvement of stakeholders who are necessary for tackling the issue and those who have the capability to contribute to solutions. From a collaboration viewpoint, stakeholders can be individuals who are either affected by or are contributing to the issues, have the perspectives and knowledge to develop solutions, and have access to the resources required for implementation (Balestrini et al., 2017; Waddell, 2005). Constructively involving diverse people who bring different perspectives and making the necessary information available to them can create opportunities to tackle critical problems (Chrislip & Larson, 1994).

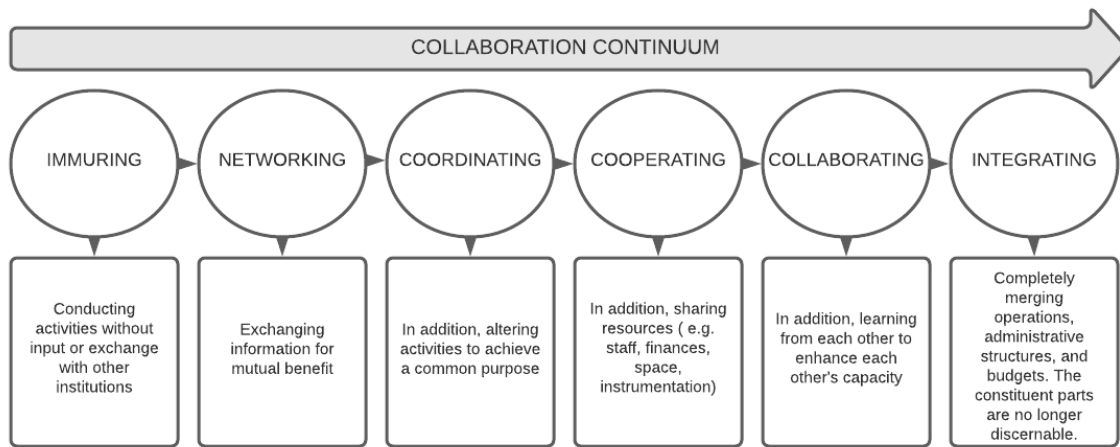
This study involves youth participants from the Canadian Service Corps collaborating as external stakeholders with adult staff in local organizations who are the internal stakeholders on the organizations' projects that aim to have a positive impact on SDGs.

2.4.1 Collaboration: Definition and Meaning

Collaboration is the collective involvement of participants in an organized attempt to contribute to the success of specific goals (Wood & Gray, 1991). Existing literature presents multiple definitions of collaboration that cover some important aspects of collaboration but are not complete in themselves because collaboration can be unique based on the situation and intended outcomes (Mandell, 2001; Behrendt et al., 2019; Newman et al., 2019). Collaboration is characterized as a process through which parties with different perspectives constructively explore their differences and find solutions that surpass their limited vision (Gray, 1989). Collaboration is an interactive process with adaptively shared purpose and characterized by a temporary structure, joint decision-making, and agreed-upon rules (Roberts & Bradley, 1991). Collaboration explains how organizations "co-labour" or work together both formally and informally (CEQ, 2007). Most collaboration efforts involve stakeholder analysis, process design, shared agenda, constituency building, and implementation (Ecoregional Conservation Strategies Unit, 2000). There is a absence of cohesive understanding of the concept (Reilly, 2001). For example, collaboration is frequently used interchangeably with coordination and cooperation (Walter & Petr, 2000) and synonymously as teamwork (Thomas et al., 2003). However, Himmelman and Mashek have advanced a discussion on the collaboration continuum, which distinctly defines inter-

organizational collaboration forms (Himmelman, 2002; Mashek, 2015). Collaboration is a working relationship between individuals, departments, or organizations that are placed on a continuum of inter-organizational models, each stage of the continuum has distinct characteristics and necessitates capabilities (Mashek, 2015). Figure 1 from the paper "People, Tools, and Processes that Build Collaborative Capacity" describes various collaborative relationship forms and the required capabilities along the collaboration continuum.

Figure 1. Collaboration Continuum



Source: (Adapted from Mashek, 2015)

From a broader perspective, collaboration can range from a basic level of delivering a small project to a more strategic level of advancement of a shared vision (Huxham & Vangen, 2005). Participants adjust their process to the domain of collaboration; the domain of collaboration can be narrow and specific or broad (Kanter, 2014). The interactive process implies a change-oriented relationship for a duration between participating stakeholders (Wood & Gray, 1991). Participating stakeholders engage in a process that results in action or

decision on the concerning issues (Wood & Gray, 1991). An individual, group, or institution that is either affected by or affects a particular issue positively or negatively is considered a stakeholder (Ecoregional Conservation Strategies Unit, 2000). Individuals represent their organizations as they act on behalf of their organizations and engage in collaborative relationships with other participants (Schruijer, 2020). Some of the consequences of collaboration cannot be generalized as they are unique to the intended outcomes of the collaboration (Wood & Gray, 1991).

Contributions to literature in this field are academic as well as practitioner-centered based on the studies from multiple disciplines and situations. It is a widely studied topic that lacks coherence across disciplines (Thomson et al., 2009), but factors that impact collaboration like goals, available resources, stakeholder commitment, communication, and project depend on the collaborative situation (Huxham & Vangen, 2005; Thomson et al., 2009). Collaboration becomes necessarily important for solving complex problems that require the knowledge and experience of multiple stakeholders (Feast, 2012; Clarke & Crane, 2018).

In this study, I explore the collaboration of youth participants from the Canadian Service Corps working with local organizations on sustainable development projects. The study aims to explore the positive elements, challenges, and perceived success factors of this collaboration from an organizations' perspective. The following sections of the literature review summarize discourse on benefits and challenges associated with collaboration within the broad academic and practitioner literature on collaboration.

2.4.2 Collaboration: Benefits, Challenges and Success Factors

Collaboration is seen as a moral imperative to deal with complex social and economic development problems that an organization cannot tackle on its own (Huxham & Vangen, 2005). Collaborative work in areas concerning social problems and economic development is adopted in different parts of the world (Mandell, 2001; Manaf et al., 2018; Vangen & Huxham, 2003; Williams, 2002). Capacity-building collaborations increase the ability of community-based organizations to focus on issues and obtain resources important for addressing concerns (Himmelman, 2002; Mashek & Nanfito, 2015; Goytia et al., 2013; Grant et al., 2020). Collaboration creates an opportunity for participants to share specialized skill sets and tangible as well as information-based resources (Clarke & MacDonald, 2019). It allows participants to undertake tasks more comprehensively and allows for a better understanding by learning from diverse groups (Parkinson, 2006). Collaboration leads to mutual learning of the participants (Huxham & Vangen, 2005; Murphy et al., 2012). Collaborative involvement increases social capital and encourages a fair process by including important interests of the traditionally disadvantaged (CEQ, 2007). Diversity of perspectives and openness of collaborative processes promote creative thinking, innovation, and more information. (CEQ, 2007; Prins, 2010). Collaborative work can be a creative problem-solving practice on account of the knowledge and experience of stakeholders (Crosby & Bryson, 2010; Gray, 1989).

Collaboration is unsuccessful when the participants cannot develop shared goals, effectively design the process, employ shared leadership, and establish a collective identity (Huxham &

Vangen, 2005). Collaboration may sometimes involve individuals; it may sometimes include organizations, and sometimes it can involve both individuals and organizations (Huxham & Vangen, 2005). In the current study, both individuals and organizations are involved in a collaboration on sustainable development projects. Collaboration membership involving different types of participants may lead to ambiguity because their representativeness of the organization and personal interests can vary (Huxham & Vangen, 2005). Ambiguity about roles and expectations and imbalance of power can cause struggles in collaboration (CEQ, 2007; Parkinson, 2006). While different perspectives of collaborators are seen as an advantage of collaboration because they aid in creative thinking, innovation, and integrating knowledge, these can also lead to challenges stemming out of biases and differing values (Swartz & Triscari, 2010; Veal & Mouzas, 2010). Incompatibility of individual interests and collective interests is a barrier to collaboration (Thomson et al., 2009). Lack of structure and power division is a major challenge in collaborations (Andersson, 2009); autonomy and inclusion of members are important for cohesiveness among collaborating members (Andersson, 2009; Nowell & Harrison, 2011). Underorganized structures make collaboration more complex (Schruijer, 2020). Collaborative work must navigate some bureaucratic and logistical barriers that regulate the collaborative relationship and area of work (Veal & Mouzas, 2010). Constraints such as limited time, resources, funding, and member commitment create some operational barriers (Kramer & Crespy, 2011).

Researchers have identified multiple attributes, including the inclusion of stakeholders, partner selection, mutual trust, open communication, shared vision, and appropriate structure as contributors to a good collaboration (Huxham & Vangen, 2005; Mattessich et al., 2001;

Clarke, 2011; Sun et al., 2020). Several researchers have focused specifically on the structures, skills, and competencies for the successful management of factors affecting collaboration (Buckley et al., 2002; Williams, 2002). Some of the common success factors identified across literature are tangible goals, trust-building, and effective communication (Greer, 2017; Huxham & Vangen, 2005). Stakeholder readiness and project timing, openness, and involvement of stakeholders in the process, identification of right participants, a commitment of the leadership, and trust-building are some factors that can aid successful collaboration (Chrislip & Larson, 1994). Development of clear roles and terms of relationships, open and consistent communications, shared interest of participants, trust-building, and skilled leadership, can have a positive impact on collaboration (Parkinson, 2006). Open communication (Sense, 2005) and knowledge transfers (Murphy et al., 2012) support mutual learning and knowledge creation. Collaboration is generally ideal for participants that are likely to share a continued relationship beyond the current issue. Availability of resources, focused attention and time of dedicated staff, and training are essential elements for implementing collaboration (CEQ, 2007). Management of Diversity, constructive conflict resolution, and balanced autonomy support successful collaborations (Gardner, 2005). Building a positive emotional climate that fosters collaboration and endorses differences supports collaboration success (Schruijer, 2020). The design of collaborative structures for decision-making, communications, monitoring and reporting, partner engagement, and collective action was also found to influence the success of collaborative, sustainable development efforts (Clarke, 2011; Wong et al., 2020).

2.4.3 Intergenerational Collaboration in the Organizational and Social Contexts

Existing literature on intergenerational collaboration is diverse, mostly studies detail intergenerational collaboration from the organizational and social contexts. Studies of intergenerational collaboration in an organizational context involve intergenerational collaboration among the organizations' employees and span across literature in business, education industry, healthcare industry, and creative industry (Litz & Kleysen, 2001; Edelman et al., 2016; Miller et al., 2003; Wolf et al., 2018). From a social standpoint, literature on intergenerational collaboration studies family, social relations, and intergenerational programs (Short-DeGraff & Diamond, 1996; Borrero, 2015; Roodin et al., 2013; Dorfman et al., 2003). Intergenerational programs are social service programs that involve different age groups coming together for purposeful exchanges (Murayama et al., 2019). Some widely discussed intergenerational programs include community service programs, shared site programs, school-based programs, programs related to long-term care, and educational programs. This section focuses on intergenerational collaboration in the organizational context and intergenerational programs from the social context.

Intergenerational collaboration involves collaboration between individuals from two or more generations (Villar, 2007). The term generation is polysemic in nature and is defined in several ways (Sánchez et al., 2008; Srinivasan, 2012). Generation is described as a group of people that can be identified by shared birth years, life events, and age location during their developmental stages (Kupperschmidt, 2000). The biological age-based approach to defining generations gets the most attention in which individuals of certain ages based on their birth

year comprise a generation (Urick, 2019). In this study, generation refers to individuals belonging to certain age groups.

The terms intergenerational and multigenerational are sometimes used interchangeably (Sánchez et al., 2008; Brownell & Resnick, 2005). However, there is a distinction between the two terms. The term intergenerational suggests the involvement of members of two or more generations in activities that increase interaction, collaboration to accomplish shared goals, a joint impact, the likelihood of change, and increased awareness of the perspectives of different generations (Villar, 2007). On the other hand, multigenerational is a broader term that implies shared interests and characteristics among generations but does not necessarily have an interaction or influence (Villar, 2007). Intergenerational emphasizes relationships more than just interaction; doing things and growing together is considered important rather than mere coexistence (Sánchez et al., 2008). Relations between generations are relations between individuals belonging to a generation; generation is thus a reference point of the individuals participating in the relationship (Sánchez et al., 2008; Gordon, 2018), and organizations can have a workforce from up to four generations (Nurhas et al., 2019; Egan, 2011; Hillman, 2014; Gordon, 2018).

Intergenerational Collaboration: Organizational Context

Intergenerational issues in the current workforce are getting a lot of attention due to the demographic shift (Wolf et al., 2018). Intergenerational concerns are an important area in diversity management and a key success factor for global organizations and start-up

innovation (Egan, 2011). Varying perspectives across generations promote innovation and creativity (Meredith & Schewe, 2003; Arsenault, 2004). Intergenerational innovation implies individuals from different age groups working together in a creative process to develop valuable ideas (Andriopoulos & Lewis, 2009). Researchers have recognized innovation through intergenerational collaboration as a key success factor for sustainable family businesses (Litz & Kleysen, 2001; Edelman et al., 2016; Miller et al., 2003). Studies on global industrial work settings have documented intergenerational collaboration as an important factor in innovation success (Wolf et al., 2018).

Intergenerational collaboration enables knowledge and skill transfer. The terms knowledge transfer and knowledge sharing are often used interchangeably. Knowledge transfer has a broader scope because it involves knowledge sharing between participants as well as the acquisition of knowledge by the receiving participant (Wang & Noe, 2010). Studies show positive impacts of intergenerational collaboration on knowledge and experience transfer between the participants (Harvey, 2012; Hillman, 2014; Nurhas et al., 2019). Organizations are paying attention to the intergenerational transfer of knowledge because they lose skills, knowledge, and experience with every employee that retires, this knowledge needs to be replaced, which requires time and investment (Harvey, 2012; De Long & Davenport, 2003; Strack et al., 2014). Organizations are considering training programs for older employees to update their skills and benefit from their experience (Strack et al., 2014). Reverse mentoring that facilitates knowledge transfer from younger employees to senior executives is considered strategically relevant in organizations (Jordan & Sorell, 2019; Flinchbaugh et al.,

2016). There is a need for more studies to appraise organizational practices that encourage knowledge transfer across generations (Harvey, 2012).

Management of a multigenerational workforce has its own challenges. Generations have different values, attitudes, and mindsets leading to generational differences (Zemke et al., 1999). Divergent expectations of work-related values between generations lead to challenges. These differences can lead to barriers in understanding the collaborators' ability (Kurniawan, 2008) and can hinder collaboration (Gordon, 2018; Egan, 2011). Such barriers and tension impact motivation levels (Binda et al., 2017) and the overall performance of the organization (Sessa et al., 2007; Carver & Candela, 2008). Negative intergenerational interactions arising out of generational differences create needless barriers in the organization (Lancaster & Stillman, 2003). The current literature on generational differences is mixed with academic and practitioner contributions (Hillman, 2014).

While there are many views on generational differences, there is a lack of empirical research for clearly understanding these differences (Arsenault, 2004). Work-value tension among generations arises from communication barriers, different viewpoints of work-life balance, and different levels of technology use (Carver & Candela, 2008). Different work ethics and life experiences lead to conflicts in the workplace (Hanks & Icenogle, 2001). Poor communication is a major area of concern in intergenerational interactions (Arsenault, 2004), and various recommendations for training and effectiveness of communication in a generationally diverse workforce are made (Hillman, 2014). Some studies have discussed the different technological backgrounds as a challenge in intergenerational collaboration (Boulton-Lewis et al., 2007; Charles & Charles, 2016; Cresci et al., 2010). Studies describe

certain operational barriers like inadequate time availability for collaboration (Binda et al., 2017; Edge, 2013), difficulties associated with virtual presence (Nedelcu, 2017), and lack of independence (Amaro et al., 2016) as deterrents in collaboration (Nurhas et al., 2019).

Traditionally, it is believed that changes in values and attitude are a function of age (Arsenault, 2004). Generational cohorts are greatly affected by the events during their coming-of-age years (Meredith & Schewe, 2003). Theoretically, generational differences in work values are supported by birth-year cohort theory (Twenge et al., 2010) and age-related life-stage values development (Deal et al., 2010). Researchers have pointed work-value differences stem out of individual differences rather than differences in generational cohorts (Deal et al., 2010).

Intergenerational Collaboration in Intergenerational Programs (IPs): Social Context

Intergenerational programs are defined in different contexts; the commonality between definitions is the participation of different generations, mutual sharing, and benefits (Sánchez et al., 2008). Intergenerational programs involve members of more than one generation in activities that enhance cooperation, interaction, exchange, and mutual sharing of skills, knowledge, and experience between young and older participants (Ventura-Merkel & Lidoff, 1983). Intergenerational programs promote activities that stimulate interaction, cooperation, and exchange between more than one generation (Kaplan and Sánchez, 2014). IG programs encourage cross-generation bonding, cultural exchange, and support system by engaging nonbiologically linked younger and older participants, which helps to maintain the wellbeing

of younger and older generations (Newman, 2014). Intergenerational programs promote ongoing interactions between youth and older generations in a coordinated manner resulting in the development of relationships and mutual benefits (McCrea et al., 2004). Intergenerational Programs can promote the creation and improvement of intergenerational relations (Sánchez et al., 2008).

Intergenerational programs have evolved over time. The first intergenerational programs were formed in the 1960s and 1970s to address the divide between generations in United States (Sánchez et al., 2008). In the 1990s, intergenerational programs evolved to focus on social problems related to cultural, social, and economic needs. They mushroomed in North America and were adopted in Canada as well as the United States. In the current phase, there is an increasing focus on community development alongside the other objectives carried forward from the previous phases. Geographically, there was development and growth of intergenerational programs in Europe (Sánchez et al., 2008). International Consortium of Intergenerational Programs was founded in the Netherlands in 1999 to promote intergenerational programs, tactics, and policy from a global standpoint (Sánchez et al., 2008; UIA, n.d.).

Successful intergenerational programs are supported by organizations and local communities, provide opportunities to develop relationships, participants get chances to work together, and programs can adjust to respond to participatory challenges (MacCallum et al., 2010). The intergenerational programs must be well managed, involve the collaboration of different local organizations, and must respond to local needs. Other elements include evaluation of the program, preparation of participants, adequate funding, well-defined roles of participants,

and opportunities to create and develop relationships between participants (Sánchez et al., 2008).

Research in the past has recognized the positive effects of intergenerational work in terms of social implications and positive experiences (Darrow et al., 1994; Bowers, 1999; Conway & Hodgman, 2008). Intergenerational programs improve relations between individuals from different generations (Canedo-García et al., 2017). Intergenerational projects lead to a better understanding of other generations leading to an increased willingness to cooperate (Canedo-García et al., 2017; Sánchez et al., 2008). Younger participants gain a better understanding and develop positive behavior towards the older participants when they work together on intergenerational projects (Peacock & Talley, 1984; Pope et al., 1987; Strom, 1988; Dellmann-Jenkins et al., 1991). On the other hand, research also records similar benefits for older generations. Elderly participants exhibit higher levels of social interactions and positive social behaviors when they are a part of intergenerational programs (Short-DeGraff & Diamond, 1996). Intergenerational programs give older adults a better understanding of younger people, increased familiarity, and social interactions (Borrero, 2015; Roodin et al., 2013; Dorfman et al., 2003). IGs support continued learning among older adults (Roodin et al., 2013; Borrero, 2015; Thompson & Weaver, 2015). Older adults identified the development of new perspectives, social and communication skills (Hegeman et al., 2003).

2.5 Gaps in Literature

There is an extensive and diverse body of literature in the field of sustainable development (Bebbington, 2001; Michelson et al., 2016; Redclift, 2005) and collaboration (Reilly, 2001; Thomson et al., 2009). However, the research with a specific focus on sustainable development goals is relatively new and limited (Bali Swain & Yang-Wallentin, 2019; Bautista-Puig et al., 2021; Sachs et al., 2021; Nicolai et al., 2015), and therefore studies on the collaboration between youth and adult staff members in local organizations working together on projects that aim to make a positive impact on achieving sustainable development goals is lacking. Multiple stakeholder collaboration is identified as an important element for the success of sustainable development goals (Abraham & Iyer, 2020; Wysokinska, 2017; ESDC, 2019; Gusmão Caiado et al., 2018). The development of studies in this direction is important to understand the benefits and struggles associated with such collaborations in the implementation of SDGs.

