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Young Leader's Sustained Engagement in Environmental Action: A narrative inquiry

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YOUNG LEADERS' SUSTAINED ENGAGEMENT IN ENVIRONMENTAL ACTION: A NARRATIVE INQUIRY

By

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Abstract

Young people have been identified as key stakeholders in taking a leadership role in addressing environmental issues, but more research is required to find out how to sustain young people's motivation for environmental action over time. The present study investigated this through narrative interviews with eleven environmental leaders who attended a conference called *IMPACT! Youth Conference for Sustainability Leadership* in 2009 or 2011. Drawing upon the literature on life paths to environmental action (Almers, 2013; Chan, 2009; Chawla, 1998, 1999; Harré, Tepavac, & Bullen, 2009) the interviews incorporated an exercise that asked participants to plot important events in their lives and to use the events to graph their engagement over time. The data analyzed included interviews that built upon these engagement graphs drawn by participants during the interviews. The findings indicated that competency (the knowledge of an issue, skill-development and self-efficacy), identity development and relatedness (sense of community) were highest while participants attended university. Competency and identity development were found to be cumulative, but relatedness fluctuated, directly impacting the level of engagement participants had. Developing a supportive community and finding relatedness appears to be important for facilitating sustained engagement in action. This study provides important insight into how young people can motivate themselves and be supported to sustain their environmental engagement over time.

Keywords: youth, motivation, environmental action, engagement, sustainability

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Our physical, psychological, and collective well-being is dependent on the health of the natural environment. Ongoing environmental degradation, including global climate change, poses a serious threat to ecosystems and to humanity. Despite declining public concern regarding climate change (Scruggs & Benegal, 2012; Weber & Stern, 2011), there is scientific consensus that global climate change is a product of human activities (IPCC, 2013). The consequences of our actions for people across the world are not shared equally (IPCC, 2013). In this regard, climate change is a matter of social and environmental justice, thus making the issue of global climate change relevant to community psychologists who pursue values of social justice and the well-being of individuals and communities (Riemer, 2009). Despite this relevance to community psychologists, the field has largely neglected the issue (Riemer & Reich, 2010), exposing a gap and creating an opportunity for community psychologists to host meaningful dialogue in order to facilitate community-based action. The magnitude and complexity of climate change demands we go beyond simple behaviour changes that tend to trivialize the problem by suggesting that personal sustainable practices alone will solve the climate crisis. In both academic literature and global reports, it has been suggested that only a radical paradigm shift which fundamentally alters our relationship with nature can move us towards a sustainable mode of living (Blythe & Harré, 2012; Global Humanitarium Forum, 2009; Riemer & Reich, 2010; Riemer, 2010). This shift will require a holistic approach, one that engages numerous stakeholders at various levels, particularly the younger generation whose future is truly at stake (Flanagan & Sherrod, 1998).

While the value of youth engagement is critical to active civic participation (Kassimir & Flanagan, 2010; MacKinnon, Pitre, & Watling, 2007; Pearce & Larson, 2006) and the urgent need for action on climate change is well recognized (Global Humanitarian Forum, 2009; Jensen

& Schnack, 1997; Riemer, Lynes, & Hickman, 2014; United Nations, 2004; United Nations. Department of Economic and Social Affairs, 2010), there is only a limited amount of research focused on youth engagement in environmental action, and even less on what sustains young people's motivation to remain engaged over time. Research on youth engagement has tended to focus on methods of mobilization with emphases on individual behaviour rather than collective actions that aim to influence cultural change. This study begins to address this gap of understanding how young people sustain their commitment to environmental action by focusing on the motivations of young environmental leaders who participated in the *IMPACT! Youth Conference on Sustainability Leadership* in 2009 or 2011. The purpose of this research is to contribute to the growing body of knowledge about youth engagement in environmental action. This research presents a deeper understanding of the contextual factors, conditions and processes that contribute to sustained motivation to engage in environmental action among young adults from their perspective. More importantly, it investigates how to sustain young people's motivation in creating lasting, actionable change into the future. To investigate this, I used a narrative approach in my interviews with eleven participants to understand how young environmental leaders sustain their motivation to remain engaged. It adds to the many voices calling attention to the importance and relevance of action on climate change in the community psychology literature. The following section provides context to my research and reviews existing literature on youth engagement in environmental action.

Literature Review

I began by looking into scholarly literature and reviews about youth civic, social, and political engagement. I then narrowed my search to youth environmental engagement and action. Within this literature, I decided to focus on two types of motivations: 1) initial motivations to become engaged in environmental action and, 2) ongoing motivations to sustain this work. In

order to capture the diverse voices and perspectives of the field, I used a methodologically inclusive research synthesis approach to help construct connected understandings in the corpus. For the purposes of this review, the terms *youth, adolescence, young adulthood* and *young people* are used as they are in the original studies. I assume these terms are interchangeable, while recognizing that there are many developmental differences in regards to the use of the various terms.

I will go on to discuss the extant literature on youth engagement, including important definitions and current trends, to provide foundation for the conceptual frameworks on youth engagement, which I will examine. Next I will review the findings on youth engagement and motivation, and then specifically in environmental engagement. Lastly, I will examine self-determination theory as fundamental premise of motivation, which will serve as a theoretical context for interpreting my results in the discussion section.

Context and Scope

The role of young people. As key stakeholders in the fight against climate change, young people have both distinct concerns and responsibilities. The future consequences of climate change and environmental degradation will affect young people most acutely throughout their lives. It is therefore important that they are encouraged to "engage in new forms of action and activism that will generate effective responses to ecological challenges" (Global Humanitarian Forum, 2009; J. Hansen et al., 2013; United Nations, 2004, p131). Young people represent a population in which significant gains can be made for long-term change if they are willing to challenge the status quo (Harré et al., 2009). For instance, corporations often target the youth demographic because of their disposable income and potential for establishing high-consumption patterns of spending at a young age (Kasser, 2016; United Nations, 2004).

Supporting values of materialism aligns with the dominant capitalist discourse that relies on insatiable consumption. Studies have shown that people who have strong materialistic values engage in fewer pro-environmental behaviours and have higher ecological footprints than those who place a low priority on materialism (Brown, K.W. & Kasser, T., 2005; Kasser, T., 2016). Behaviours of consumption are aided with the ubiquity of technology and a globalized marketplace; there is now greater distance between consumer's decisions and the environmental impacts of these choices. However, if young people can be engaged in critical consciousness early, they can develop the skills necessary to withstand the pressures of advertising and the pervasive culture of consumption. The new generation has the power and potential to move beyond simplistic "green consumerism" and towards becoming fully engaged ecological citizens (Corriero, 2004; Hickman, 2012; Riemer et al., 2014; United Nations, 2004).

There are many compelling reasons to support youth participation in environmental action and leadership development: firstly, young people often have a openness to change that challenges the status quo and presents fresh, innovative solutions (Harré, 2009). This is illustrated by the fact that many cultural revolutions and political movements have been driven by younger generations (Blythe & Harré, 2012; Ginwright & James, 2002). For instance, young people had a significant role to play in the civil rights movements and protests against the Vietnam war in the 1960's and 70's (Ginwright & James, 2002; Quiroz-Martinez, Wu, & Zimmerman, 2005). In the climate movement internationally, young people are at the helm of large climate change organizations such as *350.org*, the *Canadian Youth Climate Coalition* and *Power Shift.* These groups take a critical perspective and an action-oriented approach to pressure governments and corporations on policy while also creating change at the grassroots level.

Aside from having a greater stake in future outcomes and actions related to climate change, young people are also well-placed to take action because they have the capacity to reach

diverse audiences and are therefore effective messengers (Riemer & Patterson, 2009). Moreover, youth often identify innovative ideas and develop new forms of action that tend to generate effective responses to environmental issues (Campbell & Erbstein, 2012; Riemer et al., 2014; United Nations, 2004). For instance, the Indian Youth Climate Network organized an electric car caravan that drove the longest procession ever attempted. Along the way, the group conducted leadership trainings, and collected local solutions to climate change that were disseminated in ways that appealed to other youth, like videos on social media (United Nations, Department of Economic and Social Affairs, 2010). The affinity young people tend to exhibit towards social media and communication technology facilitates this process and allows for easier community organizing and sharing of innovations. Lastly, since the environmental movement came of age politically in the 1970s, a renewed generation of environmental activists is necessary to combat "the graying of the greens" (United Nations, 2004, p.134). At the most rudimentary level, young people serve as a generational replacement of engaged elders before them– an inescapable reason for fostering engagement and leadership opportunities for them (Flanagan & Sherrod, 1998; Watts & Flanagan, 2007; Wray-Lake, Flanagan, & Osgood, 2009)

Youth Burnout. Although youth are incredibly resilient and willing to take risks, burnout and discouragement are common realities in a climate of political indifference and institutional inertia (Mannarini & Fedi, 2012; Mazur, 2011). Environmentalists are particularly vulnerable to burnout due to the overwhelming magnitude of the crisis combined with consistently limited resources (Beauchamp, 2009; Thomashow, 1996). In large part, maintaining environmental advocacy relies on the ability of advocates to sustain themselves emotionally and spiritually despite continual challenge and resistance, both socially and politically (Lysack, 2012).

Youth conferences. One potential means of igniting or revitalizing the motivation of young people is through conferences and gatherings (Arnold, Cohen, & Warner, 2009a; Blythe & Harré, 2012; Chawla & Cushing, 2007; Pancer, Rose-Krasnor, & Loiselle, 2002). Conferences give youth a voice, allow them to connect with peers, encourage political participation, and foster mobilization at the community or government level for meaningful change (Arnold, 2009). Youth conferences were found to be a developmental benefit to the youth, and had a wider societal benefit by fostering youth empowerment by actively participating in decision-making (Pancer et al., 2002).

Youth Engagement

Emerging adulthood. In the context of Western culture, young people are often allowed a prolonged period of independence, marking a time of personal transformation that lays a foundation for future career paths. Arnett (2000) proposed the term *emerging adulthood* to identify this pivotal transitional time between adolescence and young adulthood. Emerging adulthood is a socially constructed concept in the context of Western culture and is typically understood to include young people from their late teens to mid-20s. It is a period of profound change distinct from both adolescence and young adulthood because it is considered "a time of relative independence from social roles and normative expectations" (Arnett, 2000, p.469).

Environmental behaviours and actions. Youth engagement refers to "the meaningful participation and sustained involvement of a young person in an activity, with a focus outside of him or herself" (Pancer, Rose-Krasnor, & Loiselle, 2002, p. 49). This definition is important in the context of environmental advocacy because it makes an important distinction between degrees of pro-environmental behaviour: personal practice and action (Alisat & Riemer 2015). Whereas "pro-environmental behaviour" as a personal practice is typically defined as "behaviour

that consciously seeks to minimize the negative impact of one's actions on the natural and built world" (Kollmuss & Agyeman, 2002, p. 240), while action is understood more broadly to be a deliberate intention to act collectively to create varying degrees of political, social, and/or cultural change (Alisat & Riemer, 2015).