Sustainable development goals aim to solve complex social, environmental, and economic issues related to sustainable development (Bali Swain & Yang-Wallentin, 2019; Weber et al., 2021; Vasseur et al., 2017; Gusmão Caiado et al., 2018). A collaboration involving diverse stakeholders is seen as an opportunity to tackle critical problems through the integration of new perspectives and knowledge (Chrislip & Larson, 1994; Feast, 2012; Clarke & Crane, 2018). Collaboration is a widely studied topic across various disciplines and conditions in both academic as well as practitioner literature. However, it lacks consistency across fields (Thomson et al., 2009) because the factors impacting collaboration, the collaboration setting,

and planned results are different (Huxham & Vangen, 2005; Thomson et al., 2009). As such, specific literature on collaboration between youth and local organizations working on sustainable development projects in Canada is lacking; this study explores collaboration specifically in this context.

Individuals constitute organizations and function on behalf of their organization and engaging in collaborative relationships with other participants (Schruijer, 2020). In this study, youth participants represent the host youth-serving partner organizations of the Canadian Service Corps, and adult managers represent the local organizations. As such, this collaboration involved individuals from at least two generations. Existing literature mostly focuses on intergenerational collaboration among employees that are internal stakeholders of organizations (Litz & Kleysen, 2001; Edelman et al., 2016; Miller et al., 2003; Wolf et al., 2018). Youth's role as external stakeholders is different from that of employees in an organization due to different bureaucratic commitments. Therefore, the insights from this study can contribute to the intergenerational collaboration literature by focusing on the collaborative relationships between parties across organizational boundaries.

CHAPTER 3: METHODS

3.1. Introduction to Methodology

This chapter explains the research methodology employed for the study. The research is exploratory in nature and utilizes an inductive approach. To understand the attributes, positive elements, and challenges of collaboration between youth participants and organizations in sustainable development projects, a qualitative study with key informant interviews (KIIs), a semi-structured interview method, was established as the most fitting approach. The study further applied qualitative analysis of secondary survey data from the same organizations to triangulate and confirm results.

The chapter incorporates a description of the research design, the criteria for key informant sample selection, and the data collection and analysis. It further extends into a discussion on the limitations, control, reliability, and validity of the study.

3.2 Research Design

The method of inquiry employed for exploring the impact of collaboration between youth participants and organizations working on the organization's sustainable development projects utilizes a qualitative approach. The area of research involving collaboration between youth and local organizations on projects contributing to the implementation of sustainable development goals is relatively new. Exploratory research is useful to gain a better understanding of new and less investigated areas where the research questions may not be

clearly defined (Agee, 2009; Brown, 2006). The aim is to research the topic with varying levels of depth as opposed to providing conclusive evidence (Singh, 2007). Qualitative research clarifies the nature, strengths, and interactions of variables (Black, 1994) and provides deeper insights (Chalhoub-Deville & Deville, 2008). Thus, a qualitative approach is suited to explore the collaboration between young participants and organizations working on sustainable development projects.

Within the qualitative framework, key informant interviews (KII) are a qualitative research design. Based on the methodological differences between KIIs and other research methods, KIIs are considered more valuable for this study (Lokot, 2021). This method is highly suitable for collecting qualitative and quantitative data that are not easy to gather through structured data gathering techniques (Tremblay, 2003). Key informants are recruited by selectively sampling individuals with specialized knowledge on the subject under inquiry (Poggie 1972; Tremblay, 2003; Jones Taylor & Blake, 2014). The interview builds on the informant's expression and recollection of facts and experiences (Tremblay, 2003).

Interview questions were designed to capture a range of descriptive responses as opposed to objective yes or no answers. The semi-structured interview method allowed the key informants to articulate their own opinions and obtain explanations if they experienced ambiguity in the question itself. Thus, the semi-structured interviews provided data that was rich in context and allowed for an in-depth analysis based on patterns and regularities in the responses of the key informants.

3.3 Research Partnership

This research is conducted as a part of the Youth and Innovation Project at the University of Waterloo in partnership with three host organizations- Ocean Wise Conservation Association, Canadian Wildlife Federation, and YMCA. The aim of the larger study is to explore the impact of collaboration between youth participants and local organizations on sustainable development projects facilitated by the organizations. These local organizations are secondary organizations associated with one of the three research partners, and they offer placement to youth participants from programs led by one of the three research partners. During the placement, youth participants take part in sustainable development projects in secondary organizations. Key informants for this study are the supervisors and project managers from these secondary organizations; they have the knowledge because they were directly a part of the collaboration with youth participants on the organization's sustainable development projects.

Ocean Wise Conservation Association is a conservation organization that concentrates on safeguarding and restoring oceans by facilitating communities to act through research, education, direct-action conservation, and field projects (Ocean Wise, n.d.). Youth participants from three programs- Ocean Wise Cohort 2 2020, Ocean Wise Direct Action 2020, and Ocean Wise Learning Journey 2021 were placed in secondary organizations to collaborate on the organization's sustainable development projects. Ocean Wise programs listed above connect Canadian youth and young professionals with experts in marine and aquatic conservation organizations (Ocean Wise, n.d.).

The Canadian Wildlife Federation works with multiple stakeholders to stimulate collaboration in achieving wildlife conservation (Canadian Wildlife Federation, n.d.). Youth participants from the Canadian Conservation Corps (CCC) were placed in secondary organizations to collaborate on the organization's sustainable development projects. Canadian Conservation Corps (CCC) is a program for impact in conservation that inducts youth of ages 18 to 30 in a wilderness journey followed by a field placement with national leaders in conservation (Canadian Wildlife Federation, n.d.).

The YMCA in Canada is a charitable organization committed to the development of people and their sense of responsibility to the community. Local YMCAs are driven to address the unique needs of their communities (YMCA, n.d.). YMCA Community Action Network is a national program that supports youth with identifying and executing opportunities with a local service project (YMCA, n.d.). Youth participants from the program were placed with local organizations to deliver service projects that are meaningful to them.

3.4 Key Informant Selection

Key informants for semi-structured interviews were selectively sampled from the secondary local organizations that inducted youth participants from youth service programs of host organizations. The youth participants and local organizations collaborated on sustainable development projects. Key informants for interviews were identified based on their survey responses submitted to the Youth and Innovation Project at the University of Waterloo. Table 5 lists the key criteria for the identification of key informant interviews.

Table 5. Criteria for Key Informant Interview Identification

Key Informant Interview Criteria
1. The interviewee must be willing to participate interview.
2. The interviewee should have participated in a project with youth participants that aimed to have a positive impact on sustainable development goal(s).
3. The interviewee must be one of the supervisors/managers on the sustainable development project involving collaboration with youth participants.
4. The interview must be conducted in English.

Key informant interviewees were identified based on the criteria outlined in table 5. For Criteria 1, interviewees' willingness to participate in the interview was determined based on their response to a question on the Youth and Innovation project survey inquiring if they would be willing to participate in a follow-up interview. For Criteria 2, it was important to ensure that the collaborative projects between youth participants and organizations contributed to sustainable development. This was determined from the interviewee responses to questions on the survey investigating the nature of the project and the sustainable development goal(s) that the project had a positive impact on. For Criteria 3, close attention was paid to the interviewee roles in their organization and on the collaborative project. Considering the inclusion of Key Informant Interviews (KIIs) as a method of data collection, it was important to establish the expertise and specialized knowledge of the interviewees. Interviewees were selected based on their direct involvement in collaboration with youth participants on sustainable development projects. The interviewee roles in the project were that of supervisors and project managers. Finally, for Criteria 4, it was ensured that the

interviewees were willing and able to participate in the interview in the English language since the researcher is limited to conducting the study in English.

Apart from the above-mentioned criteria, diversity in the interviewee sample was given special attention. It was ensured that there is significant diversity in the type of organizations represented by the key informants. Table 6 lists the criteria for ensuring diversity in the key informant interview sample.

Table 6. Criteria for Diversity in Key Informant Interview Sample

Key Informant Interview Sample Criteria
1. The sample should comprise of key informants from organizations operating in various parts of Canada.
2. The sample should comprise key informants from diverse types of organizations.
3. The sample should comprise of key informants from organizations working with different host organizations and programs.

It is argued that representation of diversity is essential for qualitative research given the small samples (Allmark, 2004). Diversity in the sample was ensured by identifying key informants from organizations that represent differences based on region, type of organization, and affiliation with host organization programs. For Criteria 1, key informants from organizations in various parts of Canada were identified from the survey responses in the organization information section. Table 7 represents regional diversity in the key informant sample. For Criteria 2, close attention was paid to organizational differences based on type and size represented by the number of employees and annual budgets. Figure 2 demonstrates diversity in the types of organizations represented by key informants; it also demonstrates the diversity

in size of organizations based on the number of employees and annual budgets. For Criteria 3, key informants associated with three different host organizations and working on different programs were selected. Figure 3 demonstrates diversity based on the host organization programs. In total, 16 key informants were selected.

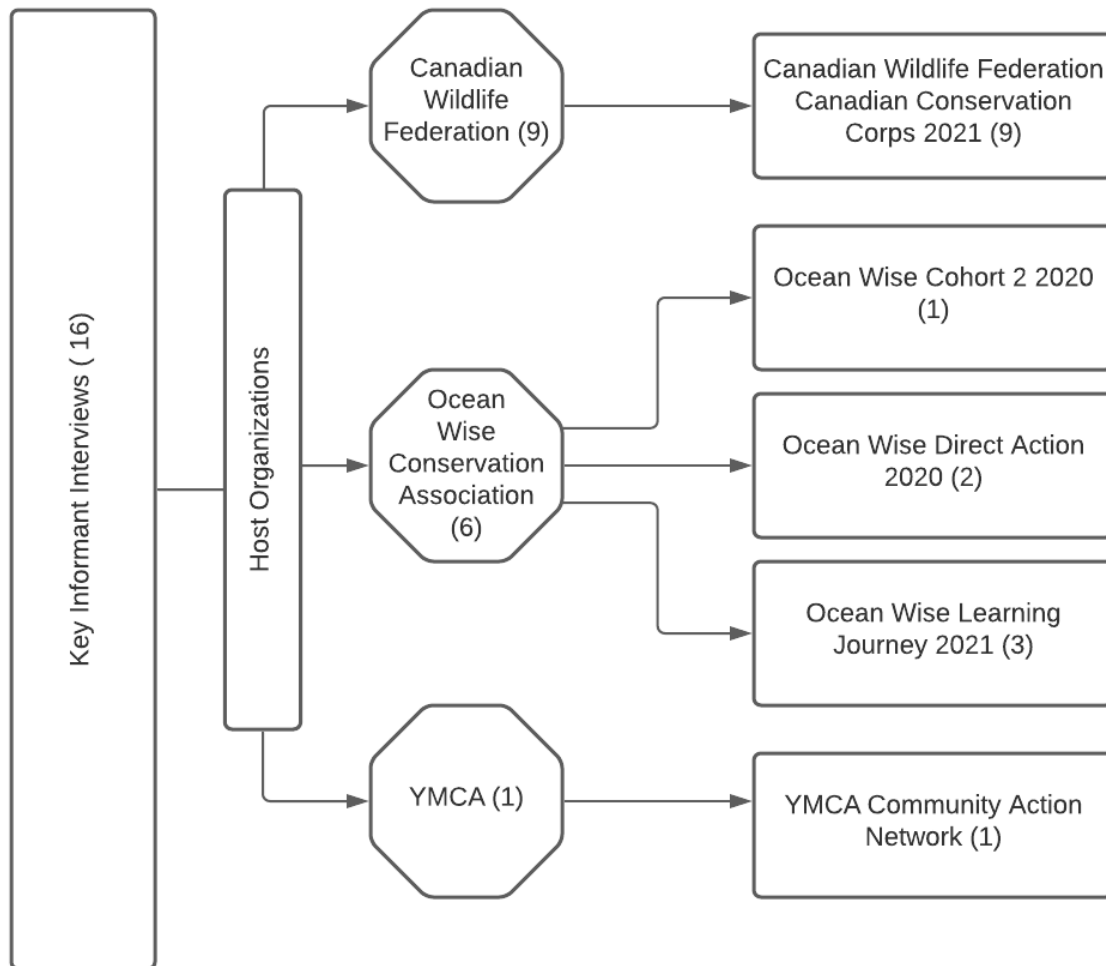
Table 7. Regional Diversity in the Key Informant Interview Sample

Region	Number of Key Informants
Alberta	1
Atlantic Canada	2
British Columbia	3
New Brunswick	1
Nova Scotia	1
Ontario	6
Quebec	2

Figure 2 . Types of Organizations Represented by Key Informants

Type of Participating Organizations			Number of Employees in Participating Organizations			Annual Budget of Participating Organizations				
Non-Profit or Charity	For Profit	Government	0-2	3-5	10 or more	Less than 100,000	100,000 to less than 500,000	500,000 to less than 1,000,000	1,000,000 to less than 5,000,000	More than 5,000,000
12	3	1	5	3	8	3	5	1	3	4

Figure 3. Key Informant Interviews Categorized by the Host Organization Programs



3.5 Data Collection

Semi-structured interviews, using the KII method, were the source of qualitative data collection. These interviews were conducted virtually over Zoom meetings which is an HD video and audio collaboration platform. Participants joined from a location of their preference where they felt comfortable talking easily about the subject. The duration of the

interviews was 45 minutes. Each interview's video and audio were recorded for transcription purposes. Semi-structured interviews gave participants the pliability to elaborate based on their experience and yet provided a decent structure. Semi-structured interviews give the researcher the flexibility to probe and ask additional questions as a rejoinder to significant answers (Bryman & Bell, 2019). The list of questions was standardized for all participants; however, the researcher could ask follow-up questions for further clarification.

The process of data collection took place over three months, between May 2021 and July 2021. A total of 16 key informant interviews were conducted with managers and supervisors from local organizations that offered placement to youth participants for collaboration on the organization's sustainable development projects. The questions were standard and mostly open-ended except for few questions that captured details about the interviewee and organization. For instance, the name of the interviewee, the name of the organization, and the duration of the project are close-ended questions from the interview. An open-ended question example from the interview is "What impact did the project have on your organization?". Interview questions were framed in simple and understandable language. Interview questions were organized into four main parts- 1) Interviewee and Organization Details, 2) Details about the Project, 3) Impact of the Project, 4) Collaboration between Youth participants and adults from local organizations.

Figure 4. Data Collection Process

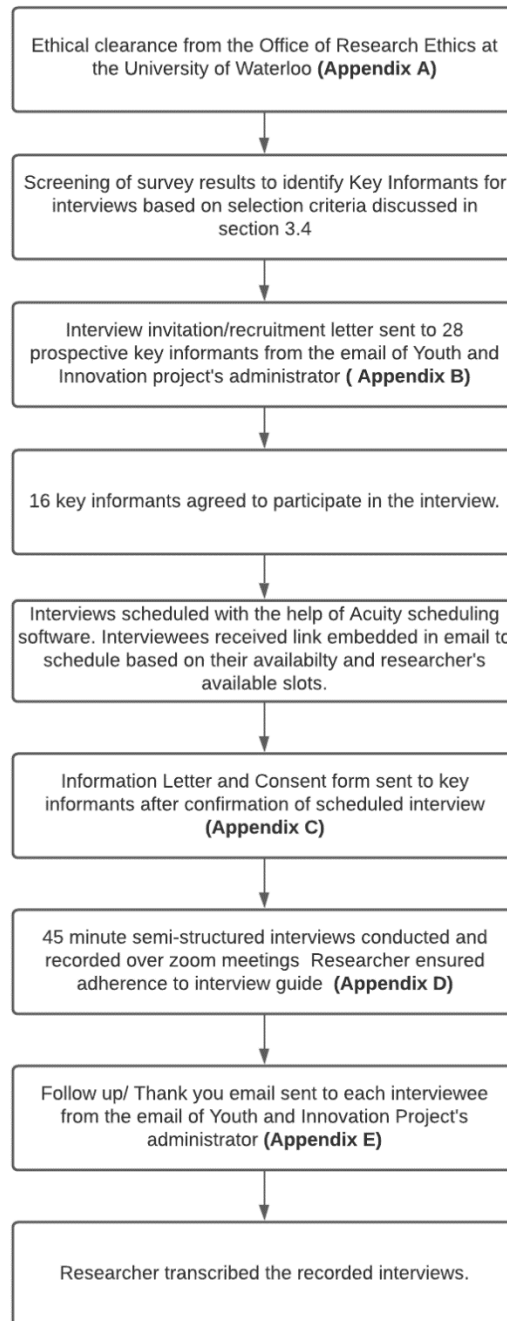


Figure 4 illustrates the data collection process. The data collection process started with getting ethical clearance from the Office of Research Ethics at the University of Waterloo (Appendix A). Survey results were screened to identify key informants for interviews based on selection criteria discussed in section 3.4. Twenty-eight prospective key informants were identified; they were sent invitation/recruitment letters from the email of the Youth and Innovation project's administrator (Appendix B). Sixteen out of the 28 prospective informants agreed to participate in the interview. The interviews were scheduled using Acuity scheduling software; a link embedded in the email was sent to the interviewees to schedule an interview appointment based on their availability and the researcher's available slots. Information letter and consent form was sent to key informants after confirmation of scheduled interview (Appendix C). Sixteen semi-structured interviews were conducted and recorded over zoom meetings; each interview lasted approximately 45 minutes. Research ensured adherence to the interview guide during the interviews (Appendix D). A follow-up email was sent to each interview from the email of the Youth and Innovation project's administrator, thanking them for their participation and sharing details about the project (Appendix E).

3.6 Data Analysis

Data transcription was followed by data analysis. The researcher transcribed the recorded interviews and documented them on word documents. Thematic saturation in data was achieved after 13 interviews; no new information or themes appeared beyond this point.

Thematic saturation is attained when additional analysis uncovers no new themes (Green and Thorogood, 2004). Scholars argue that the concept of saturation is the most critical factor in sample size decisions in qualitative research (Mason, 2010; Weller et al., 2018).

The transcribed interviews were coded for analysis and interpretation and later verified. The process of transcription allowed for a better understanding of the interviews; coding started after transcription for all interviews was complete. Thorough reading and examining of the transcript allow for the development of major themes (Thomas, 2006). Denaturalized transcription was adopted as the level of detail in transcriptions. The denaturalized approach focuses on the precision of the meanings created during the interview conversation rather than depicting accents or involuntary vocalization (Oliver et al., 2005). Following transcription, NVIVO software was used for coding, and the coding process was completed in three stages. The first stage of coding was inductive, and the focus was concept formation and typology. Research concepts in the qualitative analysis are not pre-formed but are rather emergent as they evolve during analysis (Bulmer, 1984). Concept formation in qualitative research brings the underlying concepts to the forefront; these are accurately characterized along with defining their proposed use in the study (6 & Bellamy, 2012). In the second stage, emergent data was systematically organized and categorized into themes. The third stage was the second round of coding; the transcripts were coded for a second time based on the salient themes that frequently ensued during the second stage. Salient elements in qualitative research are more important and have a higher prevalence (Weller et al., 2018). During this stage, some relationships between variables were also recognized. A grounded theory approach was adopted for data analysis from inductive data. The grounded theory involves

constant interaction with data to find emerging ideas or themes rather than using a defined theoretical framework (Smith, 2015; Mills et al., 2015).

Coding was followed by quantitative analysis, descriptive statistics using frequency count, and representation of emergent themes were applied. The coding data was rich with a high frequency of theme occurrence, and this two-way approach of analyzing representative quotations for themes and recording the frequency of the occurrence of themes was beneficial in interpreting the data.

3.7 Reliability and Validity

Reliability refers to the possibility of getting the same results when the research is repeated by different researchers or the same researcher in a different time and setting (Silverman, 2006). To ensure reliability, the research procedure, including the data collection and analysis process, is documented in detail. A database of transcripts and coding is maintained. The research process is presented transparently so that the steps can be understood and reproduced. The research report presents concrete observations as opposed to generalized summaries. Detailed documentation of research allows for repeatability.

The semi-structured interview method mixes structured questions with some unstructured unearthing (Wilson, 2014). Semi-structured interviews with standard questions were used for data collection; the researcher could probe and ask follow-up questions. Standardization of questions increases the reliability of interviews and research (Conway et al., 1995).

Triangulation is considered a qualitative research strategy in which different sources are examined for convergence of information to assess validity (Carter et al., 2014). Interview transcripts and survey results were compared by the researcher for converging themes. Utilizing a second source of data or a second method can generate more precise, thorough, and unbiased results (Silverman, 2006).

3.8 Limitations

Firstly, small sample size is a limitation in a qualitative study; the researcher must be careful in generalizing the results. However, the KII semi-structured interviews were effective in obtaining detailed information from interviewees. The method involving interviews was time-consuming in nature, but the open-ended questions were very useful in extracting comprehensive responses from interviewees based on their specialized knowledge. The researcher was able to gain deep and valuable insights based on the experience of 16 managers/supervisors from local organizations working directly on collaborative projects with youth participants. Acquiring more data by increasing the sample size does not essentially lead to more information. Thematic saturation was achieved, no new themes were discovered after coding thirteen interview transcripts. Thematic saturation is reached when further analysis discovers no new themes (Green and Thorogood, 2004). The concept of saturation is generally argued as the most critical factor on sample size decisions in qualitative research (Mason, 2010; Weller et al., 2018).

Secondly, bias in the selective selection of key informants is a limitation. Data was collected from key informants that belong to local organizations working with the three research

partnering organizations- Ocean Wise Conservation Association, Canadian Wildlife Federation, and YMCA. However, this bias is controlled since key informants represent affiliation to three host organizations and, in some cases, different programs facilitated by the host organizations. This creates an opportunity for cross-referencing to establish reliability.

Thirdly, less structured data collection methods have a risk of researcher bias. The researcher was cautious and tried to avoid research bias, though it is impossible to eliminate it. The researcher is confident about the validity of the findings and acknowledges that this method of data collection has more scope for interpretation.

CHAPTER 4: RESULTS

4.1 Introduction to Results

This chapter explains the results from qualitative and quantitative analysis of primary as well as secondary data. The presentation of the results from qualitative and quantitative analysis addresses the four research questions of this exploratory study-

1. What are the attributes of collaboration between youth participants and adults from local organizations working on sustainable development projects?
2. What are the positive elements of the collaboration between youth participants and adults from local organizations from the organizations' perspective?
3. What are the challenges associated with the collaboration between youth participants and adults from local organizations from the organizations' perspective?
4. What are the organizations' perceived success factors for collaboration with youth on sustainable development projects?

Apart from the findings addressing the four research questions, some relationship themes emerged during the analysis. A discussion on the emergent relationship themes expands in section 4.6, following the research findings of the key research questions. The data was rich and required qualitative as well as quantitative analysis leading to a two-fold analysis approach. Qualitative data from coding shown in tables describe the emergent themes and sub-themes supported by representative quotations from the interviews and surveys. Representative quotations include one quotation for each subtheme. Quantitative analysis

is descriptive and assesses overall trends in the results presented as frequency counts alongside a qualitative analysis in the related sections.

4.2 Attributes of Collaboration

While most organizations and youth collaborated over projects that contribute to sustainable development, there is diversity in their programming. This section summarizes findings concerning the attributes of collaboration between youth participants from youth service programs of the host organization and adult organization staff of partnering secondary organizations. Key emergent themes and trends within this section are characterized based on the type of projects carried out, duration, and modality of collaboration on the project. The first section describes the areas of work on which youth participants and organizations collaborated. A wide variety in work areas comprised of youth participation in fieldwork and office work is recognized. Table 8 summarizes the types of projects on which youth participants and organizational staff collaborated during placement.

Table 8. Summary of Key Project Areas Involving Youth Participation in Facilitating Organizations

Key Project Areas	<i>Representative Quotations from Interviews</i>
Research, Data Collection & Analysis	<i>“So, in terms of this year and last year, when they were, students were part of the project, or youth were part of the project, it was compiling those main data sets. Nationally doing QA QC on that, and having like a, a network for those to sit on.”</i>
Education Programming	<i>“The students worked primarily on, which is a project that brings STEM-based environmental education to the classroom. The program is a six-week program that runs in various schools and grade level wise; we will work from grades two up through grade eight.”</i>

External Stakeholder Engagement	<i>“And so, she helped in the context of. We speak, communicate with all of our reporters and build, build a relationship with them to help continue that engagement with citizen science. So, she played a role in assisting with that project as well.”</i>
Facilitating a Public Event	<i>“And the fact that our participants were able to work with these groups to plan this incredibly successful beach cleanup was really great to see, and just that positive relationship building and being able to coordinate between these different groups, and then to get everyone out, get everything set up for the beach cleanup, to speak to these adults and train them on beach cleanup safety and, you know, keep everyone organized, that was a huge feat for our participants to undertake.”</i>
Conservation and Ecological Restoration	<i>“So, kind of creating some ecological restoration, in that sense which contributed to the main overall goal of kind of ecological restoration and water system restoration, kind of in line with the project.”</i>
Communication Strategy	<i>“...and they did a lot of communications type work with me, so they learned how to manage an organization social media account. They learned how to communicate science to the public, they, our... newsletter articles and presentation skills with me as well. So, one of our participants was actually able to take the lead on a public webinar on species at risk. And we had them deliver a final presentation to our staff at the end of their placement.”</i>

As summarized in Table 8, six emergent themes describe the areas of collaborative work between youth participants and organizational staff. Research projects involved tasks like data collection, analysis, interpretation, and management. Education programming implies the involvement of youth participants in developing and delivering educational and awareness programs. External stakeholder engagement represents communication and coordination with the organization’s external stakeholders and partners. Facilitating public events represents the involvement of youth participants in planning, organizing, coordinating, and facilitating civic engagement events. Conservation and restoration projects involved the

protection and care of ecological systems. As part of the communication strategy, youth participants engaged in creating campaigns and propagating awareness about sustainable development issues and the organization's initiatives and work in the area.

However, it is important to note that youth participants were involved in multiple projects in some cases. They worked on a primary project alongside contributing to other projects or areas of the organization's work. The following representative quotation establishes the involvement of youth participants in multiple areas-

“The two participants worked on education programming, outdoor education programming. Uh, another component of it was to understand wildlife in the area and to set up wildlife cameras to capture the images of the wildlife and to track and document where they might be found on the property. Another aspect of their work was weed identification and control using physical means on the conservation area.”

The above quotation establishes the involvement of youth participants in more than one area within the organization during their placement. In this case, they contributed to three areas from the key themes- educational programming, data collection, and conservation. There are multiple quotations in interviews that support this convergence of key collaborative work areas.

While being involved in the work areas discussed above, the youth participants and adult staff from local organizations collaborated through a variety of interactions, including day-to-day operations, fieldwork, problem-solving, idea sharing, project planning, routine meetings, ongoing communication, mentorship, and social activities. The following representative

quotations describe the collaborative interactions between youth and adult organizational staff.

“...having casual discussions on how to resolve issues, like within data. Using a new, like program or something like that, just kind of guidance and collaboration that way on how to handle a certain situation and move past that conversation”.

“The other people I mentioned in our youth department are all adults they would have participated with them and then under their direction for each of their components of their projects when they were working on this project, but they are assisting with a couple other ongoing work to give them some variety of work and variety of knowledge, they interacted with them.”

“And then we also engaged in terms of fieldwork, so she was out on the water with us as well. We have a small research vessel. So, she was able to assist in that capacity.”

It is worth noting that all the interviewees confirmed that the projects aimed to have a positive impact on sustainable development goals. While they indicated a positive impact on some primary sustainable development goals, they identified some secondary goals as well that would benefit from the project. The following representative quotation is an example of the interviewees indicating the sustainable development goals that the project would have a positive impact on.

“So, climate action for sure. Probably affordable clean energy was another one that was hit on quite a bit. Life below water because there was a few ocean deep ones too, think would be most likely it.”

The second category of findings related to collaboration attributes between youth participants and organizations is the modality of their placement. Table 9 summarizes the representative quotations from interviews categorized into three modalities of youth participation during placement- remote, in person, and mixed. Remote projects offered the flexibility of working from outside the organization's office and fieldwork locations. In-person projects required participants to be physically present at the project site, whether office or field. Mixed projects incorporate both remote and in-person work arrangements to accommodate project requirements and the impact of external factors. Table 10 encapsulates the frequency count of the three modes of participation.

Table 9. Modality of Youth Participation in Projects Facilitated by Organizations

Mode of Engagement	Representative Quotations from Interviews
Remote	<i>"Sadly, it was entirely remote. placements are supposed to be in person, but was working entirely in the office for the time that the placement took place, so yes, it was, it was remote. "</i>
In-person	<i>" She works locally so; she was here, physically."</i>
Mixed	<i>"It was a mix, so he was working at home for the most part, but we did do some fieldwork where he accompanied to do some video work and photography work as well. "</i>

From the frequency of modes of participation depicted in table 10, it is clear that 37.5 % of the organizations facilitated youth participants in-person while 62.5 % of the organizations opted for either remote or mixed modes

Table 10. Frequency Count of the Mode of Youth Participation in Projects Facilitated by Organizations

Modality	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total in each category	% Of Total
Remote										x		x					2	12.50%
In-person	x	x	x				x		x		x						6	37.50%
Mixed				x	x	x		x					x	x	x	x	8	50%

It is important to note that this might not be aligned with their plan for the project and may be an adaptation to COVID disruptions and restrictions. Some quotations point towards the impact of COVID on the mode of project facilitation-

" It began in person. Of course, like we have stations for students to work at, and then we can collaborate easily that way, but then given the climate of this past year and a half, everything's become remote."

The modality frequency captured in Table 10. might be skewed on account of COVID disruptions, as is evident from the above representative quotation and some other quotations that discuss the mode of engagement.

The third category of attributes is the project's duration, and there are broadly three groupings- less than one month, 3- 5 months, and 6-12 months. Table 11 presents representative quotations that indicate the duration of the youth placement in the organization. Duration of placement also emerged as an important consideration in the design

and success of youth service programs, as will be further discussed in section 4.3. There is a variety of responses in terms of the duration of the project. Some organizations found the time frame ideal. Other organizations pointed out challenges associated with the time frame.

Table 11. Duration of Youth Placement in Projects Facilitated by Organizations

Duration of Engagement	Representative Quotations from Interviews
Less than one month	<i>“So, it was over two weekends, so it was the last weekend of February, Friday, Saturday, Sunday. And then it was the first weekend of March just on the Saturday thing.”</i>
3-5 months	<i>“Generally speaking, it's three, I think it's three months, three to four months of the, of the, of their internship, um, roughly, roughly, I think it's roughly 16 weeks.”</i>
6- 12 months	<i>“I'd say in the end; it would almost be a 10-month project, partially because of the pandemic.”</i>

Most of the projects took place over 3-5 months. 68.75% of the organizations fall under this group. 25% of the organizations fall in the 6-12 months groupings, and only one organization falls in the less than 1-month grouping accounting for 6.25% of the sample size. Table 12 depicts the frequency count of the three duration groupings.

Table 12. Frequency Count of the Duration of Youth Placement in Projects Facilitated by Organizations

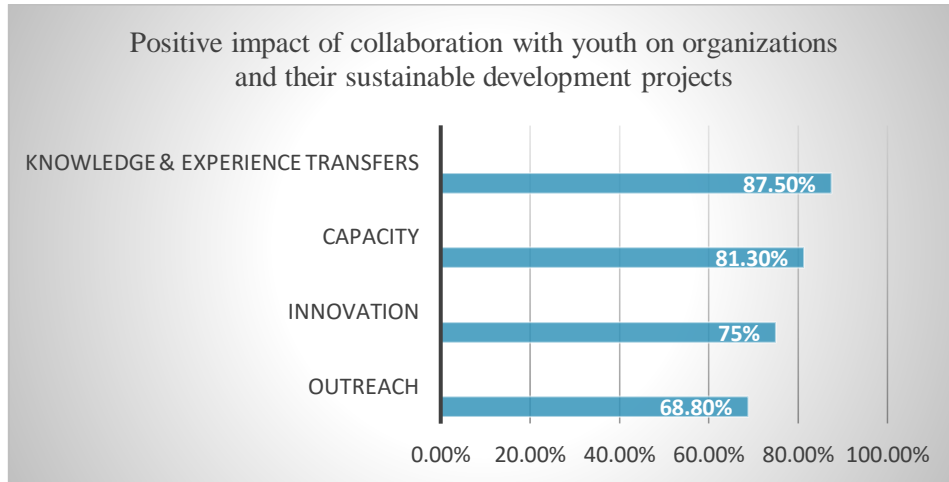
Duration	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total	% Of Total
Less than one month												x					1	6.25%
3-5 months	x	x	x	x	x	x	x	x		x	x					x	11	68.75%
6-12 months									x				x	x	x		4	25%

4.3 Positive Elements of the Collaboration Between Youth Participants and Local Organizations

From the organization's perspective, key themes that emerged as positive elements of the collaboration between youth participants and organizational staff pertain to participants' contributions to the organization and its sustainable development projects. Four key themes indicating the positive impact of youth participation in the organization's projects emerged in the interviews – 1) Knowledge and Experience Transfers, 2) Capacity, 3) Innovation, and 4) Outreach.

The occurrence of themes describing positive elements of collaboration between youth participants and organizations is significant. At least 50% of the interviewed organizations recounted all the emergent themes. 87.5% of organizations described knowledge and experience transfers as a positive impact of collaboration on the project and organization. 81.3% of organizations experienced an enhanced capacity to execute projects and overall goals. 75% of organizations recounted that youth participants brought innovation to the project and organizations. 68.8% of organizations experienced an increase in their outreach because of youth participation. Figure 5 depicts the percentage of organizations that reported positive youth contribution to the organization's project(s) and overall goals in the four key emergent theme classifications.

Figure 5. Percentage of Organizations that Reported Positive Elements of Collaboration Between Youth Participants and Organizations



The coding data in this category was very rich, and while the codes characterize as distinct codes, there may be some overlapping on account of their interrelation. Figure 6 summarizes the key emergent themes as parent codes, descriptions, and child code(s). Table 13 summarizes parent codes, child codes, and their representative quotations.

Figure 6. Parent Codes, Descriptions and Child Codes(s) Describing Positive Elements of Collaboration Between Youth Participants and Organizations

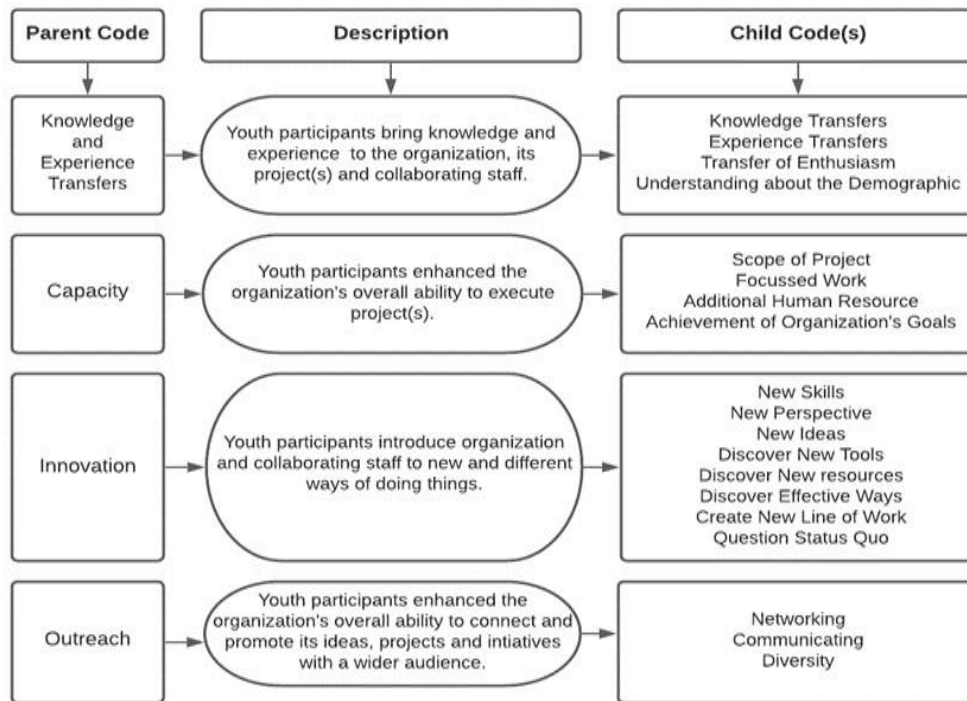


Table 13. Representative Quotations Supporting Positive Elements of Collaboration Between Youth and Organizations

Parent Code	Child Code	Representative Quotation from Interviews
Knowledge and Experience Transfers	<i>Knowledge Transfers</i>	<i>"...and she had a lot of depth and insight, and scientific knowledge that allowed us to really expand our program and working with her was such an incredible experience both for myself and my partner at We really felt like she was a, a high example of what the program could be."</i>
	<i>Experience</i>	<i>"So, a lot of these youth do come from</i>

	<i>Transfers</i>	<i>conservation backgrounds, and just, they educate me on how some of this. Like, how conservation projects, usually unfold and things like that, so I have a better idea of, of the kind of work that goes on, like, away from the desk.”</i>
	<i>Transfer of Enthusiasm</i>	<i>“Yeah, and I think it's, it also helps us leverage other projects, quite a bit in terms of how they, you know, their energy and their enthusiasm and their ideas and their. Yeah, I mean, and even just their time put in these projects has made our projects and our programming better.”</i>
	<i>Understanding of the Demographic</i>	<i>“And so, I think it's always interesting to see; you know what their goals are and where their skills are currently at, and that only helps us better understand. You should know what we should be looking for in the demographic. I mean, we hire summer students, things like that, so it's always a good eye-opener.”</i>
Capacity	<i>Enhance Scope of Project</i>	<i>“I was proud of the fact that this allowed us to improve our program and make a bigger community event, and I was really looking forward to before COVID to taking it to the next level and continue to expand it, so those are on hold until now hopefully 2022.”</i>
	<i>Contribute to Achieving Key Organizational Goals</i>	<i>“So, for us, it was an excellent outcome because we did get work that we really needed to get done. Or we are working on that now, but it was, it was given a base, a sort of a jumping-off point</i>

		<i>by the research project that our placement had done.”</i>
	<i>Focussed Progress on Key Tasks</i>	<i>“...it really just was able to bring that skill set to our team specifically, so now we kind of have our own individual who can work on that communication piece while the rest of us focus on the other aspects of the project. And that's, that's what it brought for us.”</i>
	<i>Additional Human Resource</i>	<i>“Yeah, resources. It's just a lot of work, a lot of manual work, and someone's got to do it, and we're just happy that there's youth out there that sees the value in doing it and is interested in actually contributing in that way.”</i>
Innovation	<i>New Skills</i>	<i>“...they were younger, so they were more familiar with computer technology and the programming involved, so they brought a skill set that we did not have, and I think that's why video montage that they did of the wildlife was so well received because we had never ever done anything like that before internally.”</i>
	<i>New Perspectives</i>	<i>“We’ve done some age shifting over the years, but I think that anytime you can get the younger participants involved, they’re going to bring a new perspective to the project into the organization that we don’t have.”</i>
	<i>New Ideas</i>	<i>“I am always impressed with youth and their ideas around different issues because I find the,</i>

		<i>the world is their oyster so they have these what we would sometimes see as crazy ideas, and they run with them, and then you realize that like they're not as impossible as like our adult brains initially think, and they're super passionate about the problem. ”</i>
	<i>Discover New Tools</i>	<i>“It's community-driven, so there's a lot of what we call plugins that are like in software utilities that you can download and use that were built by other people..... So specifically, they would find ones I, I would say okay well we need to do something like this, and they will find, there's an instance where they found a couple of plugins that would help really streamline the process, ones that weren't I wasn't aware of.”</i>
	<i>Discover New Resources</i>	<i>“...so that led to several meetings that were extremely helpful and ultimately led to finding a local tidal model that had already been created for this area, which will be hugely beneficial to the project, so just that initiative, I think, mostly. ”</i>
	<i>Discover More Effective Ways of Doing Things</i>	<i>“And also, frankly, sometimes a better way of doing, especially in the online world frankly for some of us old dinosaurs who aren't weren't doing that. ”</i>
	<i>Create a New Line of Work</i>	<i>“So, he really created his own project and kind of ran with it, and I was there just to kind of oversee, make sure he had everything he needed and kind of guide him in meeting the goals of the project that would help us the most. ”</i>

	<i>Question Status Quo</i>	<i>“....and having youth come in and question some of our practices or just some of the ways that we operate is really helpful to reconnect with what's actually happening in the world, and sometimes it's, you know, they're coming from a place where they're seeing more either.”</i>
Outreach	<i>Networking</i>	<i>She coordinated it with the national leadership of And it was very innovative because she actually reached out to the authors of several climate change, climate action related titles, reached out to the authors and had them actually participate in sort of a national zoom call, where they talked about their work, and then, you know, field the questions from, from the audience.was reactive in putting that whole package together. So, networking with people, getting them involved, developing the content, and then moderating the event.”</i>
	<i>Communicating</i>	<i>“...just extending our reach into the community, having more people know about our organization and what we do that has continued, it's become a bit of a snowball effect, it's definitely continued to build. Since we've had these participants just having that extra digital presence. We are definitely able to, you know, get more attention, I guess within the community on, on these environmental issues.”</i>
	<i>Diversity</i>	<i>“And this was a group of students, were</i>

		<p><i>mostly students so it's introducing a community that hasn't been very much involved in the publishing community to the publishing community so that, like you're not going to get diversity in the publishing industry, if the different communities don't know anything about the publishing industry, and I think we kind of have to go to them."</i></p>

Table 14 shows the frequency count of emergent themes related to positive elements of collaboration between youth and local organizations. Frequency count is symbolized by binary coding, “1” signifies the occurrence of theme, and “0” signifies the absence of theme in the organization’s interview.