Stern (2000), breaks action and behaviour down by identifying three types of "significant environmental behaviour": 1) environmental activism, 2) non-activist behaviours in the public sphere, and 3) private-sphere environmentalism (i.e. personal practices). Environmental *activism* is demonstrated when there is active involvement in an organization or demonstration, which has a shared goal of improving the status of the natural environment. This is usually achieved through: physical environment improvements, community education, inquiry (e.g. community assessments, monitoring), advocacy for policy change, or producing sustainable products or services (Schusler, Krasny, Peters, & Decker, 2009). All of these actions have sustainable behaviour change at the core with the ultimate outcome of creating some form of societal change. This action often aims to create change at a systemic level; thus, a high level of motivation is required to sustain this commitment (Alisat & Riemer, 2015; Jensen, 2002). Jensen (2000) distinguishes non-activist behaviours in the public sphere to be both active environmental citizenship (i.e., joining or contributing to environmental organizations, signing petitions, etc.) and those who support environmentally progressive public policies, such as the Suzuki Foundation's Blue Dot Movement in Canada – a grassroots movement working towards amending Canadian law to recognize citizens' rights to a clean and healthy environment. Non-activist behaviours in the public sphere require less sustained commitment than environmental activism, but are important because they are motivated by environmental concern and have a broad public and social impact. Lastly, as opposed to activist and non-activist behaviours, private-sphere environmentalism relates more closely to the individual in the form of a personal

practice. Personal practices such as home waste disposal choices and "green consumerism" have minimal impact at the systemic level, require much less commitment, and may not be motivated by strict environmental concerns. Stern (2000) categorizes all three of these as "environmentally significant behaviours", but if the previous definitions presented were applied, the first two would be categorized as actions, as they aim to create change in the community, and the latter as personal practice, restricted to the private sphere. In the environmental action scale developed by Alisat & Riemer (2015), they also differentiate between personal practices (individual behaviour) and actions. They see personal practices as distinct from actions, which are described as "more collective in nature and focus on system-level change" (p.13).

Current trends in youth engagement. Youth civic engagement is increasingly recognized as an essential feature of healthy, sustainable communities (Bermudez, 2012; Campbell & Erbstein, 2012; Pancer, Pratt, Hunsberger, & Alisat, 2007; Schusler & Krasny, 2010; Schusler et al., 2009; Yates & Youniss, 2006; James Youniss et al., 2002). Despite known benefits, some literature suggests declining youth engagement in the sociopolitical sphere accompanied by a decline in personal responsibility for the environment (Bermudez, 2012; MacKinnon, Pitre, & Watling, 2007; Watts & Flanagan, 2007; Wray-Lake et al., 2009; Youniss et al., 2002). One explanation offered for environmental inaction and general societal apathy is the free-riding phenomenon, in which those who benefit from resources, goods, or services rely on others to pay for them. In this case, it might be the idea of benefiting from large numbers of other people taking action (Quimby & Angelique, 2011).

A relatively new and extensive collection of works offers a broadened understanding of what is typically conceptualized as "youth engagement." The *Handbook of Civic Engagement with Youth,* edited by Yates and Youniss (2006), challenges traditional definitions of youth engagement activities, such as participation in electoral politics, volunteering in community

organizations, and reading mainstream newspapers. The contributing authors offer new insights that highlight the complex and multidisciplinary nature of youth civic engagement; they suggest it is not declining, but rather, changing form. It was perceived that growing global youth apathy was stemming from a disinterest in civic and political affairs, democratic responsibility and lack of investment in community well-being. Yates and Youniss (2006), as well other academic and non-academic literature, found youth apathy is indeed increasing, but it is now directed towards what is considered to be traditional forms of civic action: formalized political institutions, hierarchical organizations, and the passive consumption of mainstream news (Bermudez, 2012; MacKinnon et al., 2007; Watts & Flanagan, 2007). The changing nature of civic engagement among young people now suggests there is a rise of critical consciousness favouring involvement in grassroots organizations, volunteering with horizontally integrated organizations, and online blogging journalism. Often these activities are guided by justice-oriented values and principles, such as sustainability, equity, and social inclusion (Bermudez, 2012). There are many explanations for the shift. Some of these include: widening circles and patterns of civic engagement through emancipatory social movements; the strengthened voices of immigrant and disenfranchised communities that are challenging traditional civic views; and, young people looking to connect with a higher social purpose (Kassimir & Flanagan, 2010; Watson, Hollister, Stroud, & Babcock, 2011). Overall, this trend marks a distinctive shift in youth engagement that provides a promising opportunity for collective environmental action.

Self-Determination Theory

Research that has investigated themes among adult activists and engaged youth have found strong intrinsic factors related to that which drives them in their work. Some examples include identity development, a bolstered sense of self-agency, emotional investment, deep

values aligned with meaningful action and experiences (Arnold et al., 2009b; Chan, 2009; Harré, 2007; Harré et al., 2009; Kovan & Dirkx, 2003; Martínez, Peñaloza, & Valenzuela, 2012). While external influences are an important consideration, particularly for youth who may have mentors (Arnold et al., 2009), the strongest factors sustaining engagement are typically self-determined. Self-determination theory (SDT) is a macro theory of human motivation pioneered by Edward Deci and Richard Ryan (1985). SDT examines the degree to which an individual's behaviour is driven by intrinsic motivation – that is, the notion that an activity is carried out simply because it is interesting or gratifying rather than being motivated by an external goal, such as fame or wealth. It is widely recognized that intrinsically motivated tasks result in greater conceptual understandings, better retention of information, enhanced creativity and are more likely to continue over time (Darner, 2009; Deci & Ryan, 1985). Deci and Ryan conceptualize three innate psychological needs to promote intrinsic motivation: (1) *autonomy*, or the need to feel self-determined; (2) *competence*; and, (3) *belonging*, or the need to be connected to others, which is also known as *relatedness*. SDT involves the instinctive capacity and drive of humans to engage with and be engaged by the world around them. The essence of self-determination theory is nicely summarized by one of Deci's central research questions: "How can people create the conditions within which others will motivate themselves?"

SDT as a conceptual framework for environmental action. Self-determination theory (SDT) offers two significant ways of understanding what motivates youth to engage in environmental action initially and how the motivation is sustained over time. It does so by (1) addressing contextual and interpersonal conditions needed to facilitate self-determination; and also by (2) addressing the process of internalization – the change by which external forces that start as catalysts for motivation become integrated into a person's self-identity (Pelletier, 2004). Studies, mostly in the area of environmental education, have looked at how to apply self-

determination theory in order to explain pro-environmental behaviours or education, but not action (Darner, 2009; Gifford, 2011; Osbaldiston & Sheldon, 2003). However, research that has examined the lives of activists report greater intrinsic satisfaction for continued motivation when personal identity aligns with the three pillars of SDT (autonomy, competence, and relatedness), (Harré et al., 2009).

Sustained Motivation and Youth Engagement

There is a well-established body of literature on youth engagement. Upon review, I identified three conceptual frameworks of youth engagement applicable to environmental action, which share similar core components, as one became the foundation for the next version of a model: (1) the activity; (2) the initiating or catalyzing factors, which influencing the uptake of an activity; (3) sustaining factors, which influence whether or not participation continues; (4) mediators and moderators; and (5) outcomes of engagement (Centre for Excellence for Youth Engagement, 2007; Pancer et al., 2002; Riemer et al., 2014). Motivation to engage in environmental action falls within this youth engagement framework as catalyzing or initiating factors and sustaining factors. Initial motivations for engagement have been well researched (Almers, 2013; Chawla, 1999; Dono, Webb, & Richardson, 2010; Kollmuss & Agyeman, 2002; Pearce & Larson, 2006), which describe conditions leading up to the decision to engage in an action. However, research on the conditions that help to sustain motivation to engage in action (i.e. the sustaining factors) over time is scarce.

The three identified youth engagement frameworks are presented collectively and used to organize the literature review of youth engagement with a focus on the motivational factors described and in the context of the Self-Determination Theory presented in the previous section. The three frameworks, as well as both the initiating factors and the sustaining factors, are

considered on ecological levels (individual, social, and system). It is important to note that significant experiences or gatherings were found to be a valuable source of engagement, which will be elaborated on in a subsection below. Findings specifically related to motivation for environmental action are discussed within each section.

Individual level. There is a growing body of research, which indicates youth involvement in civic action to be a significant component of healthy development. Studies have found numerous positive development outcomes for youth who are civically engaged, such as enhanced psychological well-being, increased self-esteem, greater sense of personal agency and self-directedness, critical thinking, and effective communication (Centre for Excellence for Youth Engagement, 2007; Pancer et al., 2002; Riemer et al., 2012). There are a variety of factors that contribute to young people's initial motivations to engage in environmental action: personal values, beliefs and norms play an instrumental role (Almers, 2013; Blythe & Harré, 2012; Dono et al., 2010; Harré, 2007) and sometimes, motivation comes from feelings of regret, responsibility or guilt (Osbaldiston & Sheldon, 2003). All of these can motivate, but initial action will only occur when there are feelings of competency present, as is outlined in SDT.

Identity. The development of identity is a significant and reoccurring theme in the youth engagement literature. In a study investigating what distinguishes adolescent activists from the uninvolved, one finding Pancer, Pratt, Hunsberger, and Alisat (2007) reported was that high school "activists" and nonpolitical community "helpers" had indicated a higher level of identity development than their peers who were considered to be uninvolved, suggesting that these roles helped give coherence to life narratives. The literature highlights the importance of ongoing engagement in identity development. Repetition of engagement activities results in positive outcomes, leading to a deeper integration into identity, that is, it becomes a "greater part of who that person is" (Harré, 2007, p.719). It also demonstrates continued youth participation in

meaningful civic activities contribute to the development of elements of an identity that are a strong predictor for future engagement (Martínez et al., 2012; Yates & Youniss, 2006). To apply SDT here, psychological needs of competency and autonomy must be present for engagement to start and continue. Repetition of the activity with these components present reinforces the process of internalization, creating a stronger sense of self-identity (Pelletier, 2004)

Young people are at a critical period in their life for identity formation and psychological changes; it is at this time of life when behaviours and values become deeply ingrained in constructions of the Self (Blythe & Harré, 2012). In relation to environmental work, the concept of *ecological identity* – simply defined as the way a person constructs their relationship to the Earth - plays an important role in environmental engagement and activism (Thomashow, 1996). Ecological identity is developed through environmental action or education by critically reframing a person's point of view to, essentially, "restructure values, reorganize perceptions and alter individuals' self-directed, social and environmentally directed actions" (Borden, 1986; Thomashow, 1996, p. 4). Furthermore, ecological identity and collective action have been found to have a mutually reinforcing relationship crucial to the development of ecological citizens rather than simply "green consumers" (Dono et al., 2010; Riemer et al., 2014). In other words, youth engagement in environmental action plays a role in developing identity, and those who have what has been identified as an ecological identity tend to engage in environmental action.

For example, in her dissertation on commitments of environmental activists, Chan (2009) discovered that those who had long-term commitments tended to share similar qualities: they had a developed sense of self-efficacy, a personal philosophy of value-based living, an outlook of realistic optimism and strong convictions linked to deep feelings of connectivity between community and nature (Chan, 2009). Chan's dissertation is particularly interesting as we share similar approaches to investigate how environmental leaders express long-term commitment

through notions of personal identity. Chan (2009) uses a modified version of McAdams' (1995) life narrative interview to investigate participants' levels of commitment vis-à-vis ecological identities.