Table 14. Frequency Count of Parent and Child Codes Describing Positive Elements of Collaboration

Interviewee \ Codes	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
Knowledge & Experience Transfers	1	0	1	1	1	1	1	1	1	1	0	1	1	1	0	1	14(87.5%)
Knowledge Transfers	0	0	0	1	1	0	0	1	1	1	0	1	1	1	0	0	8 (50%)
Experience Transfers	0	0	0	1	1	1	1	0	0	0	0	0	1	0	0	0	5 (31.3%)
Transfer of Enthusiasm	1	0	1	0	0	0	0	1	0	1	0	1	0	0	0	1	6 (37.5%)
Understanding of the Demographic	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	3 (18.8%)
Capacity	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	13(81.3%)
Scope of Project	0	0	1	0	0	1	1	1	1	0	1	1	1	0	0	0	8 (50%)
Focussed Work	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	3 (18.8%)
Additional Human Resource	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	4 (25%)

Achievement of Organizational Goals	1	0	1	0	1	1	1	1	0	1	1	0	0	1	0	0	9 (56.3%)
Innovation	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	0	12 (75%)
New Skills	1	0	0	1	0	0	0	0	0	0	1	0	1	0	0	0	4 (33.4%)
New Perspective	1	1	0	1	0	0	0	1	1	1	1	1	0	1	0	0	9 (56.3%)
New Ideas	0	0	1	0	0	0	0	1	1	0	0	1	1	0	0	0	5 (31.3%)
Discover New Tools	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	3 (18.8%)
Discover New Resources	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1 (6.3%)
Discover Effective Ways	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2 (12.5%)
Create New Line of Work	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	2 (12.5%)
Question Status Quo	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	2 (12.5%)
Outreach	1	0	0	1	1	1	0	0	0	1	1	1	1	1	1	1	11(68.8%)
Networking	0	0	0	0	1	1	0	0	0	1	1	1	1	1	1	0	8 (50%)
Communicating	1	0	0	1	1	1	0	0	0	1	0	1	0	1	1	0	8 (50%)
Diversity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1 (6.3%)

4.4 Challenges Associated with the Collaboration Between Youth Participants and Local Organizations

Organizations experienced a broad range of challenges during the collaboration between youth participants and organizations on sustainable development projects. The range includes challenges posed by external factors, challenges associated with the youth participants, challenges associated with the organization's internal factors, and challenges associated with the planning of placements. Interviewees recounted eight key themes that represent challenges associated with youth participation in organization's projects– 1) Unplanned Disruptions, 2) Lack of Workplace Etiquette & Experience, 3) Placement Process & Duration, 4) Poor Engagement, 5) Time & Resource Drain, 6) Administrative & Operational Challenges, 7) Communication, and 8) Inclusion.

The occurrence of themes about challenges associated with collaboration between youth participants and organizations is considerable. 75% of the organizations reported unforeseen challenges, largely related to disruptions caused by the COVID pandemic. Other than that, only two organizations reported unforeseen disruptions caused by weather conditions. It is important to note this finding since it is an exceptional consequence of the pandemic. If we exclude the pandemic, challenges related to unforeseen disruptions are relatively lower. 56.3% of the organizations recounted a lack of workplace etiquette and experience among youth participants as a challenge. 50% of the organizations experienced challenges associated with the placement process and duration of placement of youth participants. 37.5% of the organizations reported poor engagement of youth participants and the organization's time & resource drain as a challenge. 31.3% of the organizations reported challenges associated with communication and administrative and logistical challenges. 12.5% of the organizations experienced challenges associated with the inclusion of youth participants. Figure 7 depicts the number of organizations that reported challenges associated with collaboration between youth participants and organizational staff on the organization's project(s) and overall goals in the eight key emergent theme classifications.

Figure 7. Number of Organizations That Reported Challenges Associated with Collaboration Between Youth Participants and Local Organizations

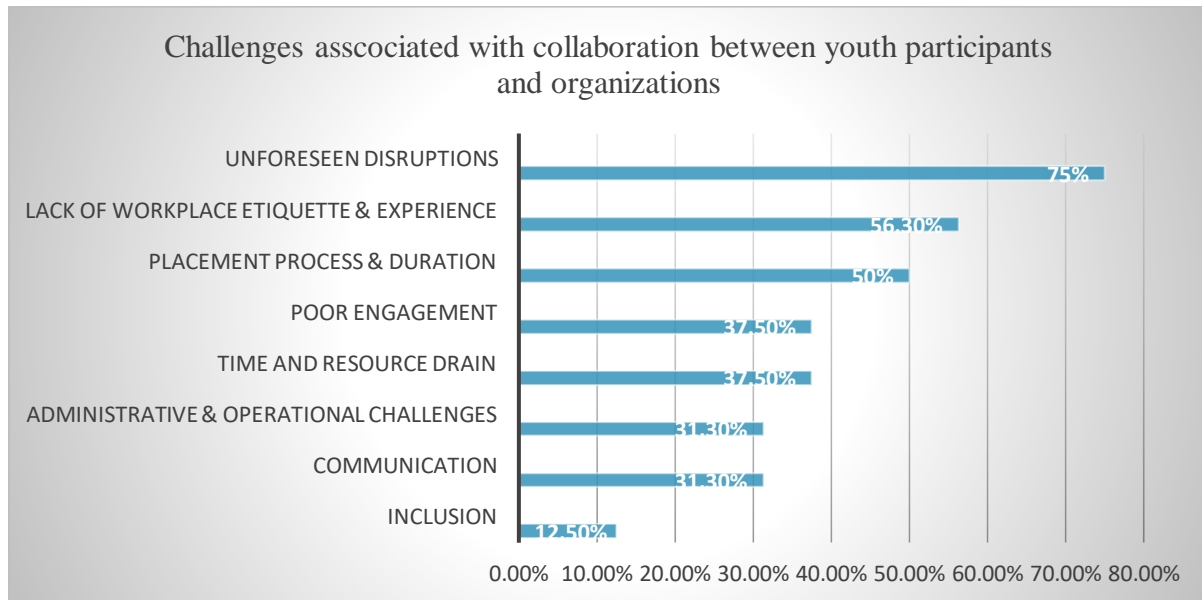


Figure 8 summarizes the key emergent themes as parent codes, descriptions, and the associated child code(s). Table 15 summarizes the representative quotations for each child code within the emergent themes related to the challenges of collaboration. Table 16 presents the detailed frequency count of the codes across the interviewed organizations.

Figure 8. Parent Codes, Descriptions and Child Codes(s) Describing Challenges Associated with Collaboration Between Youth Participants and Organizations

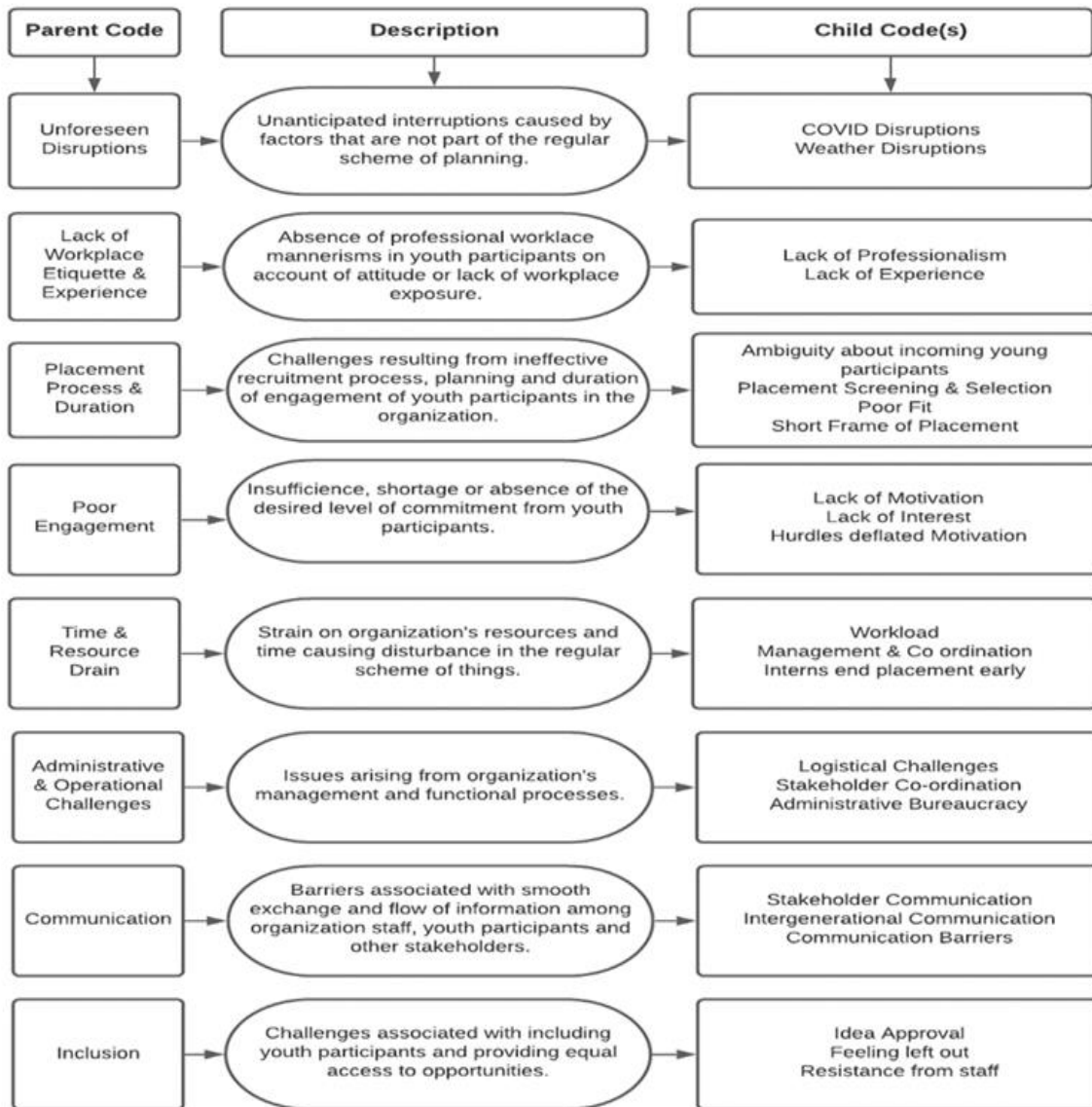


Table 15. Representative Quotations Supporting Challenges Associated with the Collaboration Between Youth and Organizations

Parent Code	Child Code	Representative Quotation from Interviews
Unforeseen Disruptions	<i>COVID Disruptions</i>	<i>“Now our second group had two hurdles, COVID hit, and they had to go home early, so that was a challenge and really restricted us from implementing new projects.”</i>
	<i>Weather Disruptions</i>	<i>“And then, of course, we were subject to weather. So, for example, we were supposed to have our planting ready, but a rainy day, kind of you know skews that, and we have to move it later.”</i>
Lack of Workplace Etiquette & Experience	<i>Lack of Professionalism</i>	<i>“And so, with the participants that we did have some performance issues with, we sat down with them, I sat down with them multiple times, just discussed things like you know, professionalism in the workplace, dress code, cell phone use in the workplace, punctuality attendance.”</i>
	<i>Lack of Experience</i>	<i>“...and other ones are very new and didn't have a ton of experience in either a work setting or were keen and open to putting themselves out there and working hard....”</i>
Placement Process & Duration	<i>Ambiguity About Incoming Youth Participants</i>	<i>“And I'm sure that might make sense on your end, but that's the biggest challenge, is managing the unknown volunteer strengths coming in.”</i>
	<i>Placement Screening & Selection</i>	<i>“So, it's probably a selection, or the way that they were assigned to the, to the work wasn't ideal because it wasn't something that they were passionate or excited about which led to, you know, problems with a lot of complaining and laziness, and so it was mutual...”</i>

	<i>Poor Fit</i>	<i>"...but for the participants, it wasn't a good match. They did not enjoy that aspect of the work at all; they would avoid it at all costs. They just weren't out outdoorsy people, which is no fault of their own, but it was what the job required, so that's why it wasn't a great match."</i>
	<i>Short Time Frame of Placement</i>	<i>"I don't think I can't think of any other challenges, other than the short time frame, of course, but I understand, internships, especially unpaid ones, can't be super long.."</i>
Poor Engagement	<i>Lack of Motivation</i>	<i>"....and we had a couple of participants who just, we had performance, like fairly serious performance issues with them, and just a low motivation and maturity level, and I don't think that has anything to do with educational background, it was all about attitude..."</i>
	<i>Lack of Interest</i>	<i>"...and others just didn't seem to really have that much interest in participating in this project, and it was a little bit frustrating knowing that this program is very highly sought after, a very competitive..."</i>
	<i>Hurdles Deflated Motivation</i>	<i>"So, I felt like they were engaged, but they also became deflated quickly when they hit those hurdles of something that they were not able to overcome initially on their own. So, it was kind of, they would run towards a project, and they would do pretty well, but then they would hit a wall and you'd have to kind of work through that together."</i>
Time & Resource Drain	<i>Workload</i>	<i>"So, it was just the challenge of the workload and getting. It's a huge project to get off the ground in the short amount of time like there were certain parameters that had to be done in, so getting it done in that time frame was amazing."</i>
	<i>Management &</i>	<i>"The challenge or where they may not have been</i>

	<i>Coordination</i>	<i>met is that I always wanted to give them more responsibility, more, more work, or more learning opportunities. But I couldn't do that if I wasn't sure that they would be able to handle it because I didn't have the time or staff to oversee the actual responsibilities that they would have been assigned."</i>
	<i>Interns End Placement Early</i>	<i>"We've had a couple interns who ended their placements early. And I guess that that is a little frustrating when that happens, because we do invest a lot of time and, but that's only happened a few times...."</i>
Administrative & Operational Challenges	<i>Logistical Challenges</i>	<i>"Um, problem well, because we got such a far breath of people, timing was a little bit of an issue because we hosted it within Atlantic and Eastern times within Canada and obviously for the people in India, that was very late or early in the morning depending on if you're a night or a morning person. And so that was a little bit."</i>
	<i>Stakeholder Coordination</i>	<i>"I think, just that we ran into some barriers with the length of time being long, turnaround time for some portions of the project, we were kind of waiting on other, external factors and other people. Like I mentioned previously, that at a time, slow things down, but it's just the reality of the nature of the work."</i>
	<i>Role Ambiguity</i>	<i>"So, I think at times there was a little bit of a back and forth between you know who's going to be responsible for what, who takes the lead on this, how much to get involved in. More from a managerial perspective, there was a little bit of uncertainty about who was responsible for what at an organizational level but nothing that the specific individuals of the project contributed to."</i>

Communication	<i>Stakeholder Communication</i>	<i>"it's just frustrations about not being able to get our sample sizes or challenges working with partners, especially early on when, you know, there was a lack of familiarity and just some, like emails that went around that were, you know, angry emails that had to be dealt with."</i>
	<i>Intergenerational Communication</i>	<i>"...so, I think there's just a challenge of some communication between older and younger generations that may have may have played out in a negative way but just as a matter of fact."</i>
	<i>Technical Communication Barriers</i>	<i>"While there can be benefits in that in having more people involved, it also creates some challenges with communication accessing emails, having internet connections when we need to have a meeting."</i>
Inclusion	<i>Ideas Not Welcome</i>	<i>"...the participants where they came up with an idea and maybe it had validity and wanted it would have made sense, but you're, you're pushing against, we've always done it this way, so we don't want to, or we don't see how that benefits that There's just a bit of push-pull with organizations, the transition."</i>
	<i>Feeling Left Out</i>	<i>"It was a bit challenging for them to maybe feel a part of the larger volunteer group or the planning committee because they weren't just willing to talk up, and maybe they were a little shy to bring up some ideas."</i>
	<i>Resistance from Staff</i>	<i>"I think, just, generally speaking, you know when it is a bit of challenge when you have different entities coming together, and you know when you have staff such as ours that do know quite a bit about some of the project aspects, it can be hard sometimes to remember to include other people in that process and kind of let go of the reins."</i>

Table 16. Frequency Count of the Parent and Child Codes Describing Challenges Associated with Collaboration

Interviewee \ Codes	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
Unplanned Disruptions	1	0	0	1	0	0	1	1	1	1	1	1	1	1	1	1	12(75%)
COVID Disruptions	1	0	0	1	0	0	0	1	1	1	1	1	1	1	1	1	11(68.8%)
Weather Disruptions	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	2 (12.5%)
Lack of Workplace Etiquette & Experience	1	1	1	0	0	1	1	1	1	0	0	1	0	0	0	1	9 (56.3%)
Lack of Professionalism	0	1	0	0	0	1	1	1	1	0	0	1	0	0	0	1	7 (43.8%)
Lack of Experience	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	3 (18.8%)
Placement Process & Duration	0	1	1	1	0	0	1	1	1	0	1	0	0	0	0	1	8 (50%)
Ambiguity About Incoming Youth Participants	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	3 (18.8%)
Placement Screening & Selection	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2 (12.5%)
Poor Fit	0	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	4 (25.0%)
Short Time Frame of Placement	0	0	1	1	0	0	0	1	0	0	1	0	0	0	0	1	5 (31.3%)
Poor Engagement	0	1	1	0	0	1	1	0	1	0	0	0	0	0	1	0	6 (37.5%)
Lack of Motivation	0	1	0	0	0	1	1	0	0	0	0	0	0	0	1	0	4 (25.0%)
Lack of Interest	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2 (12.5%)
Hurdles Deflated Motivation	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2 (12.5%)
Time & Resource Drain	0	1	1	0	0	1	0	1	1	0	0	0	0	0	0	1	6 (37.5%)
Workload	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1 (6.25%)
Management & Coordination	0	1	1	0	0	1	0	0	1	0	0	0	0	0	0	0	4 (25.0%)
Interns End Placement Early	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1 (6.25%)
Administrative & Operational Challenges	0	0	0	0	1	0	1	0	0	0	1	1	0	1	0	0	5 (31.3%)
Logistical Challenges	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	3 (18.8%)

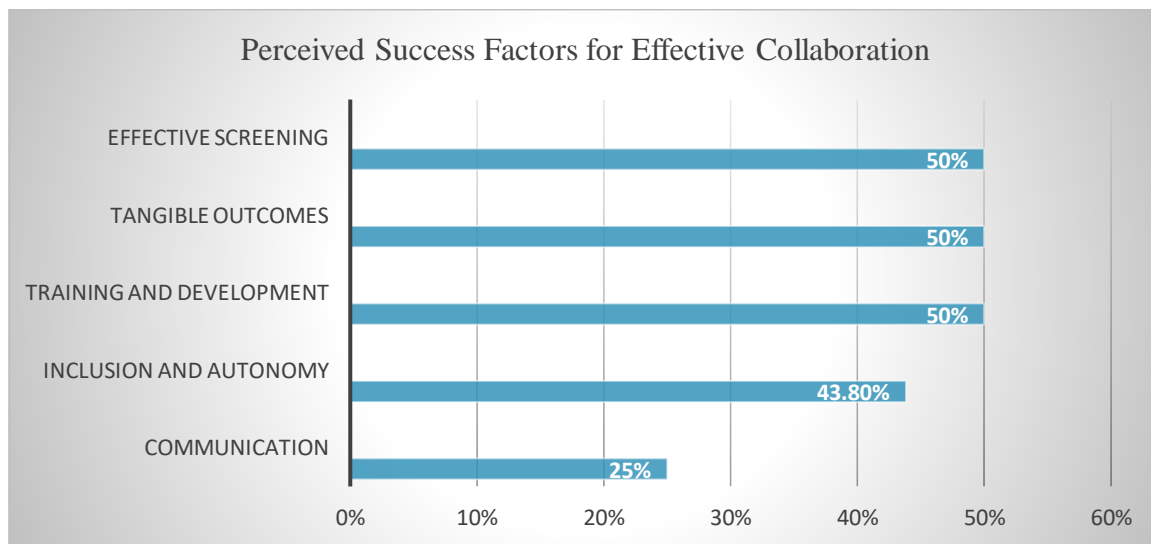
Stakeholder Coordination	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	3 (18.8%)
Role Ambiguity	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2 (12.5%)
Communication	1	0	0	0	1	1	1	0	0	0	0	0	0	1	0	0	5 (31.3%)
Stakeholder Communication	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1 (6.25%)
Intergenerational Communication	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1 (6.25%)
Technical Communication Barriers	1	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	4 (25.0%)
Inclusion	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	2 (12.5%)
Ideas Not Welcome	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	2 (12.5%)
Feeling Left Out	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1 (6.25%)
Resistance From Staff	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	2 (12.5%)

4.5 Perceived Success Factors for Effective Collaboration

This section captures interviewees' perceived factors for effective collaboration between youth participants and organizations. They are based on the organizations' experience. Interviewees consider them as key success factors for facilitating effective youth programs. Interviewees recounted five key themes that represent key success factors– 1) Effective Screening, 2) Tangible Outcomes, 3) Training & Development, 4) Inclusion and Autonomy, and 5) Effective Communication.

Figure 9 depicts the percentage of organizations that recounted the key emergent themes concerning success factors for effective youth collaboration in organizations.

Figure 9. Number of Organizations and Perceived the Success Factors



The occurrence of themes is salient. At least 50% of organizations recommended effective screening, outlining tangible outcomes, and training and development as key success factors. This is followed by inclusion and autonomy, recommended by 43.8% of the organizations. Finally, 25 % of the organizations emphasized the need for clear and consistent communication. It is noteworthy that these recommendations address some of the most frequently reported challenges discussed in section 4.4. For instance, effective screening speaks to the placement process challenges.

Figure 10 summarizes the key emergent themes as parent codes, descriptions, and the associated child code(s). Table 17 summarizes the emergent codes and their representative quotations describing perceived success factors of effective collaboration. The coding data for this section was rich, and there might be some related and converging themes though represented distinctly. Table 18 presents a detailed frequency count of the five themes and corresponding child code(s).

Figure 10. Parent Codes, Descriptions and Child Codes(s) Describing Perceived Success Factors

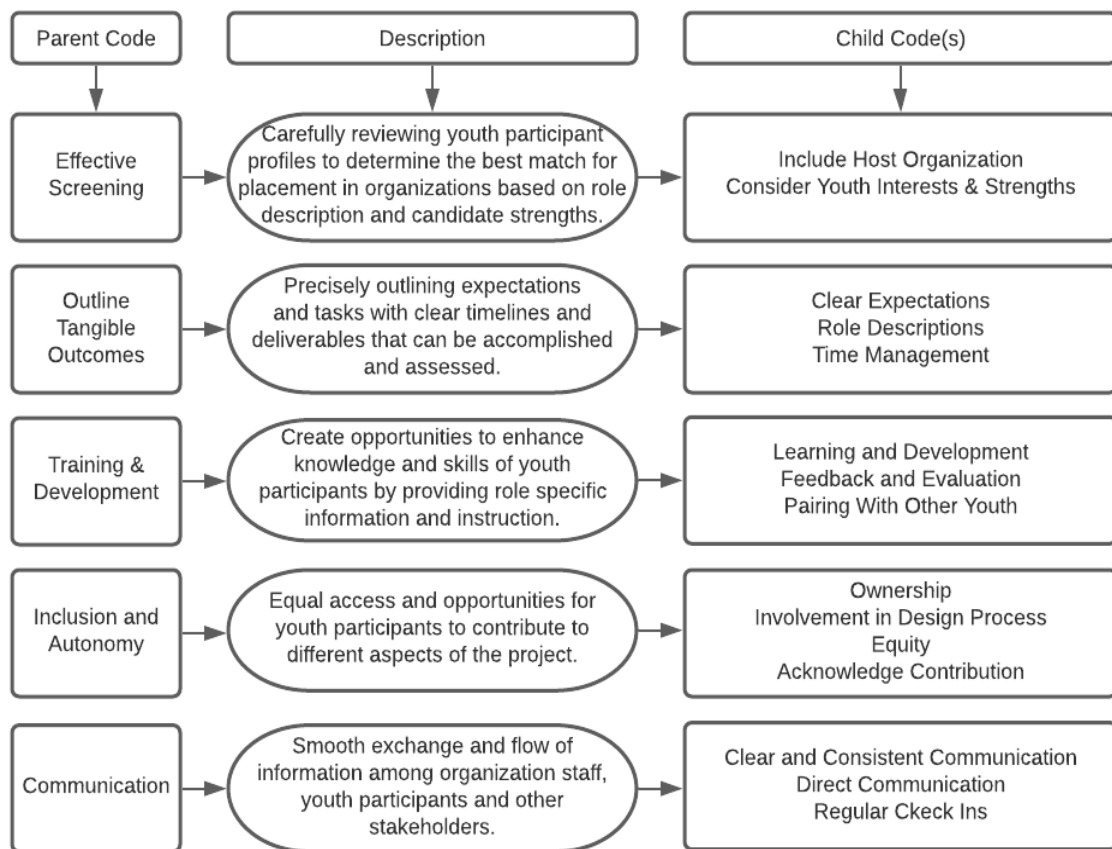


Table 17. Representative Quotations of Perceived Success Factors

Parent Code	Child Code	Representative Quotation from Interviews
Effective Screening	<i>Include Host Organization</i>	<i>"So, I would rather choose or not choose but at least be able to interview and accurately explain what the what the job really is to make sure that I'm getting people that are well fitted to it."</i>
	<i>Consider Youth Interests & Strengths</i>	<i>"...it's trying to make sure that the participants are placed on projects on which they're likely to succeed."</i>

Outline Tangible Outcomes	<i>Clear Expectations</i>	<i>"We're also trying to provide very clear expectations upfront in terms of what the students will be doing during this placement so they can choose if they want to take it or not."</i>
	<i>Role Descriptions</i>	<i>".. bringing students on or placements on with tangible projects which I think was very smart the way ..., you have to very clearly itemize what it is that you're looking for."</i>
	<i>Time Management</i>	<i>"And just thinking ahead of time critically about the time of year, the proponents, but the different stakeholders engaged, and how much time they'll be able to contribute during a three-month period is quite important."</i>
Training and Development	<i>Learning and Development</i>	<i>"...try to look at gaps in their knowledge and then how we can fill that so looking at maybe we need to add another training session, or maybe we need to have more check-in meetings with them or something like that."</i>
	<i>Feedback and Evaluation</i>	<i>"...it would be good to have some type of like feedback system, so maybe there would be an initial performance evaluation midway through the placement and then another one at the end that goes to the so that if these participants could be kind of evaluated after the placement, that might give them some motivation to work a little bit harder."</i>
	<i>Pairing With Other Youth</i>	<i>"I think one thing that's key though is if they're going to be paired up, it could be quite helpful if there's going to be someone who is younger inexperienced, you know, really out of their depth, if they partner with someone who you know was, was fairly well suited for the job."</i>
Communication	<i>Clear and Consistent Communication</i>	<i>"And communication is the other one. I mean, communication in any project for any age group is important whether that be, you know, written communication, verbal communication, having meetings, doing knowledge-sharing events, you know, just keeping everybody apprised of what's going on in the project."</i>
	<i>Direct Communication</i>	<i>"So, I think establishing more of a direct line of communication and treating it a little bit more like any other, you know, the organizational partnership would have been good."</i>
	<i>Regular Check-Ins</i>	<i>"... so having a bit more formal process for check-ins and kind of keeping the students apprised what was going on in the project would have given them more</i>

		<i>opportunity to be involved and see what that looks like.”</i>
Inclusion and Autonomy	<i>Ownership</i>	<i>“Yeah, to design a project, and to work with each other and, just have all, take responsibility for the tasks, the various tasks in terms of the technical and the networking and, and give credit.”</i>
	<i>Involvement in Design Process</i>	<i>“...I think bringing people in from the very beginning from the ground level to be a part of the conversation and not just something that is an afterthought is a really important component of that, you know, not only so that they can have their voices heard and be part of the design process.”</i>
	<i>Equity</i>	<i>“I feel that's really easy to do right now, and equity is sensory, sensory components and equity, equity and equality can be one.”</i>
	<i>Acknowledge Contribution</i>	<i>“You know, really, just acknowledging all the work that went into it and, and the skill that went into these events.”</i>

Table 18. Frequency Count of Parent and Child Codes Describing Perceived Factors for Effective Collaboration

Interviewee \ Codes	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
Effective Screening	0	1	0	0	1	1	1	1	1	1	1	0	0	0	0	0	8 (50.0%)
Include Host Organizations	0	1	0	0	0	1	0	1	1	0	0	0	0	0	0	0	4(25.0%)
Consider Youth Interests	0	0	0	0	1	1	1	0	0	1	1	0	0	0	0	0	5(31.3%)
Outline Tangible Outcomes	1	0	0	1	1	0	0	1	0	1	1	1	0	1	0	0	8 (50.0%)
Clear Expectations	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0	3(18.8%)
Role Description	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	3(18.8%)
Time Management	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2(12.5%)
Training and Development	1	0	1	1	0	1	1	1	1	0	0	0	0	1	0	0	8 (50.0%)
Learning and Development	1	0	1	1	0	1	1	1	1	0	0	0	0	1	0	0	8(50.0%)

Feedback and Evaluation	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2(12.5%)
Candidate Pairing with	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1(6.25%)
Inclusion and Autonomy	1	0	0	1	0	0	0	0	0	0	0	1	1	1	1	1	7(43.8%)
Ownership	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	4(25.0%)
Involvement in Design Process	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2(12.5%)
Equity	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2(12.5%)
Acknowledge Contribution	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1(6.25%)
Communication	0	0	0	0	1	1	0	0	0	1	0	0	0	1	0	0	4(25.0%)
Clear and Consistent Communication	0	0	0	0	1	1	0	0	0	1	0	0	0	1	0	0	4(25.0%)
Direct Communication	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1(6.25%)
Regular Check ins	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1(6.25%)

4.6 Emergent Relationship Themes

In the coding process, some relationships emerged that do not directly answer the research questions but are associated with effective collaboration between youth participants and facilitating organizations. The relationships cannot be statistically established since this wasn't an intended area of data collection. Still, they are salient because of their frequency despite the absence of related questions on the interview. The most significant relationships are-

- i. Relationship between poor engagement by youth and the absence of skills and interest required for fieldwork.

- ii. Relationship between poor engagement by youth and lower youth involvement in project development.
- iii. Relationship between prospective hiring of youth by the organization and youth background in the area along with positive engagement demonstrated during the placement.
- iv. Relationship between shorter duration of the collaboration with the challenge associated with managing within the timeframe.

The first two emergent relationships point towards factors impacting engagement levels by youth. However, it is difficult to establish these relationships because the same organization experienced various engagement levels. Most organizations that reported poor engagement from some participants also reported positive engagement from other participants. The following representative quote establishes a mix in the level of engagement demonstrated by youth participants-

“I would say, in both cases, one participant was, sort of exceeded expectations in terms of performance and the other one did not, whether that was maturity or personality or interest in the project in, in each case sort of the underperforming participant led to some challenges in.”

While there was a variety in the engagement levels in five out of the six organizations that reported poor engagement, other overlapping themes within these organizations might have some relation with engagement levels. Organizations have directly associated poor

engagement levels with lack of interest, lack of motivation, and hurdles. The representative quotations are included in section 4.4. However, the two most frequently occurring themes alongside poor engagement themes are discussed in sections 4.6.1- Fieldwork and 4.6.2- Youth involvement in project design and planning.

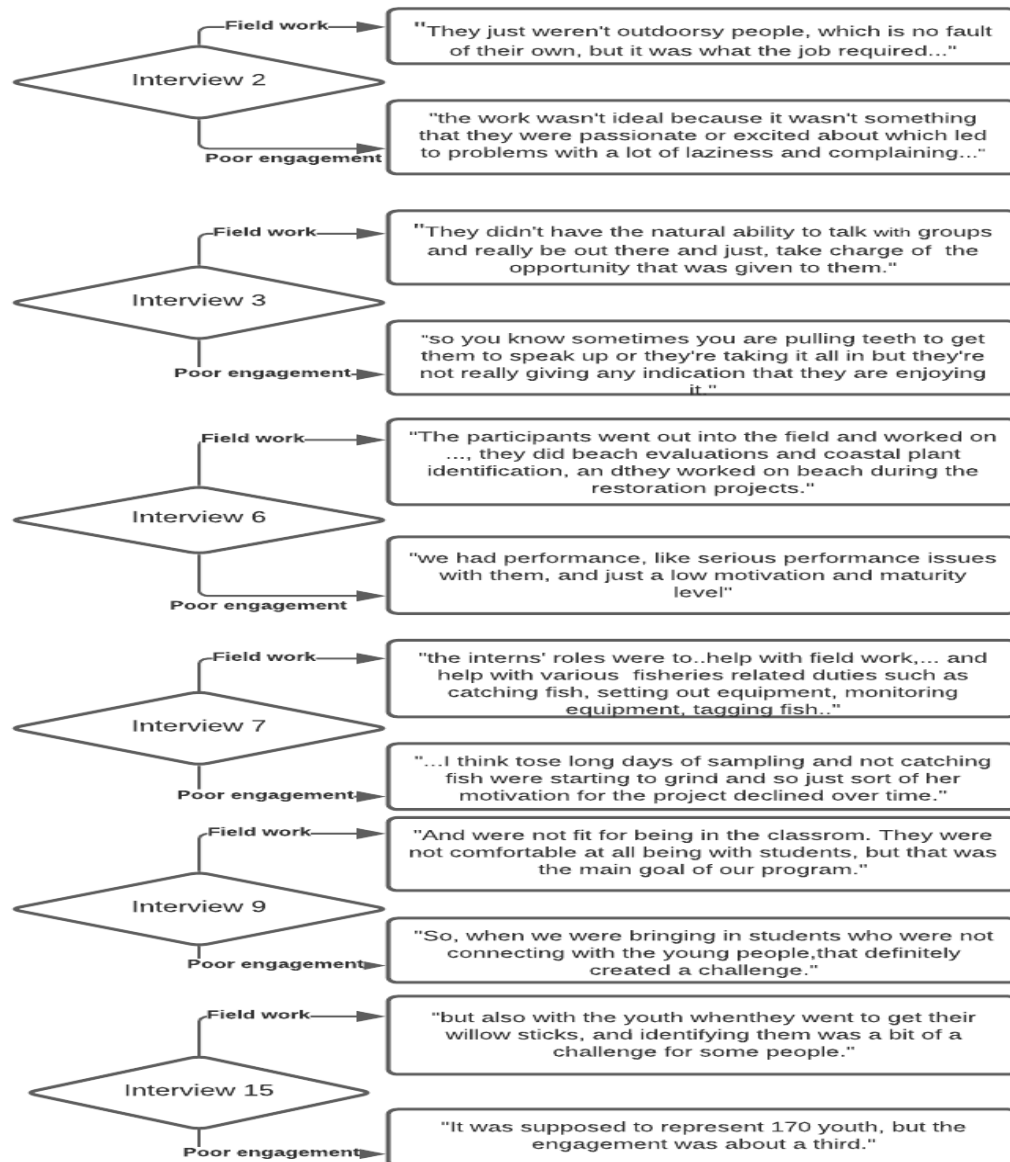
4.6.1 Relationship Between Fieldwork and Poor Youth Engagement

There could be a relationship between poor engagement and the type of work. Six organizations reported poor engagement, out of which five organizations experienced poor engagement with some of their participants, and one organization experienced poor engagement with all their participants. All six organizations have another common theme; the major area of youth participation was fieldwork, and the organizations' adult managers felt that the youth lacked the skills and interest to participate in those roles. Youth participants were mainly involved in outdoor fieldwork like restoration and physical data collection and public-facing fieldwork like educational programs. Figure 11 depicts the convergence of fieldwork and poor engagement themes across these six organizations, representing 37.5% of the overall sample. Other than that, representative quotations indicate better engagement levels after moving youth participants to office-based roles. On such quotation is presented here-

“Um, so their engagement level, I would say so, when they were in the office, we task them with researching different environmental issues, looking into different labs or, you know,

even looking through Pinterest and finding what teachers are doing with the topic. So, some things that we could incorporate. And I would say that they, they did that quite well.”

Figure 11. Representative Quotations from Interviews with Converging Fieldwork and Poor Engagement Themes



4.6.2 Relationship Between Lower Youth Involvement in Project Development and Poor Youth Engagement

The involvement of youth in program development is likely to be associated with engagement levels. There are representative quotations in the interviews of three out of six organizations that indicate limited youth involvement in project development. One such representative quotation is -

“... the nature of the projects that they've joined for us were, they were existing projects that needed some of that, like an extra set of hands to help out, essentially, and so the projects didn't necessarily unfold differently because the participants...they weren't particularly independent let's say in in their work, they were plugged into an existing project over which they didn't have a lot of authority...”

While it is also evident in the project description of the remaining three organizations but is not explicitly pointed out. However, it correlates with the survey responses. Five out of the six interviewees recounted poor engagement, and their survey answers indicated a lack of youth involvement in the project planning and design simultaneously. The sixth interviewee did not answer this question on the survey, but a representative quotation from the interview points towards the same. Table 19 summarizes the frequency count of low involvement in project development in interviews and survey responses of the six interviewees who stated poor engagement levels as a challenge.