Similar results regarding personal values and attitudes were found in other research studies with interviews conducted with political and social activists. The maintenance of integrity, high levels of personal efficacy, a holistic view of life and a sense of belonging were observed to also form the foundation for ongoing motivation among political activists (Harré et al., 2009; Passy & Giugni, 2000). However, variables concerning the degree of long-term commitment of activists were also not homogenous. What sustains commitment can also vary greatly between individuals, depending on the variety of accessible tools and according to personal context (Chan, 2009).

Social level. Youth involved in civic affairs report healthier interpersonal connections with social development, which includes peer support, positive relationships with adults and pro-social norms (Busseri et al., 2006; Hansen, Larson, & Dworkin, 2003; Youniss et al., 1999, 2002). Interpersonal variables such as relationships with parents, friends, role models and teachers are strongly connected to young people's initial engagement with civic activities (Arnold et al., 2009; Pancer & Pratt, 1999; Martínez et al., 2012). The influence of friends and family can contribute to social pressure or coercion to engage in particular behaviours (Osbaldiston & Sheldon, 2003). Youth in particular have reported peers and adult leaders as playing an important role in motivating them to become more actively engaged, which can serve as a source of support for sustaining motivation (Pearce & Larson, 2006).

Through environmental education, teachers play a critical role in raising awareness and conveying important global and local issues to youth. Many students cite classroom settings and teachers as the initial inspiration for deciding to take part in an environmental activity as well as important sources of ongoing support (Blythe & Harré, 2012). At home, parents play a critical

role in the development of critical thought, instilling values in younger adults and influencing the kinds of activities with which youth engage (Pancer et al., 2007). In an interview study with young environmental leaders, all participants identified parents as having influenced their initial decision to get involved, albeit sometimes indirectly, by modeling and living out values day-to-day (Arnold et al., 2009b).

Community involvement can also be mandatory or a consequence of social pressures. For instance, in 1999, the Province of Ontario mandated a compulsory 40 hours of community service for high school students in an effort to counteract the declining trend in youth engagement. Research investigating the effects of this mandatory program suggest there is no negative influence associated with their experience of this mandated activity, with respect to their attitudes towards philanthropy, or subsequent civic engagement (Brown, Pancer, Henderson, & Ellis-Hale, 2007). The experiences were positive when students associated their volunteer time with emotional fulfillment and they felt they had made a positive impact in their community. While mandatory community service exposes youth to new experiences, external motivators of engagement such as these have generally been demonstrated to be unsustainable in the long-term (Frey & Oberholzer-Gee, 1997), unless it involves sustained commitment to one organization (Brown et al., 2007).

Interpersonal variables are known to be an important for sustaining motivation (Arnold et al., 2009b). The people in the lives of those engaged in environmental action were typically noted in interviews as being influential, inspirational or important for providing opportunities for participation (Arnold et al., 2009b; Harré et al., 2009; Passy & Giugni, 2000). In comparing the interviews of the activists who had maintained their commitment and those who had not, it appeared that strong links between their activism life-sphere and the various other life-spheres,

such as family, study and work, was an important factor in sustained motivation (Passy & Giugni, 2000).

People who were identified as having long-term commitments to environmental, social, and political causes tended to integrate these commitments with their personal identities (Botetzagias & van Schuur, 2010). The importance of identity extends to organizations as sustained social action was found to be related to identification with the goals of the organizations with which activists affiliate (Martínez et al., 2012). Community stakeholders such as organizations or grassroots groups, can be motivating because they foster a sense of community, belonging, and connectedness that feeds the process of internalization of identity (Harré et al., 2009; Passy & Giugni, 2000). Membership in these groups also evokes a sense of collective agency and a shared appreciation for small wins that also support long-term involvement (Martínez et al., 2012).

System level. In addition to the social and interpersonal benefits of engagement, the wider system of cultural norms benefits from the energy, creativity, ideas, and values that youth bring to organizations and activities (Pancer et al., 2002). By actively participating, young people have the opportunity to build social capital in their communities, enhance their capacity as civic actors and help shape community development (Quiroz-Martinez et al., 2005; Yates & Youniss, 2006). To reiterate what was previously presented, this is important because it sets the foundations for a life-long active citizenry to build community resilience. Furthermore, early environmental participation has been found to foster attributes characteristic of "ecological citizens" and grassroots community leaders; this is achieved by connecting youth to society, heightening awareness of political issues, and increasing social responsibility (Hickman, 2012; Martínez et al., 2012; J. Youniss, McLellan, & Yates, 1997).

Participation in community committees, government offices, and environmental organizations can place young people in important decision-making positions. Leadership roles give community youth a voice in local planning, which brings a unique perspective and can serve to more effectively hold decision-makers accountable (Campbell & Erbstein, 2012). It is important that youth are involved with processes that allow for genuine decision-making. Through active participation, young people gain a sense of ownership, of empowerment, and of control, which is associated with actual power to create change (Maton, 2008; Pancer et al., 2007; Schusler et al., 2009). In a climate of disenfranchisement, it is imperative to continually create settings in which to support youth empowerment, personal competence, and capacity for meaningful action.

Experiences. In addition to the various system levels, many experts have found that experiences with the natural environment and local community form the foundation upon which environmental commitment is built (Almers, 2013; Arnold, Cohen, & Warner, 2009; Blythe & Harré, 2012; Chan, 2009; Chawla, 1998, 1999, 2006; Ewert, Place, & Sibthorp, 2005; Harré, Tepavac, & Bullen, 2009). Research demonstrates that negative experiences, such as being affected by pollution (Chawla, 1999), spending a significant amount of time outdoors at a young age (Arnold et al., 2009b), as well as an attachment to a natural environment (Scannell & Gifford, 2010), can also contribute to the development of an emotional connection with nature. It is clear from the literature that strong connections with nature have shown to be a predictor of pro-environmental behaviour. Therefore, it is not surprising that many environmentally engaged youth hold an empathetic view towards the environment, which fosters a sense of ecological responsibility and stewardship (Chawla, 2006).

Conferences. Events or gatherings such as conferences, can bring youth together to share experiences and knowledge, while also serving as a platform for the germination and catalyzing

of new ideas (Blythe & Harré, 2012). In several studies, young people have specifically identified conferences as significant events leading to an increase in their environmental awareness, the development of new skills for action, the discovery of inspiration, and the building of important networks and connections with their peers (Almers, 2013; Pancer et al., 2002). As a result of these connections, these conferences have been found to facilitate the mobilization of collective action amongst youth at a local level (Pancer et al., 2002). Indeed, conferences can often break down barriers of power by bringing youth into direct contact with government decision-makers and to exchange ideas and perspectives. This contact benefits both parties and can serve as an empowering experience for youth (Almers, 2013; Pancer et al., 2002). Conferences can be intense experiences and sometimes result in a pivotal "turning point" in the lives of young people leading to dramatic change in self-understanding and values (Arnold et al., 2009b; Pancer et al., 2002; Rose-Krasnor, 2009). Due to the short duration of these experiences (usually a few days at most), they are often overlooked in the literature on youth engagement (Rose-Krasnor, 2009). Having said this, there are other experiences that cultivate environmental engagement than conferences. Some of these include entering a job in an environmentally-related field, joining an environmental organization or protest, and reading books that contribute to new understandings or perspectives (Chawla, 1999).

Overall, the literature on motivation for action focuses on identifying individual, interpersonal and organizational factors that contribute to sustained motivation. Although qualitative interviews were conducted, the complexities of what it means to be engaged and the processes of how it was experienced was not typically the focus of the studies reviewed. A study with adult activists by Mannarini and Fedi (2012) also identified this gap in the literature surrounding processes of environmental action. Mannarini and Fedi (2012) focused on a limited

set of processes, specifically those related to the "internal" side of engagement, such as commitment, emotional stability and individual-organization relationship with adult activists.

Disengagement and burnout. Engaging in any form of activism requires an investment of large amounts of time and energy. Sustaining passion and high levels of commitment over time can be difficult, particularly when the nature of the work involves the psychological burden that comes with maintaining awareness of what are perceived as overwhelming societal issues (Maslach & Gomes, 2006). For committed environmental activists, the repetition of negative messages can create feelings of despair, which may lead to health conditions such as burnout, fatigue, and depression (Thomashow, 1996). Thomashow (1996) has found that environmental activists "tend to underestimate the psychospiritual consequences of their work" (p. 143). Burnout, or any other conditions contributing to negative feelings, inevitably leads to disengagement and can be regarded as a deteriorating factor working against sustaining factors.

Despite overwhelming stress, activists often express the view that personal needs, such as self-care practices, should not be considered a priority (Kovan & Dirkx, 2003). In the context of the environmental movement for sustainability, this concept of self-preservation in a demanding climate has been referred to as *personal sustainability* (Beauchamp, 2009). Personal sustainability speaks to the paradoxical challenge faced by environmental activists as they struggle to incorporate the same values they advocate in support of the natural environment and applied them to their own well-being (e.g. healthy eating, balanced lifestyle) (Beauchamp, 2009). Maintaining environmental advocacy will, in large part, "rely on the ability of advocates to sustain themselves emotionally and spiritually in the face of enormous challenges and political resistance to shifting to a sustainable society" (Lysack, 2012, p. 264).

Some research suggests that burnout is an inevitable part of the long-term engagement process for committed activists, but can be managed (Anderson, 2009; Beauchamp, 2009;

Downton & Wehr, 1998; Maslach & Gomes, 2006). Sources of burnout as well as strategies to identify, prevent and overcome burnout have been identified by lifelong activists (Maslach & Gomes, 2006). However, it is unclear whether these conditions can be extended to the experiences of younger people, and whether these same conditions exist among those who engage in environmental action as leaders, yet do not consider themselves radical activists.

Summary of Literature Review.

Taken together, the studies reviewed begin to illuminate the complex factors involved in fostering ongoing motivation for environmental action. Overall, the literature on youth engagement provides insights into motivation for action through identifying individual, interpersonal and organizational factors that contribute to initial motivation and sometimes, sustained motivation. However, they are each limited by their tendency to exclude samples of young people, a lack of focus on environmental action, by being restricted to a formalized education setting, and/or lacking a self-determination perspective. To effectively investigate sustained motivation, there needs to be a stronger focus on the complexities of what it means to be engaged and the processes of engagement as experienced by young people. In the present study, I am looking to fill this gap on the processes of sustained engagement. In doing so, I take a more holistic and inclusive approach to the processes of engagement within different contexts as part of a broader path of engagement that mediate young people's capacity to persist in environmental action. This is different from past studies that have taken a similar approach but focused primarily on adult activists in specific contexts or young people but in a specific context or time period.

The factors leading to sustained engagement identified in the literature were closely aligned with elements of SDT. SDT provides insights into the potential outcomes and processes

of engagement experiences as well as how conditions were created that maintained, slowed or prevented ongoing motivation in youths. Considering these findings, along with the severity and complexity of global climate change, the need to engage today's youth in sustained efforts for long-term environmental action and to understand how to create conditions that sustain self-determined motivation is greater than ever. Studies identified in this review have looked at the link between SDT and environmental behaviours but none of the literature I was able to identify has investigated the processes by which youth sustain their motivation in environmental action through the lens of SDT.

Research Questions and Rationale

Fostering youth leadership in environmental action is a critical part of the cultural paradigm shift required to effectively address climate change. Young people are already at the forefront of the environmental movement, driven by passion and energy. Youth conferences and gatherings have been shown to have important influence on the engagement of young people by renewing motivation, creating a sense of collective agency, building confidence in capabilities, increasing a sense of community and presenting opportunities for mobilizing action (Arnold et al., 2009a; Blythe & Harré, 2012; Pancer et al., 2002). However, lack of political will and environmental degradation that compounds daily, threaten engagement efforts in terms of burnout, feelings of powerlessness, and insufficient emotional and psychological support. Although initial motivation is often high, an understanding of how to foster conditions for renewed motivation is instrumental for ensuring environmental action efforts are sustainable and effective in the long-term.

Objectives and research question. Given the findings in the literature review, my research objectives for this thesis were: (1) to gain a deeper understanding of the contextual

factors and processes that contribute to sustained motivation for engagement in environmental action among young people; (2) to understand the effect of the *IMPACT!* conference on sustaining participants' motivation to engage in sustainability initiatives; (3) to understand the common experiences of young sustainability leaders and make recommendations to inform the design of engagement programs to encourage long-term action; and (4) to contribute meaningful research from a community psychology perspective to the emerging body of literature on youth environmental engagement. The research questions that guided this study are: (1) What are some of the paths of young people's engagement in environmental action that either lead to sustained engagement or disengagement? (2) How do conferences, like *IMPACT!*, contribute to the process of sustaining motivation to engage in environmental action among young people?

Methods

Personal Standpoint

In addition to my strongly held values of conservation and my appreciation of nature, my personal motivations for working in the environment field were established both professionally and academically while attending university. My interest in grassroots climate change action led me to start working for a youth-led environmental organization, *Reduce the Juice* (RTJ), in the first year of my undergraduate degree. Working with *Reduce the Juice* was my first experience with collective action on climate change. It was an empowering experience; I learned organizational skills and created measurable change in our community. My involvement with RTJ led to meaningful mentoring relationships and decision-making positions that have contributed to my growing sense of empowerment and competency related to these issues, as well as shaped my identity and position as an academic in the environmental field.

In 2009, I was also involved in issues of sustainability as a participant of the inaugural *IMPACT! Youth Conference for Sustainability Leadership* at the University of Guelph. This conference was a turning point in my personal journey of environmental action. I was introduced to environmental leaders my own age that not only shared my values and passion for sustainability, but also the understanding of the gross injustices that were occurring and the need for radical action on climate change. Furthermore, the sense of community created among participants has been a lasting source of motivation and support throughout my own efforts. I am currently both an alumni and a member of the *IMPACT!* steering committee.

I acknowledge that I hold strong convictions regarding the environment and sustainability that influence my research and perspectives. My experience with the topic carries with it both advantages and challenges. My history with *IMPACT!* places me as an insider in this community. This had benefits for the research process; my existing relationships facilitated the recruitment stage and helped build trust between my participants and myself. The value of my experiential knowledge can also be used to enrich research analysis, allowing for greater insights, more contextually attuned hypotheses, and broad perspectives on the topic (Maxwell, 2005).

Research Design

It is evident from the literature review that motivation is a complex phenomenon. In a handful of studies looking at long-term commitments of activists, elements of intrinsic motivation as well as personal and identity development emerged as being the most important for sustaining engagement (Almers, 2013; Anderson, 2009; Botetzagias & van Schuur, 2010; Chan, 2009; Culley & Angelique, 2010; Darner, 2009; Harré, 2007; Mannarini & Fedi, 2012; Martínez et al., 2012; Nisbet, Zelenski, & Murphy, 2009; Rettig, 2006). In these studies, people tended to develop these values and deep feelings over long periods and through the formative influence of

people and experiences. These experiences also had the potential of leading to disengagement by way of psychological stress and burnout. To explore the field of motivation and environmental engagement, I used a survey to recruit participants for an interview, which was the primary focus of the data collection. The quantitative questionnaire established a baseline of environmental action among the target population of young adults, and captured some descriptive statistics, which I will present below. The questionnaire was followed by a qualitative interview using narrative methods better suited for understanding complex life narratives. This mixed-method approach is complementary as it "seeks elaboration, enhancement, illustration, and clarification of the results from one method with the results from the other method" (Greene, Caracelli, & Graham, 1989). While at first the research design appears to be fixed (methods have been chosen at the start of the research process), it could also be considered emergent according to Creswell & Plano Clark (2011), because the findings and interpretation of results from the quantitative portion of this study informed the kinds of questions asked in the interview portion.

Due to lower than expected participation, descriptive statistics were analyzed using Excel to compose a picture of the diversity of engagement. Each participant's score was summarized out of 130 for their engagement in environmental activities – the higher the number, the higher the engagement. The questionnaire acted as a secondary data set by providing supplementary information on each respondent and helped me to develop probes unique to each interview participant. I did this by looking for patterns and identifying gaps in the data to help me build a list of probes to ask participants to expand on or explain. The line graphs shown in the questionnaire represented the participants' general path of engagement over time and I analyzed them by comparing them to other variables such as motivation. They provided a basic background context of interview participants with various experiences with engagement that ensured an assorted sample of experience. The graphs also helped to prepare the interview

participants to conceptualize their action in environmental work as a journey along a timeline.

Narrative interviews. The second part of the study involved 11 interviews, which used a narrative method. A narrative is the cognitive process that gives meaning to temporal events by identifying them as parts of an overarching plot (Polkinghorne, 1991). Simply put, a narrative is a story. It is the "mode of thought that best captures the experiential particularity of human action and intentionality, and involves reasons, beliefs and goals" (Baumeister & Newman, 1994, p.677). Using a narrative approach in research is subjective, but allows the experience of human development to unfold and to give meaning to the situations they find themselves in.

The aim of using a narrative approach was, firstly, to gain an understanding of the complexity and meanings of the experiences and conditions through which these young people have been able to maintain engagement in environmental actions. Secondly, I used this method to explore the significance and construct of an environmental identity within a self-determination framework. *Narrative identity* is a process by which individuals integrate and internalize life experiences to create an evolving story of the Self that evokes a sense of unity, coherence and personal life meaning (McAdams, 2002). The narrative identity is important in order to better understand how participants' commitment to sustainability arose in the first place. Thirdly, I looked at critical events and turning points in the lives of these young people, paying special attention to how experiences at conferences like *IMPACT!* contributed to motivation and if or how they change the trajectory of the engagement path.

Engagement graphs. Before each interview, participants were asked to reflect on their path of engagement and significant events in their life that influenced or altered that path, what had happened before that led to that event and to take a mental note of how they remembered feeling before, during and after the events. To understand sustained engagement, one must look at the individual's life path as a whole. This departs from McAdams' (2002) approach to the life

narrative, which focuses on critical events. Engagement graphs, as a means to explore sustained engagement, was a method developed by Dr. Manuel Riemer and me for the purposes of this study. The engagement graph, drawn by each participant, was designed to give a bird's-eye view into how each life event was cumulative and contributed to the conditions for the next event. After some initial questions during the interview, the participant was then asked to create a graph that reflected their engagement path (see Appendix D for participant graphs). During the interview, questions or probes I asked were often influenced by the participant's questionnaire responses as conversation naturally evolved, or based on events that the participant identified as influential in affecting their path. In one interview early on, one participant became a bit frustrated in the process because he said that his engagement line, which reflected his actions, did not necessarily reflect his interest in engaging in environmental action. When asked why there was a discrepancy between his engagement line and his interest, he listed several reasons, such as there were often times that he felt disconnected from the people and groups that he was traditionally engaging in activities with. He still had a desire to engage, but did not have a readily available opportunity.

The participant's feedback allowed for an emergent design in that the method to evolve into a co-created, iterative process to include a second line on the graph that more accurately reflected the participant's true experience: an interest line that followed their life path. The second line created allowed for deeper conversations about engagement. It was the discrepancy between participating in just the behavioural aspect of engagement and including information on the other two critical components of affect and cognition (Pancer et al., 2002).

Population and sampling frame. The target population for this study consisted of a group of young people who attended a Canadian university. Participants were also at the stage of life where they are considered to be "emerging adults" and have at some point demonstrated

leadership in environmental action. The decision to focus on this population stems from findings in the literature that suggest that young people in this demographic have the power and potential to create lasting environmental change (Corriero, 2004; Riemer et al., 2014; Riemer & Patterson, 2009). Privileged youth in particular have the opportunity to take action due to their relative power advantage in society (Corriero, 2004). Studies in the literature also report that youth in the emerging adulthood category are in a period of relative independence, as identity formation is shaped by values that become ingrained in a developing sense of Self (Arnett, 2000). At this time, youth engaged in environmental action may develop an *ecological identity* that enables more sustained motivation as it becomes a more integral part of the Self (Thomashow, 1996).

Youth leaders involved with the sustainability movement were recruited from a pool of 330 alumni from the 2009 and 2011 national *IMPACT!* conference held in Ontario, Canada. Since participants were already highly engaged, the sampling strategy used is most closely aligned with *purposeful intensity sampling*, wherein the aim is to capture exemplar or information-rich cases, but that are nevertheless still considered fairly typical cases (Patton, 2002). The intention behind using these exemplar cases was to highlight complexities inherent to the many paths of engagement as well as the variety of barriers and facilitators that influence sustained environmental action. To maximize the sampling pool, the questionnaire was made available in both English and French, as the conference was national and bilingual.

In phase one, the whole sample population was sent an email asking for the completion of the questionnaire. A post followed this on the *IMPACT!* Facebook page. Unfortunately, I received fewer respondents than expected: 20 completed the questionnaire in English and 2 completed it in French (2 were incomplete). From those 22, a smaller sample of 11 people was chosen for an interview using *purposeful sampling.* According to Guest (2006) a sample size of six to twelve interviews will reach the point of data saturation. For this study, saturation was

reached around the eighth interview, as there was very little new information provided. This is not uncommon when the sample is cohesive (Saumure & Given, 2008). For instance, a relatively homogenous demographic group will reduce the number of participants required to reach saturation based on somewhat similar life experiences. Given that the target population shares similar experiences (i.e., conference participants attending post-secondary institutions), are within the same category of "emerging adults," share common interests (i.e., environmental sustainability), and participated in lengthy interviews, the point of saturation was reached by the tenth interview.

Recruitment . Since alumni of the *IMPACT!* conferences were located across Canada, all recruitment was done electronically. There is already an established online network of *IMPACT!* alumni from the 2009 and 2011 conferences. This network was accessed for recruitment. The network hub is hosted on the *IMPACT!* central website (http://www.impactleaders.ca) only accessible to administration, steering committee members, conference partners and alumni. The Facebook group and email listserv was also utilized for recruitment purposes. As both an *IMPACT!* alumna and a member of the steering committee, I had access to all of these tools.