Table 19. Frequency Count of Low Involvement in Project Development

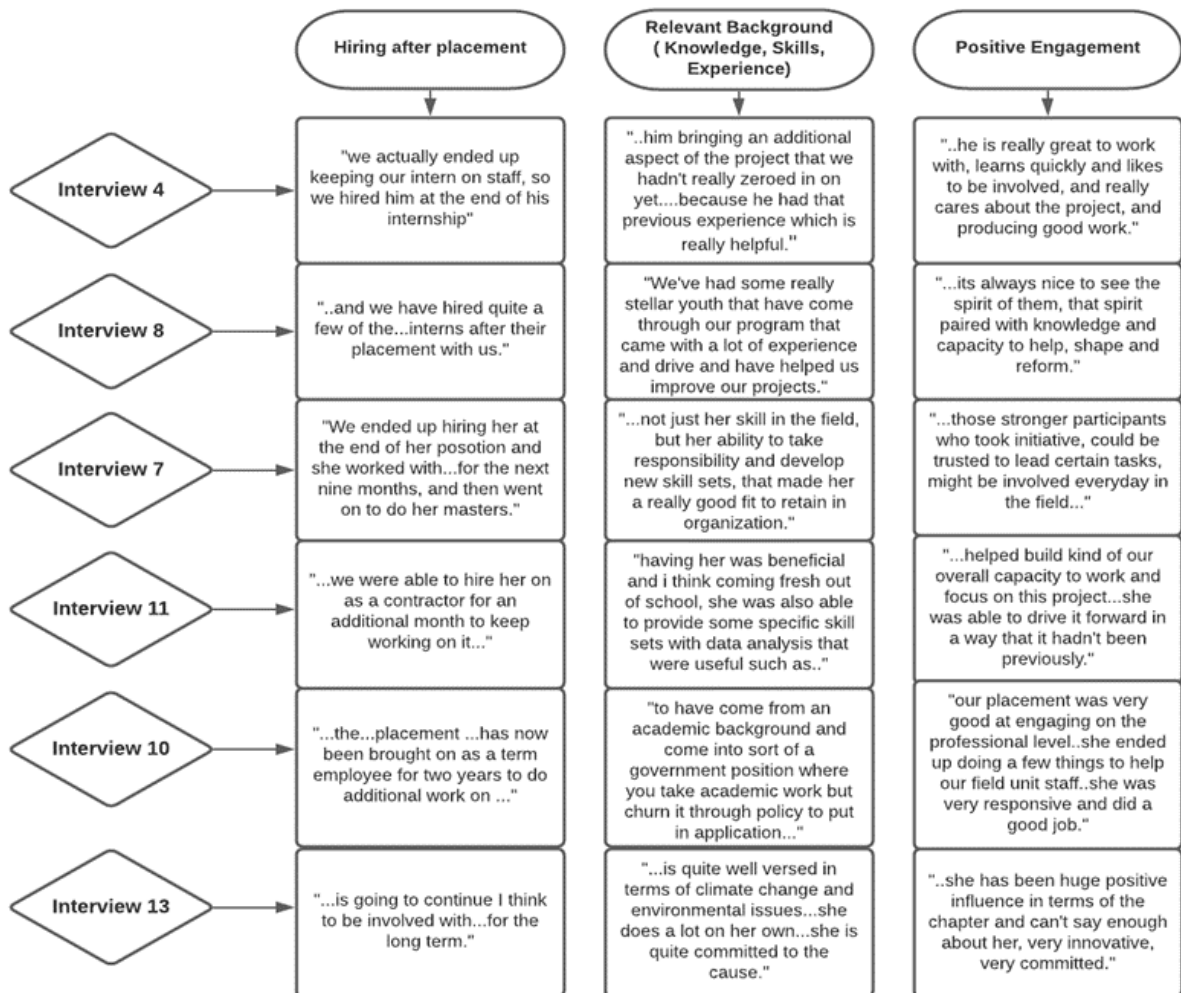
<i>Poor Engagement</i>	<i>Low Involvement in Project Development (Interview)</i>	<i>“Not involved at all: Our organization did all of the planning and design, and the youth participant(s) just carried out the project.” (Survey)</i>	<i>“Not very involved: Our organization did most of the planning and design, and the youth participant(s) contributed a little bit.” (Survey)</i>
Organization 2	1	0	1
Organization 3	0	0	1
Organization 6	0	0	1
Organization 7	1	1	1
Organization 9	0	0	1
Organization 15	1	0	0
	3 (50%)	1(16.6%)	5(83.3%)

4.6.3 Relationship Between Relevant Background, Positive Engagement, and Hiring After Placement

Six organizations recounted during the interview that they hired youth participants after the end of the placement, representing 37.5% of the sample size. Organizations will likely consider youth participants a good fit for hiring after the placement if they demonstrate positive engagement in combination with relevant background for the role. Figure12 depicts the convergence of positive engagement and relevant background themes across the six organizations that hired youth participants after the placement. Relevant background can comprise knowledge, skills, experience, or a combination thereof. There are representative quotations that indicate the organization’s interest in hiring such youth participants-

"We ended up hiring her at the end of her position, and she worked with for the next nine months, and then went on to do her masters...., but it was 100%, you know, not just her skill in the field, but her ability to take responsibility and develop new skill sets that made her a really good fit to retain with the organization..."

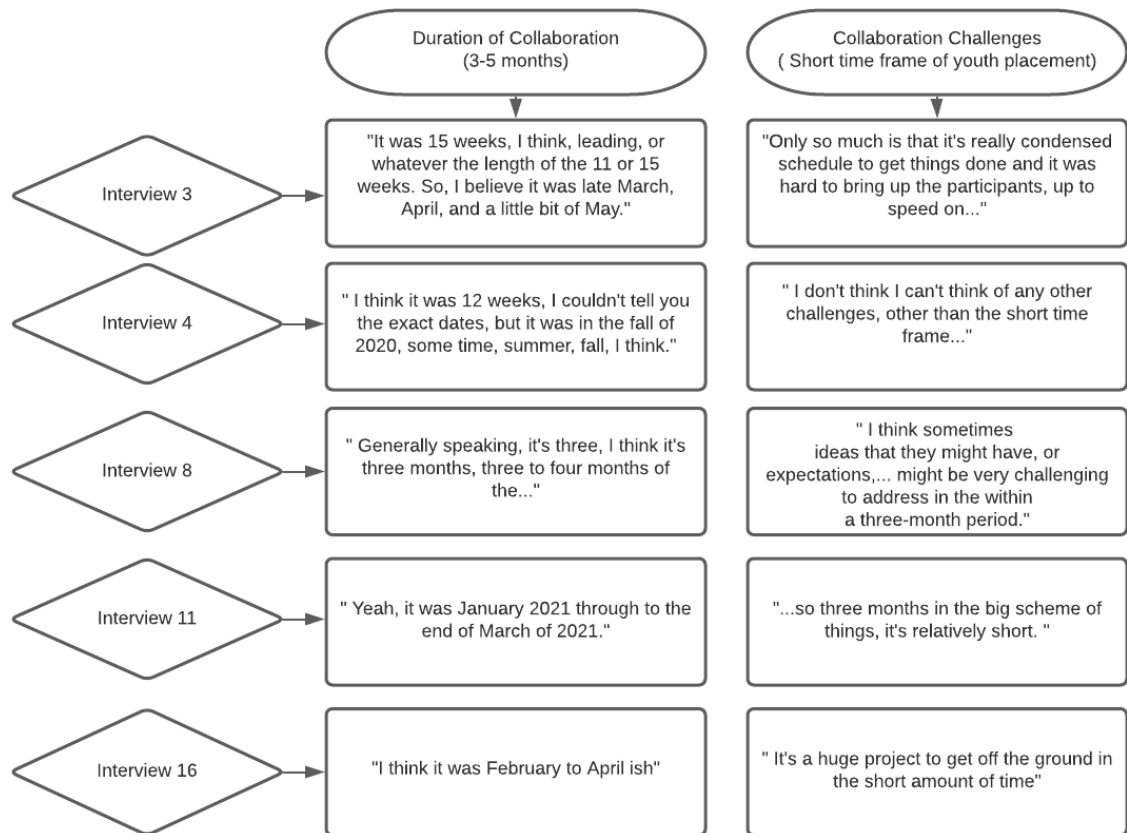
Figure 12. Representative Quotations from Interviews with Converging Positive Engagement, Background and Hiring After Placement Themes



4.6.4 Relationship Between Shorter Duration of the Placement with Timeframe Related Challenges

Interviews captured three categories defining the duration of collaboration- less than one month, three to five months, and six to twelve months. Organizations had a variety of perspectives about the duration of the placement. While some organizations felt that the time frame was ideal, others recounted it as a challenge. Eleven out of the sixteen interviewees reported that the duration of their collaboration with youth was between three to six months. Out of these eleven organizations, five organizations felt that this timeframe for collaboration was short and led to some challenges. Figure 13 shows the representative quotations in converging themes of shorter duration and related challenges.

Figure 13. Representative Quotations from Interviews with Converging Shorter Duration of the Placement and Timeframe Related Challenges



CHAPTER 5: DISCUSSION

This chapter examines and interprets the results of the study presented in Chapter 4. The discussion is divided into four parts based on the four key research themes- 1) Attributes of collaboration between youth and local organizations, 2) Positive elements of collaboration between youth and local organizations, 3) Challenges associated with the collaboration between youth and local organizations, and 4) Recommendations for designing effective collaboration between youth and local organizations.

5.1 Research Question 1

Attributes of Collaboration between Youth and Local Organizations Working on Sustainable Development Projects in Canada

The intended objective of including this research question was to define the nature of the collaborative work relationship between the two stakeholders. Collaboration literature has identified the lack of coherence in studies based on the differences in the factors affecting collaboration (Huxham & Vangen, 2005; Reilly, 2001; Thomson et al., 2009; Wood & Gray, 1991). Thus, it is vital to examine and document the nature of the collaborative working relationship in this study.

Based on the study findings, the purpose of collaboration between youth participants and adults from local organizations was to work on sustainable development projects of these organizations. The projects were carried out within Canada with significant regional diversity. Regional diversity is captured in Table 8 presented in the methods section.

Interview participants confirmed that the project(s) had a positive impact on more than one sustainable development goal. Youth and adults from local organizations collaborated on projects in these work domains- Research, Data Collection & Analysis; Education Programming; External Stakeholder Engagement; Facilitating a Public Event; Conservation and Ecological Restoration; and Communication Strategy. It is worth noting that some projects involved working on more than one domain.

The term collaboration is often used interchangeably with cooperation and coordination (Walter & Petr, 2000). It becomes important to define the scope of interactions involved in the collaborative relationship to clearly differentiate between different levels of collaborative relationships. The types of interactions between youth participants and local organizations ranged from attending regular meetings, day-to-day operations, mentorship, fieldwork, problem-solving, idea sharing, and forming social relationships. Based on the collaboration continuum discourse (Himmelman, 2002; Mashek, 2015) summarized in Figure 2, collaboration involves the exchange of information, sharing resources like space, and learning from each other to enhance each other's capacity. It can be concluded that the working relationship was collaborative in nature on account of the types of interactions listed above.

Roberts & Bradley (1991) studied the temporary structure and explicit voluntary membership for working on a shared purpose in an interactive process. The duration of the project(s) ranged from less than one month to a year. Most of these projects (68.75%) lasted three to five months, followed by some projects (25%) that lasted six to twelve months, and only one project (6.25%) lasted for less than two weeks. The modality of work ranged from

completely remote or completely in-person projects to mixed projects. 50% of the projects were facilitated with a mix of remote and in-person interactions, 37.5% of the projects were in person, and 12.5% of the projects involved remote interactions. Participants cited the impact of COVID disruptions on the modality and duration of some of these projects. Table 20 summarizes the findings of the attributes of collaboration. Numbers within brackets in the later three columns- impact on sustainable development goals, duration, and modality represents the number of organizations that reported these findings.

Table 20. Summary of Findings: Attributes of Collaboration

Types of Interactions	Key Project Tasks	Impact on Sustainable Development Goals		Duration	Modality
<ul style="list-style-type: none"> • Project Planning • Organizational Meetings • Ongoing Communication • Idea Sharing • Problem Solving • Fieldwork • Routine operations • Social Activities • Mentoring 	<ul style="list-style-type: none"> • Research, Data Collection & Analysis • Education Programs • External Stakeholder Engagement • Facilitating a Public Event • Conservation and Ecological Restoration • Communication strategy 	14 Life below water(12) 13 Climate action (10) 11 Sustainable cities and communities(7) 3 Good health and wellbeing (6) 6 Clean water and sanitation (6) 12 Responsible consumption and production(6) 15 Life on land (6) 4 Quality Education(5) 5 Gender equality(5)	10 Reducing inequalities (4) 9 Industry innovation and infrastructure(3) 17 Partnerships for the goals(3) 8 Decent work and economic growth(2) 7 Affordable clean energy(2) 16 Peace, justice and strong institutions(2) 1 No Poverty(0) 2 Zero Hunger(0)	<ul style="list-style-type: none"> • Less than one month (1) • Three to five months(11) • Six to twelve months(4) 	<ul style="list-style-type: none"> • Remote(2) • In-person(6) • Mixed(8)

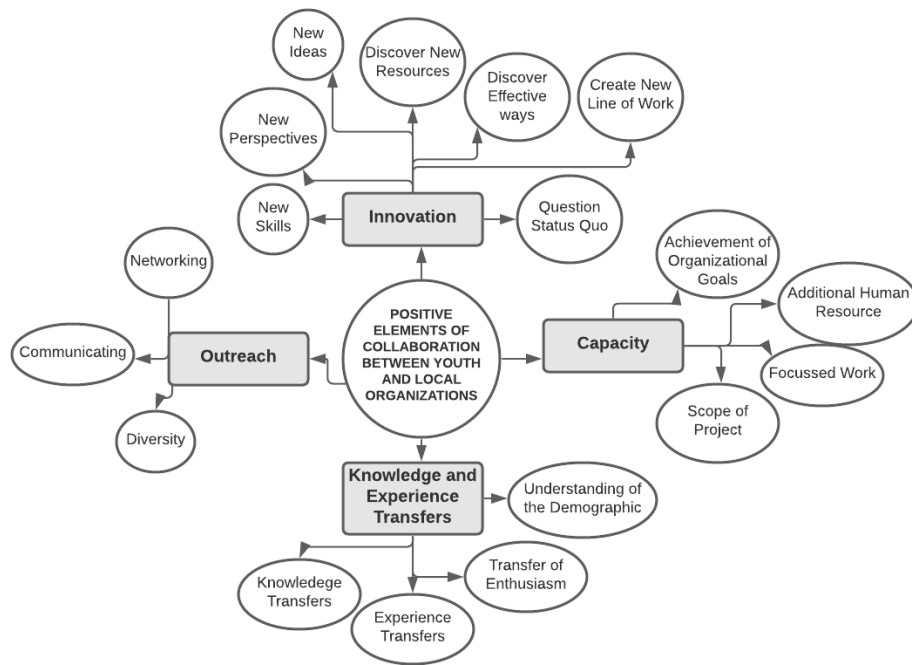
5.2 Research Theme 2

Positive Elements of Collaboration Between Youth and Local Organizations Working on Sustainable Development Projects

Capacity-building collaborations boost the capability of community-based organizations to emphasize issues and acquire resources essential for addressing concerns (Himmelman, 2002; Mashek & Nanfito, 2015; Goytia et al., 2013; Grant et al., 2020). While there is a lot of discussion on capacity building through collaboration, most studies focus on capacities such as funding and resources. As part of the positive elements of collaboration, this study identifies the unique values that youth bring to local organizations through collaboration on sustainable development projects. Collaborative efforts in matters relating to social problems and economic development are implemented in different parts of the world (Mandell, 2001; Manaf et al., 2018; Vangen & Huxham, 2003; Williams, 2002). The positive elements from this study capture youth's contribution to increasing the potential to address these challenges.

Four main themes suggesting the positive impact of youth participation in the organization's projects emerged in the interviews – 1) Knowledge and Experience Transfers, 2) Capacity, 3) Innovation, and 4) Outreach. The occurrence of these themes is salient across interviews the sample because each of these themes occurred in at least fifty percent of the interviews. Figure 14 is a theme map that presents the four key themes along with their child codes for an overview of findings related to positive elements of the collaboration.

Figure 14. Theme Map: Positive Elements of Collaboration Between Youth and Local Organizations



5.2.1 Knowledge and Experience Transfers

Knowledge and experience transfers are the first theme that emerged in 87.5% of the interviews. Interviewees reported that youth participants brought relevant knowledge and experience to the organization and its projects. This finding is consistent with existing literature in the field. Many studies have reported knowledge and experience transfers as a collaborative advantage (Crosby & Bryson, 2010; Gray, 1989; CEQ, 2007; Prins, 2010; Huxham & Vangen, 2005; Murphy et al., 2012). In intergeneration programs involving youth and older participants in a social context, most literature records knowledge and experience

transfers from older to younger participants for youth development. It does not focus much on knowledge transfer from youth to adults. However, literature on intergenerational collaboration from the organizational context largely discussed knowledge and experience transfers between participants across the spectrum (Wang & Noe, 2010; Harvey, 2012; Hillman, 2014; Nurhas et al., 2019). Reverse mentoring that enables knowledge transfer from younger employees to senior executives is considered tactically relevant in organizations (Jordan & Sorell, 2019; Flinchbaugh et al., 2016). Within knowledge and experience transfers, interviewees reported transfer of enthusiasm and understanding about the younger demographic as positive outcomes of the collaboration. This finding is consistent with studies on intergenerational programs that talk about positive social behaviors and a better understanding of the other demographic through intergenerational interactions (Short-DeGraff & Diamond, 1996; Borrero, 2015; Roodin et al., 2013; Dorfman et al., 2003).

5.2.2 Capacity

The second emergent theme is enhanced capacity. 81.3% of the interviewees reported that they experienced an increase in the capacity of the organization and its sustainable development project through an increase in the scope of the project, focused work in important areas, additional human resources, and contribution to the achievement of the organization's overall goals. This finding is consistent with broader literature in collaboration and particularly relevant for community-based organizations (Himmelman, 2002; Mashek & Nanfita, 2015; Goytia et al., 2013; Grant et al., 2020). Collaboration is considered a strategic advantage for solving complex problems (Feast, 2012). While most literature on

intergenerational collaboration focuses on the benefits for the participating demographic, some studies have reported improvement in the capacity of the organization (Sánchez et al., 2008).

5.2.3 Innovation

The third emergent theme is innovation, and 75% of the interviewees recognized that youth brought innovation to the organization and its sustainable development project and in the form of new ideas, perspectives, and skills. Youth participants discovered new resources and more effective ways of approaching different aspects of the project. Youth participants questioned the status quo, which prompted the organizations to review their programming. Adult participants from the organizations acknowledged the positive impact of youth-induced innovation.

This finding is consistent with existing literature on collaboration as well as intergenerational collaboration to a significant extent because innovation is often an intended outcome of the collaboration. Diversity in perspectives and open, collaborative processes promote creative thinking, innovation, and more information in the organizations. (CEQ, 2007; Prins, 2010; Meredith & Schewe, 2003; Arsenault, 2004; Andriopoulos & Lewis, 2009). Researchers have identified innovation through intergenerational collaboration as a vital success factor for sustainable family businesses (Litz & Kleysen, 2001; Edelman et al., 2016; Miller et al., 2003). Studies on global industrial work settings have recognized intergenerational collaboration as an important element in innovation success (Wolf et al., 2018).

5.2.4 Outreach

Outreach is the fourth positive element that occurred in 68.8% of the interviews. Adult participants from organizations reported that youth participants enhanced the outreach of the sustainable development projects through networking, communications, and through their links to a diverse community. While outreach does not occur directly in the literature on collaboration and intergenerational collaboration, it can be considered a form of increased capacity or capabilities through collaboration. Networking occurs on the collaboration continuum as means of mutual sharing of information (Himmelman, 2002; Mashek, 2015), and information sharing is considered a key advantage of collaboration. Collaboration establishes an opportunity for members to share specialized skill sets and material as well as information-based resources (Dougherty & Clarke, 2018; Parkinson, 2006; CEQ, 2007; Prins, 2010).

From the perspective of sustainable development goals, youth are active agents for advocacy and raising awareness about the 2030 Agenda by running online and offline campaigns, events, workshops, and publications (UN, 2018). Representative quotations from the study indicated a similar contribution to the organization's communication strategy.

According to the United Nations, youth can support the outreach of SDGs and the 2030 global agenda. Younger people can be partners in communicating the development agenda at the local level to their peers and communities, as well as internationally (UN, 2018). The findings of this study are consistent with the expected role of youth as communicators who have the capability to promote outreach of sustainable development agenda.