As an alumna of the conference and a mentor to cohorts that succeeded me, I had access to this group of young leaders that totaled over 550. I appealed to the group via email and Facebook, asking for their participation in completing a questionnaire for a study that was seeking to understand their experience and the phenomena of youth engagement in environmental action. The questionnaire was emailed to 330 recipients and posted to the *IMPACT! Youth Sustainability Leadership Program* Facebook group. At the time of posting this group had 550 members. There were fewer respondents to the questionnaire than expected. However, these responses nevertheless provided interesting results that helped inform and guide the interview process. In the questionnaire, participants were asked if they would be willing to be

interviewed for the present research. Once the questionnaire period closed and the data was analyzed, participants were then selected for an interview and notified by email. Arrangements were then made for an interview using Skype, or in-person, if possible. Wilfrid Laurier University's Research Ethics Board approved all procedures described here.

Participant Sample

Questionnaire. The result was 22 questionnaires returned, 20 complete and two incomplete. There were 11 respondents who identified themselves as male, eight as female, and one as trans/other. Of those who completed the questionnaire, 65 percent were enrolled in or had completed a degree related to the field of sustainability, such as environmental engineering, environmental resource management and urban planning with a sustainability focus.

Interviews. Of these participants, 12 agreed to be interviewed and one withdrew due to scheduling issues. Thus, 11 people were interviewed: six male (Roy, Ryan, Mike, Daniel Chad and Paul) and five female (Kayla, Priscilla, Lindsay, Carly, and Martha). At the time of the interviews, participants were in their mid-twenties (between 23 and 28). They came from four provinces in Canada (Quebec, Ontario, Saskatchewan and B.C.) and two lived outside Canada. All but three had finished post-secondary school (undergraduate or graduate) and identified as young professionals in the workforce. Two interviews were done in person, and the other nine were conducted online using Skype. Each interview was 60-90 minutes long. Almost all participants are white, and two are non-Canadian. The two that are non-Canadian no longer live in Canada, but they were enrolled in Canadian universities and experienced the life of a Canadian student.

Ethical considerations

Overall, there were minimal psychological and physical risks with this research. The most significant potential ethical concern to be aware of beforehand was feelings of guilt and inadequacy. Being in close age with the participants and a fellow *IMPACT!* alumnae, I was viewed as a peer. Although I possess social proximity to the participants, a certain power-imbalance was inevitable. As an *IMPACT!* alumnae interviewing other alumni, there was always potential for social desirability bias to embellish on the level of engagement to battle feelings of inadequacy or guilt. I safeguarded against this by first establishing trust and openness with the participant, assuring them that they were not being evaluated in any way. Once transcribed, the interviews were de-identified and names were replaced with pseudonyms to ensure the participants anonymity. The electronic transcriptions and all other collected data, including results of questionnaires, were stored in a password-protected file on my personal computer only.

Validity

Maxwell (2012) defines validity in a commonsense way as "the correctness or credibility of a description conclusion, explanation, interpretation or other sort of account" (p.122). There are many potential threats to validity in a research study and many strategies to ensure the credibility and reliability of the research. Here I have outlined three that stand out as potential threats to my study and how I subdued any threats.

Confirmation bias. Due to my extensive history with youth engagement, *IMPACT!*, and environmental action, the biggest threat to validity is confirmation bias. Through my experience over the years being immersed in this field, there was risk of the tendency to favour information that would confirm my own beliefs. To mitigate this potential threat, I developed my codebook by consensus coding to compare the themes found in the analysis to help ensure validity.

Misrepresenting findings and image management. A potential threat to validity regarding this research is bias due to my position as a member of the *IMPACT!* Steering Committee. Since I was involved in the design and delivery of the conference, any criticism of the *IMPACT!* conference created a risk that may have evoked an urge on my part to defend the rationale of the design, resulting in a dismissal or oversight of some potentially valuable perspectives. This could also lead to a misrepresentation of the findings or to issues of image management relating to the *IMPACT!* programme or myself. In this case, myself and the participant share a connection through our participation in the same event, but experiences and situations may differ, thus requiring me to be critically reflexive as a researcher (Finlay, 2002). To mitigate this threat to validity, I used the member-check strategy in the analysis. Once I have analyzed the transcriptions, I asked the participant to review it to confirm the findings or correct them if there is a discrepancy between my understanding and their intentions.

Reactivity. Maxwell (2012) defines reactivity to be "the influence of the researcher on the setting or the individuals studied" (p.108). Setting the right tone for a narrative interview is central to obtaining authentic data. Riessman (2008) finds that issues of power relations are of paramount importance in narrative inquiry. Researchers must create an atmosphere that enables "reciprocal and empowering interaction" (Cohn & Lyons, 2003, p.3) in order to produce rich and meaningful data (Duque, 2009). Therefore, a researcher has the responsibility of creating an empowering setting for sharing of stories in a narrative approach. To foster a climate of openness I started with easy conversation to establish trust, such as a personal catch-up since *IMPACT!*. The official interview can begin with easy warm-up questions leading up to the more challenging ones. However, the essence of mitigating any negative effects due to reactivity is to practice reflexivity and critically reflecting on the dynamics of power throughout the interview process. To address bias due to reactivity during the interview sessions, I wrote a reflection immediately

after the interview and reviewed the audio recording of the sessions afterwards to identify times that I may have asked a leading question. After making note of the leading question, I would write down various alternatives to choose from during the interview process so it would not happen again.

Knowledge mobilization

One of my research goals is to produce socially applicable research to be used to foster social and environmental change. With the findings of this research, I plan on producing recommendations in the form of a report and presentation to give to the *IMPACT!* Steering Committee. The report will help to inform the design of the next conference and identify new ways to support program participants in maintaining their engagement in sustainability initiatives. Furthermore, I anticipate creating an infographic for the *IMPACT!* community outlining the results of the study and making recommendations to strengthen the program. Academically, I plan to present this research at conferences and for use in academic publications. My intention was, and still is, to use the insights I gathered to inform programs and more effectively support the work young people are doing, pushing for a cultural paradigm shift to a more sustainable world.

Data Analysis

Narrative Interviews

I transcribed the audio recordings of the interviews, gave each participant an ID code and pseudonym to ensure confidentiality. Personal narratives can be analyzed in a variety of ways, depending on the nature of the research question and the objectives of research. There are four major types of narrative analysis: thematic analysis, structural analysis, dialogic/ performance analysis and visual analysis (Riessman, 2008). I used open coding with a thematic analysis that

focused exclusively on content rather than structure. As themes emerged, I used memos to keep track of thoughts and ideas that linked interviews together.

Using thematic analysis in a narrative approach is similar to grounded theory (Denzin & Lincoln, 2012) and interpretative phenomenological analysis, but there are important differences. Although all approaches are consistent in that themes are identified in the analysis, they differ in that narrative keeps stories intact for later interpretation and themes are analyzed in context rather than fracturing data (Riessman, 2008). The small body of literature on sustaining motivation in environmental action has identified potential individual factors, but not the context of how they are employed. A thematic analysis in the narratives would help to fill this gap. Furthermore, I used Self-Determination Theory (SDT) as a resource for interpreting the data (Deci & Ryan, 1985. Unlike a grounded theory and an interpretative phenomenological analysis, prior theory can guide a narrative thematic analysis while the researcher still searches for novel theoretical insights from the data (Riessman, 2008).

Lastly, I used elements of a "critical event approach," paying special attention to the context of the *IMPACT!* conference as a potential "turning point," as it can lend insights into ongoing motivations for environmental engagement (Denzin, 1989; Rose-Krasnor, 2009; Webster & Mertova, 2007). During the interview and analysis, I also remained open to identifying other events that might hold significant meaning. These critical events are significant because of the profound impacts they have on whoever experiences the event in a way that can change values, life directions and worldviews (Webster & Mertova, 2007). To effectively analyze this information and the significant events, each interview was transcribed and then coded using a thematic coding method to compile commonalities among the individual narratives. Furthermore, to draw upon the narrative method and keep each path defragmented, I have summarized each participant's engagement path in a brief vignette available in Appendix D.

Results

As I identified themes, and how they reflected on my principal research question, I discovered something interesting: these themes created their own narrative that aligned with the paths drawn by the participants themselves. Each interview participant provided a unique perspective and offered valuable insight that, when looked at together, revealed various cohesive narratives, each representing their own path toward environmental engagement. Conferences, like *IMPACT!*, were one of many important categories of events that were reflected in the engagement graphs each participant was asked to complete. This provided insight regarding the relative importance of conferences in the bigger picture of engagement. Responses from the interviews provided additional support and clarification in each section, especially when referencing the *IMPACT!* conference. Table 1 below summarizes the major themes, their subthemes and how they relate to the research questions that guided the present research.

The findings from the interviews are organized into themes that emerged from the data and are presented in a manner that mimics the participants' collective path. This collective path is described as a story in which I have chosen to provide various illustrative quotes. I have chosen to present the results in this way for a couple of reasons: (1) preserving the natural succession of events is complimentary to the narrative process; and (2) keeping some longer quotes intact reduces fragmentation of the participant's own story as experiences are cumulative. Intertwining the various themes provides another insight into the larger picture of youth engagement in environmental action. I have summarized each participant's engagement path in vignettes (see Appendix D) to ensure that the individual narratives are not lost in the collective, to stay true to the essence of a narrative method of defragmented data when aggregated (Riessman, 2008) and, to give context to participant's own experiences. Each vignette is accompanied by the corresponding engagement graphs that each participant created during the

interview process to visually represent how they experienced their path of engagement over time.

First, I will present the findings on early formative experiences, wherein participants identified childhood experiences they deemed fundamental to who they are today. In high school, being exposed to and then becoming more interested in environmental and social issues was a shared experience among almost all participants. While some considered high school as the point at which their curiosity in environmental action was initially peaked, the majority of participants found it was not until university that they had truly embarked on the path of engagement. *IMPACT!* was part of this process and was shown to be an important component of this journey, although it held more meaning for some than others. After the intensity of university and conferences like *IMPACT!*, participants thoughtfully reflected on their own engagement, occasions when they had become disengaged, and what environmental action meant to them now. Below is a summary of the themes and subthemes emerged from the results and how they relate to the research questions.

Table 1: Summary of research questions, themes and subthemes

Research Question	**Themes**	**Subthemes**
What are some of the paths of young people's engagement in environmental action that either lead to sustained engagement or disengagement?	Formative Experiences	Early experiences with nature
		Mentors
	High School	Early turning point
		Personal behaviour changes
	University as a Turning Point	Changing political views
		Engagement on campus
		Growth through early failure
		Travel
	Engagement After University	Current engagement
		Disengagement
	Evolving understanding of engagement	Redefining engagement as a young professional
How do conferences, like *IMPACT!*, contribute to the	*IMPACT!* Conference	Questionnaire responses from *IMPACT*!

process of sustaining motivation to engage in environmental action among young people?		Sense of community
Additional: Emergent Findings		On "activism"
		Feedback on the engagement graph exercise

Formative Experiences

There is an abundance of research that investigates the importance of good role models and exposure to nature for healthy childhood development. As outlined in the literature review, research has widely shown that children who have had exposure to nature are more likely to advocate for and protect it as adults (Chawla, 1999; Louv, 2008). Since childhood is a formative part of a life narrative, participants often chose to start the description of their path with childhood. The interviews often began with an overview of some important memories that they now credit as being a fundamental factor in shaping who they are today. In addition to early experiences in nature and the role of family members, some other influences that were brought up in the course of the interview are discussed below.