Table 21. Positive Elements of Collaboration: Findings from the Current Study and Existing Literature

Theme	Current Study	Collaboration	Intergenerational Collaboration	
			Organizational Context	Social Context
Knowledge & Experience Transfers		Crosby & Bryson, 2010; Gray, 1989; CEQ, 2007; Prins, 2010; Huxham & Vangen, 2005; Murphy et al., 2012	Wang & Noe, 2010; Harvey, 2012; Hillman, 2014; Jordan & Sorell, 2019; Flinchbaugh et al., 2016; Nurhas et al., 2019;	Short-DeGraff & Diamond, 1996; Borrero, 2015; Roodin et al., 2013; Dorfman et al., 2003
Capacity		Himmelman, 2002 ; Mashek & Nanfeto, 2015 ; Goytia et al., 2013 ; Grant et al., 2020		Sánchez et al., 2008
Innovation		CEQ, 2007; Prins, 2010; Meredith & Schewe, 2003; Arsenault, 2004; Andriopoulos & Lewis, 2009	Litz & Kleysen, 2001 ; Edelman et al., 2016 ; Miller et al., 2003 ; Wolf et al., 2018	
Outreach		Himmelman, 2002); Mashek, 2015; Parkinson, 2006; CEQ, 2007; Prins, 2010		

Table 21 summarizes the findings of this study along with similar findings in the existing literature on collaboration and intergenerational collaboration. This study records knowledge and experience transfers, capacity, innovation, and outreach as positive elements for the organizations. These findings are consistent with the roles youth are expected to play through

their participation in sustainable development goals, as discussed in section 2.3. These positive outcomes are consistent with the broader literature on collaboration as summarized above. In terms of literature on intergenerational collaboration, there are some differences and novel findings in this study. Intergenerational collaboration in the social context focuses more on the development of individuals and their common interests. As such, there is not much focus on the positive impact on the facilitating organization. Strengthening capacity and outreach are not seen as positive outcomes of intergenerational collaboration in the organizational context because the youth, as well as the adults, are internal stakeholders of the organization working in employee roles. As such, they are considered a part of the organizations' capacity, and they are bound by employment terms to work towards organizational goals. The findings of the current study present a fresh perspective to insights on positive elements of intergenerational collaboration in organizations where youth demonstrate their contributions by collaborating as external stakeholders.

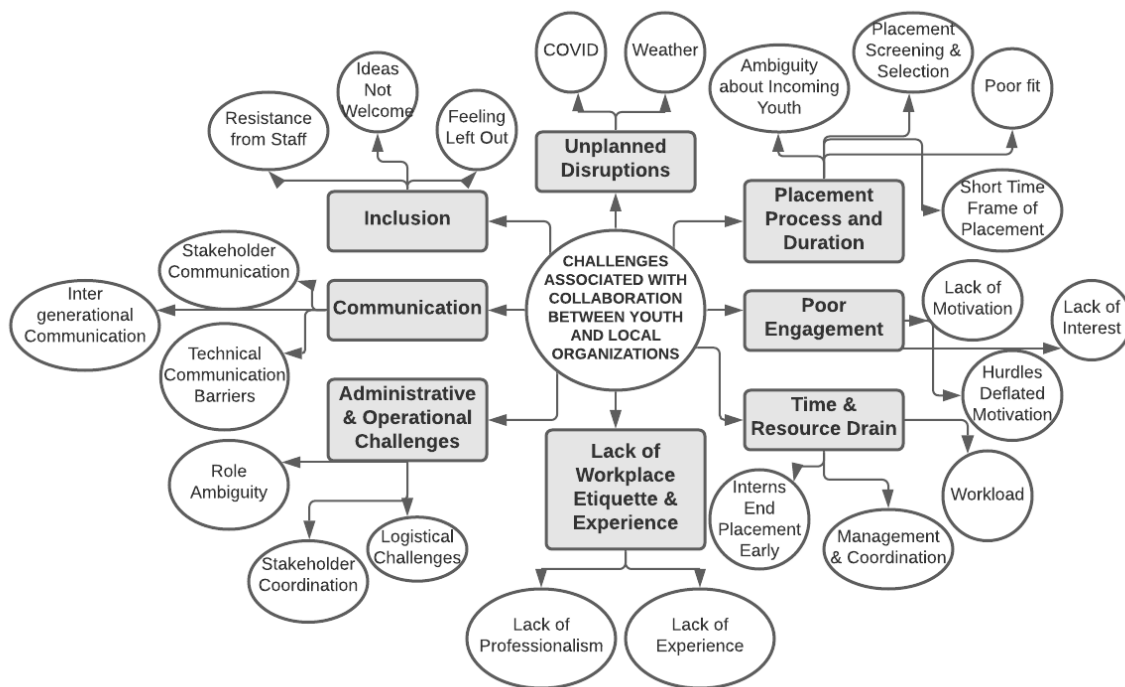
5.3 Research Question 3

Challenges Associated with Collaboration Between Youth and Local Organizations Working on Sustainable Development Projects

The challenges associated with collaboration between youth and local organizations from the organizations' perspective are mostly on account of the program design and constraints. Eight major categories of challenges were reported by interviewees- unplanned disruptions, placement process and duration, poor engagement, time and resource drain, lack of workplace etiquette and experience, administrative and operational challenges,

communication, and inclusion. Figure 15 illustrates the eight key themes and the child codes from interviews that represent the challenges associated with the collaboration.

Figure 15. Theme Map: Challenges Associated with the Collaboration



Unplanned disruptions were stated as a challenge in most interviews. However, most organizations reported challenges associated with COVID 19, which is an exceptional scenario, and only one organization reported unplanned disrupts associated with weather. It can be inferred that the frequency of occurrence of unplanned eruptions would not be as high in the interviews if COVID 19 impact is excluded.

Another broad category of challenges pointed out by the interviewees was related to the individual characteristics of youth participants. Interviewees reported a lack of workplace

etiquette & experience in some youth participants. Lack of professionalism and experience are individual characteristics of the participants and cannot be generalized for youth. Within the same cohorts, interviewees recounted some youth participants to be equipped with the relevant background and skills while others to be lacking experience. Likewise, there was a variation in the professionalism exhibited by youth participants on an individual level. Similarly, youth participants demonstrated varying levels of engagement in terms of their interest and motivation to work on the project. A collaboration involving participants with different characteristics leads to vagueness in generalization because their representativeness of the organization and personal interests can vary (Huxham & Vangen, 2005).

Interviewees recounted challenges that were associated with the planning, design, and constraints of the project. These include challenges resulting from the ineffective recruitment process, planning and duration of engagement of youth participants in the organizations like ambiguity about incoming youth participants, ineffective selection of participants leading to poor fit, and short duration of their placement in the organization. Role ambiguity and unclear expectations lead to struggles in collaboration (CEQ, 2007; Parkinson, 2006). Some organizations felt that the collaboration led to organizations' time and resource drain on account of additional workload and challenges associated with coordination and management of youth participants. Interviewees pointed out administration and operational challenges arising from organizations' management and functional processes as challenges in the collaboration. These findings are consistent with existing literature on collaboration. Limited time, resources, funding, and member commitment are constraints that cause operational and

logistical challenges in collaboration (Kramer & Creepy, 2011). Logistical and bureaucratic barriers must be addressed to stabilize collaborative relationships (Veal & Mouzas, 2010).

Barriers like communication and inclusion emerged as another category of challenges; however, the frequency of their occurrence was not very high. Interviewees recounted challenges related to communication with different stakeholders, intergenerational communication barriers, and technological barriers as barriers to smooth exchange and flow of information during the collaboration. Likewise, barriers to inclusion of youth participants like resistance from staff, ideas not welcomed, and youth feel left out surfaced as challenges in the collaboration. Past studies have recognized the inclusion of stakeholders and good structure as contributors to a good collaboration (Huxham & Vangen, 2005; Mattessich et al., 2001; Clarke, 2011; Sun et al., 2020).

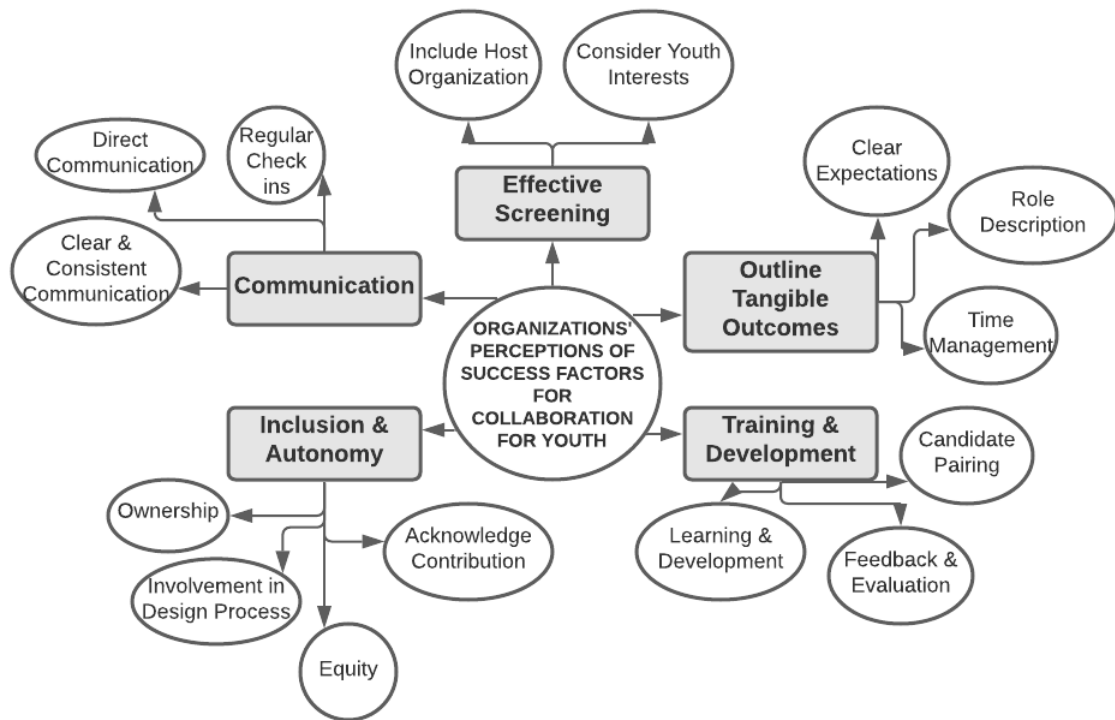
5.4 Research Question 4

Perceived Success Factors for Collaboration Between Youth and Local Organizations

Interview participants recommended five key themes as recommendations for organizations designing youth collaboration in organizations sustainable development projects- 1) Effective Screening, 2) Outline Tangible Outcomes, 3) Training and Development, 4) Inclusion and Autonomy, and 5) Communication. The findings are consistent with existing literature on collaboration with some unique elements. Figure 16 is a theme map that presents the

organizations' perceived success factors of collaboration between youth and local organizations.

Figure 16. Theme Map: Perceived Success Factors of Collaboration



Effective screening of youth participants for placement on collaborative projects emerged as a salient theme reported by 50 % of the interview participants. While effective partner selection is a common attribute discussed in multiple studies (Huxham & Vangen, 2005; Mattessich et al., 2001; Chrislip & Larson, 1994), the process of selection depends on the collaborative agreement. In this study, adults representing local organizations recognized the importance of involving organizations in the screening process and identifying the strengths and interests of youth participants. The Host organizations placed youth participants based on

their process, and the facilitating local organizations expressed their interest in being involved in youth participant selection.

The second theme that emerged in fifty percent of the interviews is tangible outcomes; interview participants recounted setting tangible outcomes through clear expectations, role descriptions, and time management as a key success factor. This finding is consistent with the existing literature that emphasizes the importance of tangible goals (Greer, 2017; Huxham & Vangen, 2005), development of clear roles and relationships (Parkinson, 2006), and participant skills and competencies (Buckley et al., 2002; Williams, 2002) as important attributes for successful collaboration.

The third theme is training and development, and it occurred in fifty percent of the interviews. Interview participants recognized the need for learning opportunities, feedback and evaluation, and teamwork through candidate pairing. This finding is also consistent with the common attributes in the existing literature. It allows participants to undertake tasks more comprehensively and allows for a better understanding by learning from diverse groups (Parkinson, 2006); it leads to mutual learning (Huxham & Vangen, 2005; Murphy et al., 2012).

The fourth theme is inclusion and autonomy, and it occurs in 43.8 % of the interviews. Interview participants emphasized the need for involving youth participants in the design process, have ownership and equitable roles. Balanced autonomy supports successful

collaborations (Gardner, 2005; Andersson, 2009; Nowell & Harrison, 2011), collective identity and mutual trust are important for successful collaboration (Huxham & Vangen, 2005).

The fifth emergent theme is communication; interview participants recommended establishing clear and consistent communication, direct communication, and regular channels. This theme occurred in twenty-five percent of the interviews and is consistent with existing literature. Researchers have discussed the need for open and consistent communication for successful collaboration (Parkinson, 2006; Sense, 2005; Greer, 2017; Huxham & Vangen, 2005).

CHAPTER 6: CONCLUSION

The research provides specific insights that apply to collaboration between youth and local organizations as stakeholders in the implementation of sustainable development goals. It provides a summary of the nature of collaboration involved in the subjects under this qualitative investigation. It provides insights into the positive elements and challenges associated with the collaboration between youth and local organizations. Further, the study provides some recommendations for designing effective collaborative projects involving youth. Involving multiple stakeholders in partnership is an important action area for sustainable development goals and is an integral part of Canada's national strategy on sustainable development. Since these are relatively new proposals, this exploratory study is a foundation for further investigating collaboration between youth and community-based local organizations in Canada.

Organizations are represented by individuals, adult participants from local organizations participated in collaboration with youth on sustainable development projects. The study provides further insights into intergenerational collaboration. This collaboration is inherently different from young employees collaborating with older employees in a bureaucratic organizational setting. The study provides a fresh perspective on intergenerational collaboration in an organizational setting where youth participants collaborate as external stakeholders.

The study captures one-sided perspectives since all interviewees represent the organizations'. The collaboration involved youth participants as well; their perspective is not captured in this study. Other than that, the study has limitations, such as extensive literature in the field, which lacks coherence, a limited number of interview participants, limited time, and a single coder. The first limitation is the lack of coherence in literature which creates struggles and confusion in the inductive coding stage. A limited number of interview participants is the second limitation. The research involved 16 adult managers in project management and supervisory roles working directly with the youth participants on the organization's sustainable development projects. Limited participation makes the generalization of research difficult. The third limitation is the time since the interviews lasted only 45 minutes and there were 26 interview questions. A longer interview would have allowed for capturing more details. The interviews were coded by a single coder, which impacts the validity of coding.

The emergent relationships are potential areas of future research. Organizations experienced poor and good engagement within the same cohort. Organizations reported challenges arising from the individual characteristics of youth participants, such as lack of motivation, professionalism, and experience in the field. This raises the question of the impact of individual characteristics of youth as opposed to a generalized view. Another area of future inquiry is the distinction between temporary and lasting impacts of collaboration. The study has unearthed some areas of positive impacts of the collaboration; it can be further explored whether these are temporary or continued after the end of the collaboration.

Based on the organizations' perceived success factors of collaboration and emergent relationships, few recommendations can be made to the host organization. Organizations

expressed their interest in being more involved in the screening process to identify participants that are most suited for the role. Organizations further expressed the importance of being more informed about the expectations and skillsets of the incoming youth and being given the time for more effective planning of the collaboration.

Host organizations should pay attention to the individual characteristics of youth rather than generalizing them. There is an opportunity to design an instrument for youth participants to analyze their personality, behavior, cognitive styles, and attitudes towards sustainable development goals. This can be useful in effective screening and placement. There is also an opportunity to identify areas of skill development. Based on the emergent relationships, youth participants demonstrated lower commitment in areas involving fieldwork- physical and public-facing roles more specifically. So, there is an opportunity to identify areas for skill development and training that will equip youth participants to contribute more effectively.

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Appendix A

**Ethical Clearance from the
Office of Research Ethics at
the University of Waterloo**

UNIVERSITY OF WATERLOO

Notification of Ethics Clearance to Conduct Research with Human Participants

Principal Investigator: Amelia Clarke (School of Environment, Enterprise and Development)

Co-Investigator: Ilona De-Gosztonyi-Dougherty (School of Environment, Enterprise and Development)

File #: 40348

Title: Ocean Bridge Evaluation - Community Impact Component

The Human Research Ethics Committee is pleased to inform you this study has been reviewed and given ethics clearance.

Initial Approval Date: 07/04/19 (m/d/y)

University of Waterloo Research Ethics Committees are composed in accordance with, and carry out their functions and operate in a manner consistent with, the institution's guidelines for research with human participants, the Tri-Council Policy Statement for the Ethical Conduct for Research Involving Humans (TCPS, 2nd edition), International Conference on Harmonization: Good Clinical Practice (ICH-GCP), the Ontario Personal Health Information Protection Act (PHIPA), the applicable laws and regulations of the province of Ontario. Both Committees are registered with the U.S. Department of Health and Human Services under the Federal Wide Assurance, FWA00021410, and IRB registration number IRB00002419 (HREC) and IRB00007409 (CREC).

This study is to be conducted in accordance with the submitted application and the most recently approved versions of all supporting materials.

Expiry Date: 07/05/20 (m/d/y)

Multi-year research must be renewed at least once every 12 months unless a more frequent review has otherwise been specified. Studies will only be renewed if the renewal report is received and approved before the expiry date. Failure to submit renewal reports will result in the investigators being notified ethics clearance has been suspended and Research Finance being notified the ethics clearance is no longer valid.

Level of review: Delegated Review

Signed on behalf of the Human Research Ethics Committee



Karen Pieters, Manager, Research Ethics, karen.pieters@uwaterloo.ca, 519-888-4567, ext. 30495

This above named study is to be conducted in accordance with the submitted application and the most recently approved versions of all supporting materials.

Documents reviewed and received ethics clearance for use in the study and/or received for information:

file: OceanBridge Ethics Questionnaire June 2019 FINAL.docx

file: Oceanbridge Consent Form June 2019 FINAL.docx

Appendix B
Invitation for Interview Email

[INSERT NAME],

Recently you (and your organization) participated in the [INSERT ORG NAME] youth service (or youth intrapreneurship) program and you indicated in the post-program survey that you were willing to participate in a follow-up interview with researchers from the Youth & Innovation Project at the University of Waterloo.

I am writing with the hope that we can set up a time for that interview.

The main topics of the interview are related to your participation in the youth service program (or youth intrapreneurship), and the impact of the program on the local community, as well on social and environmental issues.

The interview will be 45mins long and can be scheduled at your convenience. You will find here a link to our scheduling software, where you can indicate which date and time work best for you: [INSERT LINK]. The interview will be hosted through Zoom, so you can join the interview through a laptop or you can dial in by phone.

We have also attached an information letter which we encourage you to read. If there anything we can do to facilitate your participation in this interview or any accessibility needs that you would like to make us aware of please don't hesitate to reach out to me in advance of the interview.

Please let me know if you have any questions.

Thank you in advance for your time,

[INSERT YOUR NAME & EMAIL SIGNATURE]

Appendix C
Information Letter and
Consent Form

[INSERT DATE]

Dear [INSERT ORG NAME] community partner, participant or staff,

I am writing to you from the Youth & Innovation Project at the University of Waterloo in Waterloo, Ontario.

My colleague Dr. Amelia Clarke and I are conducting a study that aims to evaluate the [INSERT ORG NAME] youth service (or youth intrapreneurship) program. This evaluation will focus on the impact of the [INSERT ORG NAME] youth service (or intrapreneurship program on participating organizations, local communities and social and environmental issues.

[INSERT this paragraph for community partners & young participants only]

As part of this research study, you recently filled out a survey because you or your organization participated in the [INSERT ORG NAME] youth service program. At the end of that survey you indicated that you were willing to participate in a follow up interview.