Early Experiences in Nature. Growing up on an island beach in Bermuda, Kayla described how she was acutely aware of pollution and how human actions directly affected the natural environment. She went on to describe how regular beach clean-ups were, "just something you did"; thus, messages of environmental conservation and awareness were normalized behaviour for people in Bermuda.

For participants with these kinds of early experiences, their childhood experience with nature laid the foundation for future environmental engagement through the development of a

strong sense of environmental stewardship. Many of the early experiences people recalled in the interview were not necessarily focused on environmental preservation, conservation or stewardship, nor did they place any notable significance on it at the time. But in hindsight, they say it impacted their actions and helped shape the person they are today. For instance, Martha mentioned having a family farm where she learned to care for cattle and help with the chores outside, Daniel recalled some leisure canoe trips and planting trees, and Mike's parents managed greenhouses where he learned to garden and be energy efficient. All of these instances were phrased as unremarkable, normal childhood experiences. Others, like Paul, had very vivid and profound experiences with nature to which he attributes an interest in environmental causes:

> In 1992, kids in Alberta were given little sapling trees to plant and grow. My brother came home with two trees to plant and I thought it was the coolest thing ever. I think I was so excited because I loved trees and climbing them as a kid, so I thought it was so cool to be a part of that. And that it was my brother, who was obviously the coolest person in the world. But, my tree died. I did not take good care of it. And I learned, as it slowly turned red and the needles fell off, that, the thing that I saw as indestructible as nature, is not necessarily indestructible. And that I had taken it for granted. The memory sticks with me, as I watched the tree wilt. It did not survive its first winter. And although I had survived 5 winters, I could not instill any knowledge into that tree to help it survive. It got me thinking at a young age that things are quite fragile.

Participants often described experiences with the natural world as an insightful, spiritual moment they remember vividly. Roy had a profound moment of serenity and reflection while immersed outside in nature during his teenage years that put things into perspective for him, something just clicked.

Mentors. Influential people that appeared early in life, such as childhood mentors, were regarded as highly significant to some participants, while others found they did not have mentors until much later. It is important to recognize? not that all significant figures who were cited were family members. Participants remarked that they could only identify who and what was important in shaping their paths in hindsight, and were unaware of the significance at the time.

For example, Lindsay spoke of her mom being a "crazy recycler, with like, eight different bins at the house to sort it all." As she recalled that time in her life, Lindsay recognized how her mom's actions at home directly impacted the environment. Another participant, Martha, also reflected this sentiment when describing her relationship with her grandmother:

> My grandma was a big part of my life early on and what I learned from her is how I act now. She was a true environmentalist. But when she grew up, it was just how you acted. She always hung her clothes on a line, she always grew a garden, she always canned her fruit and vegetables, she had a national geographic subscription. She was the first one to show me that there was inequality in the world, and taking me through National Geographic [magazines] and what showed up in there. I didn't recognize the importance of my time with her until I was older.

On several occasions, Paul described an uncle who was very important to his development and who would "always give me the right book at the right time – accidentally." He goes on to describe the book and what it awakened in him:

> He gave me this book called *Ishmael.* The thing about it is that it's about a talking Gorilla, so that's great for a 9 year old, but it's actually this in-depth exploration of the history of humanity and how our society isn't sustainable how it is, and there's lot of room for improvement and so the story really stuck with me… Reading *Ishmael* really opened my eyes to see there are some interesting perspectives and how people think about these environmental issues.

High School

The vast majority of participants interviewed cited high school as the beginning of their path of engagement. The first turning point was often when participants remembered learning something they identified as crucial to their understanding of the world and how they influenced it. Then, after learning about some form of injustice (environmental or social), participants often felt compelled to take action in some way. However, with limited experience and independence, the first step was always personal, such as changes to their own behaviour when it came to consumer habits, like Roy who refused to buy bottled water and Martha committing to predominantly locally-grown organic food. This trajectory eventually led to an interest in

influencing others' behaviours.

Early turning point. Learning about widespread environmental devastation led to what Priscilla described as a "widened perspective" of different ways of seeing and engaging with the world. Roy referred to it as a "sustain-awakening" when in grade 12, he "found windmills as a source of energy really cool and just something clicked for [him]." For Mike, it was seeing the famous Al Gore movie on climate change, *An Inconvenient Truth (2006)*:

> It shocked me because I hadn't heard about the issue before. And it seemed like such a simple thing to fix at the time *(laughing)*. And I realized how big of a problem it could be, and I remained skeptical that it would be so bad, but at the same time I wanted to learn about how bad it could become. So that was my first eye-opening experience.

In high school, Lindsay first learned about social issues that were of concern to the global community. She attended a youth conference where "it was the first time I ever heard the concept *sustainability*". It was at this point that Lindsay realized getting involved in the field of sustainability was a natural progression of her interest in global issues. The four participants cited above had very clear "ah-ha" moments when being exposed to new information. I will go on to describe similar turning points in university when travelling. The other half of participants' interviewed experienced paths toward environmental engagement that were a series of small events and experiences that cumulatively built interest, competence, and confidence to engage in more public actions .

Personal behaviour changes. After becoming aware of environmental devastation, participants often began with changes in their personal sphere of influence by engaging in individual actions like becoming more conscious of what they eat and asking questions about where their food comes from and how it is grown (e.g., local foods, vegetarianism). Several participants, like both Ryan and Roy, started our conversation by outlining how they continue to choose a type of diet for the sake of the environment: "I remember I became a vegetarian and

part of that was for environmental reasons" and, "I only eat poultry and seafood purely for environmental reasons; this is how I advocate for sustainable food rights." Others like Carly and Daniel became vegetarians later in life. At some point during the interviews, all participants had outlined various personal sustainable behaviour choices and practices around food and resource use, such as water conservation.

Beyond these initial personal changes most participants joined (or even started) clubs in high school as a next step. These experiences in teenage years allowed participants to link knowledge and concerns they had regarding the environment, and their experience of influencing the world around them, becoming autonomous young adults. About half of the participants responded that upon learning of environmental degradation and social injustices their political values began to shift.. For the five participants that admitted to originally holding the traditional, politically conservative values of their parents, this was a significant life-altering step because they felt they were free to voice their own opinions and explore worldviews that may challenge the beliefs they were brought up with. The freedom to experiment and explore in university catalyzed this change quickly and will be discussed in more detail in the next section.

University as Turning Point

When describing their university experiences in the interviews, participants remembered being excited by being introduced to new ways of thinking and experiencing the world, while being immersed in a community that pushed them to explore new ideas. Lindsay described moving away to university from a small town to a progressive university. She said it "was a huge change to see people even talking about the issues. Just talking about them in class, at events, and having people around me that were very engaged… I just learned a *tonne* by going to school." Likewise, Chad described it as the point where he went from a "passive interest to taking a much

more active role." Three sub-themes emerged from participants's time in university: (1) it fundamentally changed their political views; (2) gave them a chance to experiment and attempt to create change on their campuses, which led to very important early failures; and (3) allowed the opportunity to travel beyond the university bubble and widen their perspective on their own position in the world.

Changing political views. For those that grew up in more politically conservative households, like Carly, heading to university led to a major shift in their own political views:

> And I would say that I was raised in a family was sort of hostile to environmentalism. My dad would talk about what a kook David Suzuki was. Like, it was definitely a turning point from the time to go to university and to realize not everyone thinks it's conservatively as your own family. And I mean, I know that but, but to go to university was probably the point of origin for me to start realizing… Like I was reading all of this stuff in the newspaper on climate change, that's where it started for me… Was just getting out of high school.

Roy had a similar background: "I came from a very religious conservative background. Somewhere out there on the Internet is a picture of me cheering on [a conservative politician]… and since then, I've shifted my political aligning to the Green Party." Fundamental shifts in political leanings influenced the types of activities and social circles with which these young leaders became involved. Ryan also became involved with the Green Party locally, which led him to meet a socially-minded group of people with whom he engaged in guerilla gardening and cycling advocacy. Before university, Priscilla described herself as apolitical. However, while working for an environmental non-profit group, she started attending aboriginal environmental protests as part of her job and later got involved with more environmental justice-focused work: "and then, so, after being politicized … is where [my engagement] starts to peak more." Having an opportunity to engage with environmental issues combined with a community of supportive peers was a common component to the success of any engagement activity on campus.

Conversely, the repercussions of a lack of support became apparent when participants discussed the points on their graphs when they became disengaged.

Engagement on campus. Going to university is often the first real opportunity to engage in environmental or other social action in a meaningful way. Participants were able to take the interest that had peaked in high school and act on it by galvanizing peers and supportive organizations on campus to create change. They would find community and build action competence by capitalizing on opportunities associated with the freedom to align their values with meaningful action and influence others. Participants chosen for interviews were exemplars in environmental action; they possessed leadership qualities fueled by their drive to have an impact. As expected, participants were highly engaged in sustainability-related activities in university, and demonstrated initiative by being the driving force behind the creation of organizations, clubs and environmental campaigns on campus. As mentioned, Ryan joined with others to form a group focused on guerilla gardening, but he also started a radio show to discuss environmental issues. Kayla took over a struggling environmental group on campus and doubled its membership in the first year. Kayla's reflection on the impact of her group illuminates the enthusiasm and trepidation that university students experience when first learning how to be effective in advocacy work:

> I feel like it was bringing a lot of awareness to the campus but I'm not sure if people were really invested in it. Like you could see within our members that their engagement was definitely increasing the more that they learned about it. So that was good. I felt that least that our club members were genuine. But when we approach different students on campus, I don't really feel as if we were penetrating the student body. But that's probably because we were all new to it too. None of us really had every experience in environmental engagement, stakeholder engagement or anything like that. We were basically like "were super into this you should be too, Here's why." But we were learning as we went as well.

Partners and friends who were environmentally-conscious helped drive the engagement

of some participants. Lindsay described these supportive peers as being "way more than I would have been otherwise." A couple of participants described the role of peer pressure in eco-friendly social groups as having pushed them towards changing their own behaviour. Lindsay described "the day-to-day things that made me super conscious of those things to the point of I wouldn't want to show up with something that would… like… make them notice, like the type of food I would being to a potluck. It made me way more conscious of small actions." Ryan talked about his girlfriend being much more engaged than him, and acting as a gateway towards greater civic and environmental engagement.

Growth through early failure. Starting or leading an environmental cause while in university was a trait shared by my participants. Interestingly, participants outlined how frustrating, yet important, failure was for them in university. They typically became passionate about environmental causes by learning about them in school and from mentors; when looking to rally others they expected a similar level of enthusiasm – this was not often the case. Many of the challenges and frustrations described in these interviews came from having to learn what motivated others to participate in an event and navigating what made other people passionate.

When Paul began university in 2006, he and his friends founded a non-profit inspired by the refusal of the Canadian federal government to support the moratorium on underwater trawling that was endangering aquatic ecosystems. They had seen groups, such as Greenpeace, actively protesting, which was exciting to them. However, within that domain, they identified a gap they wanted their group to fill: they wanted to build dialogue with both younger and older people in order to better understand their perspectives on the environmental issues. Moreover, Paul and his friends wanted to provide them with concrete actions on how to address the issue in their daily lives. Paul describes how he felt about the NGO's work and its eventual disbandment:

> Unfortunately, that kind of work is not sexy at all, and it was really hard to maintain it. And as I got busy with university and the volunteers started dropping off, I realized I didn't have the management experience to keep it going… instead of dropping off myself, I got involved in more direct-action groups. I was feeling as a young person, I failed. I couldn't get my organization to work. That was really disappointing.

Paul was not alone in his trouble maintaining interest among his peers. Mike was inspired to take action after seeing Al Gore's *An Inconvenient Truth* (2006) in high school and decided to start an environmental club on his campus. He started organizing film screening for his peers in hopes of inspiring them through a meaningful dialogue about creating environmental change on campus. Mike describes his experience with the new club:

> So I decided to start [a club] but it peaked pretty quickly. Because I didn't have any experience running events or anything like that. I could only get three or four people to commit to movie nights, so that was kind of demotivating. So my interest kind of peaked there too. And it did for a long time because I couldn't think of any other way to really contribute. Later I realized that even just getting those three or four people out was more than enough because I had taught those people about something and we can have a discussion about it. But at the time it was kind of a downer because I had hoped that I could get 30 or 40 people to commit my movie night right away. But that wasn't realistic.

Although the failures were disheartening and frustrating at the time, most participants looked back fondly on the effort they put forward and could now realize how important that was for them in the context of their journey thus far. Both Priscilla and Chad had particularly negative experiences with each of their failed projects and felt they could not return to environmental engagement. Priscilla explains her work situation while in university:

> I didn't have a lot of support from other people, so I was doing a lot of the work on my own which is really hard… it felt like we weren't really going anywhere with the campaign. After that, I continued to work for the environment organization for two years, and then I just kind of got bored and had to do something else.

Travel. Travelling itself, or a specific event that occurred while travelling, was often referred to as a life changing experience, one that typically occurred while attending university. In the same way that Paul had connected with literature early in life, others described travel as awakening in them a different perspective of the world, allowing them to see the connection

between themselves and the global community. Roy strongly attributed his travel to shaping his identity by saying "if I didn't do that I'm not sure I would be the sustainability guy I am today." Lindsay spoke of travelling as part of a group focused on permaculture and food security in Guatemala:

> You can see how what you do is working in a closed system. [They would say] 'this is our pile of garbage for the year, this is where it's going'… a lot of cool projects that you can just see.

She went on to reflect how the experience of observing people living out sustainability values really "kick started" her engagement when she returned to Canada. She says, "it got me more thinking [about sustainability] as a lifestyle rather than an opportunity." Carly had a similar eye-opening experience when she first travelled away from school and home:

> Then in my second year of university I went to school in Ireland for semester and that was the first time that I was like 'wow there's places other than where I grew up.' I was seeing other parts of the world and I was realizing that I was really interested in the quality of life for people who lived in those places…

She goes on to describe travelling as a method of renewing her motivation while also challenging some assumptions that she had about her own work:

> Travelling reinvigorates my interest because it gives you some sort of perspective on why you should be interested in these things. I also recently traveled to India and that was really powerful to realize 'shit, it doesn't matter what we do here, there's so many people in this part of the world that are still burning garbage.'

Daniel's travel experience was extremely influential on his understanding of sustainability such that it fueled his engagement activities upon his return. He was immersed in eco-culture at one of the most revered eco-colleges that teach holistic education courses and transformative learning through sustainable living:

> Going to visit my brother at Schumacher College was life changing. It's a small college in England that's all about deep ecology. The class was about living locally on this piece of land and being isolated from consumerist capitalist world. That really changed my outlook. Then going back into normal society, I was very frustrated and angry at what we

were doing to the planet. It was a really transformative experience.

IMPACT! Conference

Participants generally reflected back on the *IMPACT!* conference with fondness and positivity. Some had strong environmental motives for applying to the conference, while one participant applied "because it was free." They described the conference in many ways: from "pretty good" and "engaging" to "eye opening" and "life-changing." Even among those more critical of the event (mostly related to the sense of isolation and lost momentum that followed the conference) shared commonalities in identifying positive outcomes of the conference. The commonalities that emerged from my interviews about the *IMPACT!* echoed my own personal experiences at the conference. The first was the overwhelming sense of community and personal connectedness, both in terms of passion for the issues and admiration for the initiatives with which people were already engaged. The second was the role the conference played in being a powerful influence, if not critical event, commonly identified on the visual paths of engagement identified by participants.

Questionnaire responses on *IMPACT!* Participants were asked about the degree to which the conference could be considered a turning point for them and to rate some of the expected outcomes using a scale of 1-7, one coded as "not at all," and seven as "a great deal." Interestingly, there was a wide distribution of responses for this question. Four respondents replied six or seven and three respondents replied one or two. I used this information in the interview to discuss their experience at *IMPACT!*. When asked about that which was obtained from attendance of the conference, gaining new peer connections was the highest rated and new professional connections were the lowest. The responses are summarized in Table 3 below:

Table 2: Mean responses of *IMPACT!* conference outcomes

	Statement	**Mean response**
1.	To what degree was attending IMPACT! an important turning point, if at all, in your environmental engagement?	4.78
2.	To what degree did you obtain the following as a result of attending the IMPACT! conference?	____
2.a	New peer connections	5.17
2.b	New professional connections	3.17
2.c	Inspiration to take action	5.00
2.d	New skills	3.5

In addition to questions about the *IMPACT!* conference itself, which asked participants to rate the anticipated outcomes of the conference, respondents were asked to describe their general experience at *IMPACT!*. The comments obtained supported the quantitative data while also generating some more nuanced considerations that I further investigated in the interviews. First, the comments confirmed that one of the most favourable outcomes of the conference was the community of like-minded peers with which attendees developed connections. As one respondent wrote:

> Reflecting back on the 2009 conference, I feel truly grateful to attend because of the people I met. It was amazing to be in a room full of like minding, boundary pushing, and intelligent peers. Many things can push down your spirit, drive, and commitment to environmental awareness, but knowing that there is an abundance of youth out there doing the same thing your are provides an overwhelming, inspiring supportive community. I keep in touch with people I met there to this day.

Mike, who was later interviewed, had a different perspective on the conference as someone coming from the STEM (science, technology, engineering, math) field; He raised a good point that I was admittedly blind to as a student in social sciences and humanities:

> Looking back, I enjoyed the presentations by keynote speakers the most. As an engineer, I still haven't found a way to become active in sustainability. Conferences like IMPACT! are very good at teaching skills that are effective when you are already engaged in the discussion. Maybe it would have been better to look at possible ways for people to get involved through their career path so that they will be involved in daily activities. For me,

> now that I'm working, I feel disconnected from the environmental movement because it takes so much of my time.

The gap in environmental action in the workforce highlighted by Mike in the excerpt above became a touchstone point for this research as it pushes the question of sustaining motivation beyond post-secondary school and into the next stage of life when finding a career. Daniel's comment about the *IMPACT!* conference represented the sentiments of much of the participants interviewed: "Very good. Constructive. A little awkward regarding the relationship between expectations after the conference and stage of life. Met nice inspiring active people all over the country, which has exciting..."

Sense of community. On the first day of the *IMPACT!* conference, I was overwhelmed with a sense of awe. Up until that point, I had not met so many other young people as well-versed and as passionate about sustainability as myself. The conference brought together young people who had a shared understanding of the problem and awareness of the complexities. This allowed us to move beyond simply explaining the problem and instead discussing solutions. After interviewing participants, I realized I was not alone in my experience. Carly describes her reaction to the conference:

> I think two weeks into grad school I went to IMPACT! so that was like "whoa, mind-blowing. People just came from across Canada," and I was just realizing that there is a community of people that are concerned about the same things that I was concerned about. And the main… The most exciting part about IMPACT! was hearing about all the different things that people were doing. And then a few months after it leveled off a little bit for me. Because I still wasn't sure what to get involved in.

She also alluded to the paradox that was touched upon by several participants: the deep connections made while at the conference drive motivation for independent action, but when people returned home, that source of support was removed and motivation for engagement decreased. However, the feeling of being unsure and working through these issues together was

an important component of the gathering. As Martha explained, it is the "feeling of being lost together that is comforting." Some participants arrived at the conference already engaged in environmental actions back home. For those that were looking for inspiration or opportunity to become more active, like Kayla, the peer connections made were more meaningful: "if there is one thing that was really great about *IMPACT!* it was to realize that everybody is in the same boat on this topic. Everybody wants to take action but they're not quite sure how."

IMPACT! was summarized by Paul as a conference that "injects some sustainability thinking into your personal journey." For a lot of people it was a "foundationally life-changing experience" (Chad). Kayla explained how *IMPACT!* was a transformative experience that altered her perspective on the work with which she was already engaged:

> Of course IMPACT! Was the actual point that totally changed my whole perspective. Because I've always thought of sustainability as environmental sustainability and there was nothing else. I thought that commerce was the enemy, and social sustainability never even came to my mind, so it was good to hear that from respectable people and allow my mind to be open to actually embrace these different perspectives of sustainability and how, you know there really isn't just one pillar of environmental sustainability. But you really have to bring all of these things into the picture. So IMPACT! is probably like the height, I have it as a height on my graph because I wasn't considering social and economic sustainability. And now that I know about them, I've been thinking about sustainability in a more holistic way for sure.

Those that attended the conference and already had a solid foundation regarding sustainability issues were further inspired to take action by the actions their peers were taking. Roy remarked,

> Like, I still consider myself a sustainability guy this is something that I'm interested in. But it was at that IMPACT! conference where I was like 'hey I should really be doing more because I have this passion and in this room here it is clearly a common trait.'

Engagement after university

Universities are fertile ground for environmental action. They tend to foster experimental learning, the freedom to explore controversial topics and take action on issues with low costs of failure. The real test of how influential all these formative experiences were in shaping sustained

motivation is revealed in the ways with which these leaders engage outside the university environment. Participants provided many thoughtful reflections on their engagement. They first reflected on their current level of engagement and were then asked to reflect on how they felt about it. They then referred to their engagement graph and deconstructed instances where their engagement declined. Participants were asked to examine some of the possible causes of this decline. The interview naturally progressed to a conversation about the development of their perspective on engagement and what it means to them to be engaged beyond the university. Participants reflected on what "engagement" means to them, their opinions on what "activism" is, and how to incorporate these ideas as young professionals in the workplace.

Current engagement. When asked about current levels of engagement, most participants hesitated before answering. Despite reassuring them that they would not be judged on their answers, there was a sense of guilt and shame for not being adequately engaged. Kayla was one of the first interviews whose thoughts, I would later discover, would be echoed among many other participants:

> I feel like I should be doing more. Like, that's what I'm used to. Well, that's what I *was* used to. Still I feel a little uneasy about it. Like I… I like what I'm doing now but I wish I had more time to do the kinds of activities I've done in the past.

Mike and Carly expressed similar thoughts about wanting to do something, but were unsure what and how. They were waiting for an opportunity; not only to put their efforts towards something related to environmental action, but for it to be *meaningful*. Mike says,

> I don't feel like it's enough. I wish I could do more. I especially want to do stuff with something that I'm good at. Something like communications is not really my specialty. My specialty is engineering and science. But I find it really difficult to find places where I can actually use that to make a significant difference.