You have been selected to participate in an interview. Neither participating in or deciding not to participate in this interview will affect your relationship with [INSERT ORG NAME]. Participation in this interview is voluntary and will take the form of a 45 minute interview via Zoom and will take place at a mutually convenient time. We will ask you to share your experience and perspectives on your participation in the [INSERT ORG NAME] youth service (or youth intrapreneurship) program. With your permission, the interview will be recorded for transcription purposes only. This recording will only be viewed by the researchers and it will be securely stored to ensure your confidentiality is maintained. Your responses will be collected and analyzed to create a summary report for [INSERT ORG NAME]. Your responses will not be linked to your name or if applicable the name of your organization anywhere in the report, and [INSERT ORG NAME] will not have access to any data that would connect you or if applicable your organization to specific comments. However, if applicable the name of your organization will be included in the report in an appendix indicating which organizations who participated in this study. The data collected in this study may be used in future academic publications or in studies that further explore the impact of youth service (or intrapreneurship) programs, the responses will not be linked to your name or the name of your organization in any future publications. As a result, there is no risk associated with participating in this interview. If you do not wish to participate, you can withdraw from this study anytime up until the data has been analyzed

and the report submitted to [INSERT ORG NAME] in [INSERT DATE] and your responses will be deleted. You may also skip any questions in the interview that you do not wish to answer. The information collected from this study will be kept for a period of at least seven years and will be password protected.

This study has been reviewed and received ethics clearance through a University of Waterloo Research Ethics Committee (ORE #40348). If you have questions for the Committee contact the Office of Research Ethics, at 1-519-888-4567 ext. 36005 or ore-ceo@uwaterloo.ca.

If you are an Indigenous person and/or representing an Indigenous organization, we would like to assure you that this research recognizes the responsibility of Indigenous peoples to preserve and maintain their role as traditional guardians of these ecosystems through the maintenance of their cultures, spiritual beliefs and customary practices. This research respects the integrity, morality and spirituality of the culture, traditions and relationships of the Indigenous communities and aims to avoid the imposition of external conceptions and standards. We recognize that the Indigenous communities have the right to exclude and/or keep any information concerning their culture, traditions or spiritual beliefs confidential. Further, we acknowledge the traditional rights of Indigenous peoples to control the way the information they provide is used and accessed. As such we will include time during in the interview for you to provide us with any comments that you would like us to consider when we handle and process your responses.

If you would like to participate please follow the link provided in the email sent to you to indicate a time and date that works for you for the interview.

If you have any questions about participation in this research study or the Youth and Innovation Project, please feel free to contact Valentina Castillo Cifuentes at vcastillocifuentes@uwaterloo.ca.

Thank you for your assistance with this research study.

Sincerely,

Ilona Dougherty
Managing Director
Youth & Innovation Project
University of Waterloo
<https://uwaterloo.ca/youth-and-innovation/>

Consent Form

Introductory text

This study will focus on evaluating the impact of the youth service programs of Canadian Wildlife Federation, Ocean Wise and the YMCA of Greater Toronto on participating organizations, local communities and social and environmental issues. You were asked to participate in this interview because you participated in a youth service program of one of the three organizations previously listed as a participant, community partner or staff.

Your responses will be collected and analyzed to create a summary report for the organization with whom you participated in a youth service program, as well as contributing to academic research. Your responses will not be linked to your name, or if applicable the name of your organization anywhere in the summary report. Canadian Wildlife Federation, Ocean Wise and the YMCA of Greater Toronto will not have access to any data that would connect you or, if applicable, your organization to specific comments. However, if applicable, the name of your organization will be included in the report in an appendix indicating which organizations participated in this study.

If you do not wish to participate, you can withdraw from this study and your responses will be deleted, anytime up until the data has been analyzed and the summary report is submitted to each of the three organizations in March 2022. You may also skip any questions in the interview that you do not wish to answer.

Consent form

By agreeing to participate in the study you are not waiving your legal rights or releasing the investigator(s) or involved institution(s) from their legal and professional responsibilities.

I have read the information presented in the information letter about a study being conducted by Dr. Amelia Clarke and Ilona Dougherty of the Youth and Innovation Project at the University of Waterloo in Waterloo, Ontario. I have had the opportunity to ask questions related to this study and I have received satisfactory answers to my questions and any additional details that I requested. I was informed that participation in this study is voluntary and that I can withdraw my consent by informing the researcher, up until the data has been analyzed and the summary report is submitted to each organization in March 2022.

This study has been reviewed and received ethics clearance through a University of Waterloo Research Ethics Committee (ORE #40348). If you have questions for the Committee contact the Office of Research Ethics, at 1-519-888-4567 ext. 36005 or ore-ceo@uwaterloo.ca.

For all other questions contact Valentina Castillo Cifuentes at vcastillocifuentes@uwaterloo.ca.

Please check the box to state your agreement:

☐ With full knowledge of all foregoing, I agree, of my own free will, to participate or if applicable, have my child participate, in this research study.

☐ I agree to my interview being recorded on Zoom to ensure accurate transcription and analysis.

☐ I understand that the data collected in this study may be used in future academic publications or in studies that further explore the impact of youth service programs.

☐

I understand that my responses will not be linked to my name or the name of my organization in the summary report or in any future publications.

☐ I understand that if applicable the name of my organization will be listed at the end of the summary report along with the names of all organizations who were interviewed.

Interviewee Name:

Interviewee/Parent or Guardian Digital Signature (if over 18 and living in Quebec or over 16 and living anywhere else in Canada):

Parent' or Guardian's Name (if under 18 and living in Quebec or under 18 and living anywhere else in Canada):

Parent or Guardian Email (if under 18 and living in Quebec or under 18 and living anywhere else in Canada):

Parent or Guardian Phone Number (if under 18 and living in Quebec or under 18 and living anywhere else in Canada):

Date:

Indigenous participation disclaimer

This research recognizes the responsibility of Indigenous peoples to preserve and maintain their role as traditional guardians of these ecosystems through the maintenance of their cultures, spiritual beliefs and customary practices. This research respects the integrity, morality and spirituality of the culture, traditions and relationships of the Indigenous communities and aims to avoid the imposition of external conceptions and standards. We recognize that Indigenous communities have the right to exclude and/or keep any information concerning their culture, traditions or spiritual beliefs confidential. Further, we acknowledge

the traditional rights of Indigenous peoples to control the way the information they provide is used and accessed.

Do you identify as an Indigenous person or do you represent an Indigenous organization?

If so, is there anything that you would like us to consider when we are handling and processing your responses?

Are you a member of another historically underrepresented group or are you part of an organization that represents another historically underrepresented group?

If so, there anything that you would like us to consider when we are handling and processing your responses?

Is there anything we can do to facilitate your participation in this interview or any accessibility needs that you would like to make us aware of?

Appendix D
**Interview Guide and Interview
Questions**

**Community Impact Evaluation & Youth Intrapreneurship Evaluation
Interview Guide**

April 2021

Introduction

The Youth & Innovation Project's community impact research and youth intrapreneurship research aim to measure the impact of young people's projects carried out as part of youth service and youth intrapreneurship programs respectively, have on the community partners and communities they engage with as well as determining whether the programs are leading to meaningful and lasting environmental, social and economic change.

In advance of the interviews being conducted as outlined in this guide, a post-program survey or in the case of the youth intrapreneurship research, a pre-program and post-program survey, have been filled out by both young participants and community partners involved in these two programs.

This interview guide describes the follow-up interviews that will be conducted in order to gather qualitative data with a select number of host organizations, community partners, and young participants.

Definitions

Host organizations: The organizations who hosted the youth service or youth intrapreneurship program: Ocean Wise, YMCA of Greater Toronto, Canadian Wildlife Federation and St. Paul's University College GreenHouse.

Community partners: The local community organizations that worked with young participant(s) on their project for a minimum of 5 hours. The organizations will have filled out the survey and opted in to participating in an interview.

Young participants: The young people who were participants of the youth service or youth intrapreneurship program. The young people will have filled out the survey and opted in to participating in an interview.

Interview participant selection

Those who filled out the survey were asked at the end of the survey if they would be open to participating in an interview. The pool of potential interview participants will be those young

people and community partners who indicated their willingness to participate in an interview and provided their contact information, as well as a select number of staff from the host organizations that are hosting a youth service or youth intrapreneurship program. A list of staff from each host organization will be provided by the host organization. These staff will not have filled out a survey.

The YouthInn Program Coordinator will work with the interviewers to determine the number of interviews to be conducted.

From the young participants and community partners who opt-in to the interviews, those who are selected to be interviewed will be selected using the following criteria:

- Diversity characteristics in the case of young participants (age, gender, sexual orientation, disability, race, education);
- Diversity in type of organization (size, social or environmental issue addressed, population targeted or represented) in the case of organizations;
- Regional diversity; urban vs. rural;
- Diversity in the type of project carried out; and
- Diversity in the type of results achieved e.g., it is important to ensure that projects that were unsuccessful in achieving impact are included as often as projects that were successful in achieving impact.

When it comes to interviewing staff from the host organizations, the organization will provide a list of potential staff to be interviewed and then those who are selected to be interviewed will be selected using the following criteria:

- Regional diversity; and
- Those with the most experience supporting projects.

Once candidates for interviews are selected, record their names and contact information in the tracking sheet and in partnership with the YouthInn Program Coordinator keep this sheet up to date throughout the interview process: See YouthInn Program Coordinator for link to tracking sheet.

Setting up interviews

The following steps should be taken to set up the interviews:

1. For the community impact research we will be using Acuityscheduling.com to schedule interviews. The YouthInn Program Coordinator will set up this platform for you and coordinate with any other students or staff who are conducting interviews at the same time as you are. The participants will be asked to fill out the consent form (Appendix D) as part of the scheduling process.
2. To carry out the interviews, for the community impact research we will be using Zoom. The YouthInn Program Coordinator will set up Zoom for you to use.

3. For the community impact research once Acuity scheduling and Zoom are set up and a list of interview participants has been determined, the YouthInn Program Coordinator will send out an individual email to each potential interview participant (see Appendix A and B). The information letter (Appendix C) will be attached to that email as a PDF. If a participant does not respond to their first email, the YouthInn Program Coordinator will send a reminder email one week later. If a participant doesn't respond or chooses not to be interviewed another participant will be selected using the criteria above.
4. For the community impact research, once an interview is scheduled, Acuity will automatically send out a calendar invite with the Zoom link and then the YouthInn Program Coordinator will send out a reminder to the participant the day before to remind them of the interview.

Taking notes, recording the interview & tech check

All interviews should be recorded on Zoom so that they can be transcribed.

For the community impact research during the interview you should also take notes. These notes should capture overall impressions, detailed notes regarding content are not necessary given that we will be transcribing the interviews. Comments about body language or tone are also helpful to keep track of. For example "they seemed really uncomfortable when I asked that question" is helpful to note.

Before the interview, make sure to test Zoom to ensure you know how to record the interview and how to enable audio transcription. Ensure you have set the session to be recorded in advance. The YouthInn Program Coordinator will download the recording and files from the Zoom Cloud, and will let you know where the recording and the transcript should be saved. Once the YouthInn Program Coordinator confirms with you that the files are available on the OneDrive, proceed to name the video, audio and text files using the following name format: AbbreviatedNameoftheProgramNameoftheInterviewee – date – typeofdocument. For example: CIRJaneSmith-April252021-zoomuneditedtranscript

Once the interview is done, edit the recording transcript from Zoom using the below format. Make sure to edit the recording transcript as a new document, keeping the original transcript from Zoom.

- Full name of interviewee and organization aligned to the left
- Full name of interviewer and date aligned to the right
- Font: Arial 12; Line Spacing 1.15
- When interviewer is speaking, format the text in bold and start with the interviewer's name initials followed by a colon (e.g., **VCC: What was the impact of the program?**)

- When the interviewee is speaking, format the text starting with the interviewee's name initials followed by a colon (e.g., VCC: The impact was...). (See format sample provided by the YouthInn Program Coordinator).

All written notes should be saved. The YouthInn staff team will let you know where the notes should be saved. A word document with your notes should be saved with the following name format: AbbreviatedNameoftheProgramNameoftheInterviewee – date – typeofdocument. For example: CIRJaneSmith-April252021-notes.

Tips for interviewers

Below are some tips for you to keep in mind as you conduct the interviews:

- **Stable internet & a quiet location:** Ensure you have stable internet and a quiet location where you can conduct your interviews. If either are any issue, please let the YouthInn Program Coordinator know and they can support you to make necessary arrangements.
- **Avoid subjective comments:** Avoid comments such as 'good answer'. Stay neutral in any reactions and comments you make. For example: 'Thank you for sharing that' or 'I appreciate your comments' are appropriately neutral responses.
- **Be patient:** Be sure to allow for different pacing of an interview when working with individuals from diverse communities. Not allowing enough time for replies or cutting someone off will decrease the chances of them being candid and sharing their thoughts fully.
- **Keep it professional:** Remember you are representing the Youth & Innovation Project and the University of Waterloo when you are conducting these interviews. Make sure to dress in business casual, ensure your background is relatively neutral and be kind to and respectful of your interviewee.
- **For further reading on how to conduct interviews we recommend:**
 - Cormac McGrath, Per J. Palmgren & Matilda Liljedahl (2019) Twelve tips for conducting qualitative research interviews, Medical Teacher, 41:9, 1002-1006, DOI: [10.1080/0142159X.2018.1497149](https://doi.org/10.1080/0142159X.2018.1497149)
 - Bojana Lobe, David Morgan, Kim A. Hoffman (2020) Qualitative Data Collection in an Era of Social Distancing. International Journal of Qualitative Methods. Vol 19, doi.org/10.1177/1609406920937875

Interview wrap up

Once the interview is complete make sure to do the following:

- Let the YouthInn Program Coordinator that the interview is complete so they can download the Zoom recording, and send the participant a thank you email (Appendix F).
- Make sure the Zoom recording is saved and confirm that the recording worked. The videos and audio files should be saved with the following name format: AbbreviatedNameoftheProgramNameoftheInterviewee – date – typeofdocument. For example: CIRJaneSmith-April252021-Zoomrecording.

- Make sure the raw file of the Zoom transcript is saved with the following name format: AbbreviatedNameoftheProgramNameoftheInterviewee – date – typeofdocument. For example: CIRJaneSmith-April252021-Zoomuneditedtranscript.
- Edit the Zoom transcript as described above, and make sure the edited file of the Zoom transcript is saved with the following name format: AbbreviatedNameoftheProgramNameoftheInterviewee – date – typeofdocument. For example: CIRJaneSmith-April252021-Zoomeditedtranscript.
- Review your notes and clarify anything that would be difficult for someone who did not participate in the interview to understand, then save these notes. A word document with your notes should be saved with the following name format: AbbreviatedNameoftheProgramNameoftheInterviewee – date – typeofdocument. For example: CIRJaneSmith-April252021-notes.
- Ensure interviewee information in tracking form is complete: See YouthInn Program Coordinator for link to tracking sheet.

The YouthInn staff team will let you know where the above files should be saved.

Interview script – Community partners

Below is the script and interview questions to be used when you are carrying out interviews with community partners.

*This script assumes that the participant has already given their consent through the Acuity scheduling software. If that is not the case, ensure the participant is sent the consent form by email (Appendix D) and fills it out ahead of time. **You should NOT conduct an interview if consent has not been received in written form in advance.***

Confirm that Zoom is recording the interview as programmed before you begin reading this script, there should be red dot in the left-hand corner of your Zoom screen and ensure you have enabled audio transcription. Ensure you have the image for question 13 (Appendix E) ready to be shared when that question is answered.

1. Introduction

Thank you for agreeing to participate in this interview.

Before we get started, is there anything I can do to facilitate your participation in this interview?

Do you have any accessibility needs that you would like to make me aware of?

This interview is being conducted as part of a study by the Youth & Innovation Project at the University of Waterloo. I will share the link to the Youth & Innovation Project's website in

the chat in case you would like to learn more about their work: <https://uwaterloo.ca/youth-and-innovation/>

My name is [INSERT YOUR NAME HERE]. And I am an [INSERT YOUR ROLE & EXPLAIN YOUR AFFILIATION WITH YOUTHINN HERE] with the Youth & Innovation Project.

The aim of this study is to measure the impact of the projects young participants carried out as part of the [INSERT ORG NAME HERE] youth service (or youth intrapreneurship) program on community partners and communities as well as determining whether these projects led to meaningful and lasting environmental, social and economic change.

I want to remind you that this interview is anonymous, and it is being recorded for transcription purposes only.

Do you have any questions for me before we get started?

2. Interview questions

The following are the questions to be asked as part of this interview. If you feel like you need additional information from a participant, you can ask additional questions such as 'Can you tell me more about...?'. If you feel like a participant has already answered a question before you ask it you can skip it.

The interview should last no longer than 45 mins. Keep a close eye on the time throughout the interview to ensure you don't go overtime.

1. What is your name?
2. What is the name of your organization?
3. What is your role at your organization?
4. What role did you play in the project your organization supported that was carried out by the [INSERT ORG NAME HERE] young participants?
5. Tell me about your expectations of what it would be like working with the young people on their project before it started?
6. Tell me about the project itself:
 - a. What were the main goals of the project?
 - b. Over what period of time did it take place?
 - c. Was the project remote, in person, or mixed?
 - d. Who was involved?
 - e. What types of interactions did you have with the young participants?
7. What about the project are you most proud of?
8. What challenges did the project face along the way?
9. How were these challenges overcome or if they were not overcome, why not?

10. What impact did the project have on your organization?
11. What impact did the project have on the broader local community?
12. What impact did the project have on social and environmental issues?
13. Are you familiar with the Sustainable Development Goals?
14. I am going to share my screen to show you the 17 Sustainable Development Goals. *At this point in the interview share your screen with the interviewee (Appendix E).* The Sustainable Development Goals are an international framework from the United Nations adopted by 193 countries. The mission of the Sustainable Development Goals is to achieve a sustainable future for all by 2030. I will give you some time for you to go through the SDGs, and once you are done, could you please tell me which SDG do you think the project had a positive impact on?
15. I am going to share my screen to show you the 17 Sustainable Development Goals. *At this point in the interview share your screen with the interviewee (Appendix E).* I will give you some time for you to go through the Sustainable Development Goals, and once you are done, could you please tell me which Sustainable Development Goal do you think the project had a positive impact on?
16. What was the collaboration between any adults involved and the young participants like?
17. From the collaboration between the adults and the young participants involved, were there elements that contributed to any positive impacts on the project?
18. From the collaboration between the adults and the young participants involved, were there elements that led to any challenges?
19. What did you find most frustrating about working on this project?
20. What did you find most satisfying working on this project?
21. Was there anything unexpected that you learned through the course of this project?
22. What would you do differently next time?
23. **INSERT UP TO THREE QUESTIONS HERE THAT ARE SPECIFIC TO YOUR RESEARCH HERE.**

Thank you so much for answering my questions. Do you have any questions for me?

If you have any questions in the coming days don't hesitate to reach out to the Youth & Innovation Project team and we will be happy to answer them for you.

Thanks again for your participation in this interview.

End of interview.

Appendix E

Follow up Email

Thank you for taking the time to participate in an interview for the Youth Service & Intrapreneurship Programs - Impact Study.

We very much appreciate your time and insights.

The data collected will contribute to a better understanding of the impact of the [INSERT ORG NAME] youth service program had on participating organizations, local communities and social and environmental issues.

This study has been reviewed and received ethics clearance through a University of Waterloo Research Ethics Committee (ORE #40348). If you have questions for the Committee contact the Office of Research Ethics, at 1-519-888-4567 ext. 36005 or ore-ceo@uwaterloo.ca.

Your responses will not be linked to your name or the name of your organization anywhere in the report, and [INSERT ORG NAME] will not have access to any data that would connect your name or your organization to specific comments. However, the name of your organization, if applicable, will be included in the report in an appendix indicating which organizations completed the interviews. The data collected in this study may be used in future academic publications or in studies that further explore the impact of youth service programs, the responses will not be linked to your name or the name of your organization in any future publications. The information collected from this study will be kept for a period of at least seven years and will be password protected.

If you have any questions about the study or wish to withdraw your participation at any point up until the data has been analyzed and the report submitted to [INSERT ORG NAME] in [INSERT DATE] and your responses will be deleted, please do not hesitate to contact me.

Thank you again for your participation!

Sincerely,

[INSERT YOUR NAME & EMAIL SIGNATURE]