Carly remarked, "I'm a little embarrassed that it's not more than it is… There's definitely a sense of that I'm super passionate about these topics but I also don't know what to do about it." I asked

her if she could identify a reason or something changed for her since university. She thoughtfully replied,

> I think the thing that has changed over time is having a community of people that are interested in the same thing. Like, that has expanded and shrunk. It's not necessarily that I have been seeking out like more or fewer opportunities. It's more so the people who have the same interests have come and gone over time.

At the time of the interview, Daniel had recently quit his job as sustainability coordinator at his university. He left his job to spend his time writing a book on sustainability. Although he was engaged in the topic, he was admittedly reclusive while he wrote. He had little responsibility to a community or a structure to support him, which was a big change from the fast-paced university position he had previously held. He reflected on his new reality:

> It started by feeling really good, I had a lot of thoughts built up. Things had been a bit too structured for me [in my job]. [By starting the book], being able to read whatever I wanted and having the time to do that and seeing these new ideas, that was great. And now, I've become a little bit tired and frustrated… I call it swimming by myself. There's just so much, and the lack of structure and routine is wearing me down.

Disengagement. Participants experience disengagement at some level on some point in their path. All had varying reasons and situations that contributed to their disengagement, but all the reasons can be summarized as a lack of support. Lack of support came in two distinct ways: changing environments that resulted in an associated loss of communal support and lack of support on a specific project, which led to frustration and disenfranchisement.

*Losing community support***.** It had become clear that the sense of community and opportunity that university provided was a key motivator for ongoing engagement. Consistency of location is a stabilizing factor; investment in time is necessary for building relationships that support ongoing engagement. Participants who had moved away after university realized just how crucial this factor was for maintaining support. Accordingly, participants identified location change as a major disruption to their engagement efforts. Lindsay and Carly both attributed

moving and losing their community relationships as *the* major reason for their disengagement. Lindsay said, "my low level of engagement has a lot to do with moving a lot in the last two years – I'm not longer as connected with a community" and Carly said the point on her engagement graph was so low because it had "a lot of that has to do with being away from the alumni and the people in [her] program." Ryan had moved four times since university:

> I would like to be more involved to be honest. I'm not really satisfied with that at all. I know the reason for that is primarily because I've been moving around a lot for work so it's difficult for me to be seriously committed to anything, because I bounce around so much. Nobody really wants commitment of only four months out of someone. And that's been really tough for me because I also like to be involved with politics as well, and it's the same in that sense. I can't really get seriously involved since graduating I have lived in four different cities.

Losing project support. Support and commitment from peers are key elements for the success of any project. Failing at a project can put a significant damper on one's engagement, and sometimes lead to feelings of disenfranchisement. For example, when Chad started working at his university he received *IMPACT!* funding of $5000 for an educational project to address problems associated with the gap between equity and sustainability. He gained support from all campus stakeholders "except for the Office of Sustainability." He was therefore forced to return the money and cancel the project. He became disenfranchised regarding the university structure, leading to a "dramatic drop in [his] environmental engagement." Chad's engagement did eventually continue but with a focus on social justice rather than environmentalism.

Lindsay describes a similar situation that led to a considerable decrease in her engagement:

> I got another round of IMPACT! funding for the same project as before, but it was to build on the idea and expand it. The people who I was doing the project with didn't have a lot of spare time, and I ended up doing a lot of their reporting the last time. We said we would only do it this time if we were all in it together. So we made all these plans before, got the money… and then partway through one of them got pregnant… and the other one

> moved out of town, so it just wasn't happening. I would rather return the money than fake it, so we retuned about one third of the money.

However disengaged, the graphs Lindsay indicated still showed her interest to be high as she continued to look for new opportunities. When Daniel reflected on his own unique path he said something that succinctly encompassed what others had expressed: "Last year I had a burnout phase… I needed to recharge and revaluate what I was doing. And just recently I'm feeling my energy and fire coming back."

Evolving understanding of engagement

Although many of the stories followed a similar trajectory in terms of coming to understand sustainability, each participant came to carve out their own niches within the sustainability domain. Each person came to build upon their foundational understanding of sustainability, guided by their own unique experiences. For instance, Daniel reflected on growing up in a self-proclaimed fairly wealthy and privileged family and saw the economic inequality that currently exists from a unique insider perspective. Economic disparity within the sustainability movement concerned him and led him to take action by using his high-profile connections to mobilize capital towards under-funded sustainability projects. He was also exploring other parts of sustainability through various lenses, for example, by writing a book on Canada's history with social movements. In the same vein, Chad challenged how sustainability was defined and reframed it to make sense for his situation, causing him shift his efforts towards anti-oppressive work and queer ecology.

Through Martha's volunteering in the community, she also witnessed economic disparity, and now works at a credit union. Even within that position, her views on sustainability and community engagement continue to evolve:

> I changed positions at work from Community Development Manager to Governance Liaison Manager. As much as I loved working in the community, and I loved being involved, it was very frustrating for me to see some of those larger issues that you were just putting a Band-Aid on because you were always up against policies or limited by the types of funding you could get, or types of donations you could acquire. So I moved into a governance position with the intent of going into public policy to hopefully start making some changes on that side of things as opposed to being on the ground and helping with the smaller goals.

The participants' changing understanding of engagement in connecting social and economic justice within an environmental framework more broadly seems natural given the holistic framework of how sustainability is widely taught and presented - three pillars of social, economic and environment. Although many participants shifted and expanded their views on environmental engagement, sustainability became an internalized value of how their life was lived. The notion of internalized sustainability and identity will be considered in the discussion section.

Redefining engagement as a young professional. An important recognition from this study is that participants are often trying to figure out how best to reconcile having an environmental impact while moving towards a fulfilling career. As Paul realized, "It's very hard to change the world because the world is always changing." For some, they're able to merge environmental action with career advancement because they have chosen a career path that engages with sustainability issues either directly or indirectly. When participants reflected on how they felt about their degree of engagement since entering the workforce, they generally took one of the following paths: those that did not make sustainability a core part of their conditions of employment and often felt guilty for not engaging more in their leisure time; or those that made sustainability part of their jobs, and had some complicated feelings and insights on their engagement as it took on a new form as a young professional.

The first group is comprised of people who gravitated toward joining existing environmental initiatives and they were more likely to have been influenced by their social circles to carry out collective environmental actions. For this group in particular, finding a sense of community and being presented with an opportunity for collective action was crucial. In university opportunities for environmental action were widely available, so when compared to their current level of environmental engagement, there tended to be a lot of guilt associated with not being able to sustain engagement. However, they still brought their deeply held environmental values into the workplace and would look at problems encountered at their job through an environmental lens.

For example, Martha works in public policy and economic development by helping to fund sustainability programs, Lindsay is now a coordinator at a youth service group that hosts structured camping trips designed to instill an appreciation for nature and environmental stewardship, and Carly works as an urban planner to make our cities more liveable. Even if the link between one's career path and sustainability is weak or indirect, it influences how environmentally conscious youth think about their career trajectories, as Ryan remarked,

> My interest is in working for government rather than private industry is because I'm interested primarily in helping people and being sustainable. Money is nice, of course everybody wants money… [but] there's definitely a value system there that I don't always think about all the time, but definitely does guide my actions.

The second group demonstrated more initiative in their environmental engagement by starting a club or being a very active member of another organization. I would identify this group as very strong sustainability leaders that have deeply internalized environmental values. Thus, it was not surprising that they actively searched for paid work positions that could support their values and orient their lives towards sustainable development. In terms of what they understood as engagement, the risk and responsibilities tended to change once it was integrated into their

jobs. Paul described it aptly as “finding personal coherence.” There seemed to be a maturity, strategy and deep reflection on what the personal and systemic goals they chose to actively seek out in their work as well as their lives. The work that they often engage is what they identified as supported needed when they were in university, such as policy changes to funding guidelines to make them more accessible and understanding of the day-to-day realities of grassroots organizing. In a sense, they are seeking to create systemic change by pushing within it. They are challenging the status quo and bring innovative ideas from a position of influence inside of an organization, and may have the power to carry out initiatives for change. Environmental issues are a social problem, so the ability to collaborate and work with people to change broader social systems to support sustainable lifestyles is the ultimate objective for many of these young people.

Integrating sustainability as part of a career is a dependable way to keep young people engaged in the issues, but it causes significant and complex tensions with *how* they engage with the issues. Paul pointedly outlined what he struggles with:

> Sometimes I struggle with [my engagement] because I think if you work as a consultant or as an academic that unlocks a lot of doors for influence you don't have when you are plastering the placard…. So to me that has two repercussions. One being that I want to engage the community in things I'm learning as I go about this work. But a lot of that is privileged information that I can't share. So as I'm learning and growing and exploring things as a young professional, it sometimes gets a bit challenging. I'm like "can I actually get involved in that environmental group?" It’s although focusing on an area that I'm passionate about, I also worked in that area that I'm passionate about. It's almost like a trade off; I have to have the job and I can have influence that way, or be more on the peer activist side of things and have that kind of influence. And to me it's put a bit of a damper on my engagement. Because in university when you’re a student you can study and research things and join as many groups as you want.

This excerpt illustrates the tensions between the need to be fulfilled by grassroots organizing and feelings of frustration associated with the incremental successes characteristic of that kind of engagement. It prompted a follow-up question from me to Paul: Does the ability to

influence things as an expert cause you to lose a bit of that ability to mobilize and engage on the grassroots or on a peer level? He replied,

> I think I still have a lot of energy for these things, and it's just trying to find the right box I can put them in that creates a lot of personal coherence. So I can still say, still have influence as a consultant, but also builds community as a citizen or an activist, and also keep doing research and find a way to spread the energy in a different topic area in a way that they're mutually supportive versus - do I have to choose one or the other?

Additional: Emergent Findings

On "activism". Participants selected for this study were from a pool of highly engaged individuals, what I would consider to be "activists" – someone who tries to positively influence positive social, political, economic, or environmental change in society. As I began the interviews, one of the first questions I asked the participants was, "How would you describe your current level of activism?" Almost unanimously, participants would stop and clarify that they did not consider themselves to be an activist. When asked if they could describe why they chose not identify with being an activist, they often explained that they associated "activists" with non-violent direct action; they are "not in the streets protesting on the picket line" (Roy). As Carly describes:

> I guess that I see traditional [activism] about protests, boots on the ground sort of sense. That's how I would define it, but I realize that there are also different levels, like online activism. In that sense I guess I have been participating, like all sign an online petition or whatever. But I don't think of myself as an activist.

It was a common sentiment and image of a protestor that participants distanced themselves from: someone who is combative and confrontational. Activists, as the participants perceived them, were not meant to be negatively characterized; in fact, Priscilla, the one who had done the most non-violent direct action form of protesting remarked, "[Activism] is really fun, as really beneficial. Well obviously I have my own criticisms of it, but definitely something that I like to

do. It is fulfilling, just right now I don't have the capacity for it." Coming from a young working professional standpoint, Paul understood protest itself as a necessary force: "you almost have to trust that the other side of society will put pressure on the right topics and you will use the knowledge and skills you have and work hard through a positive attitude."

Feedback on the engagement graph exercise The general graph shapes for all the participants followed a common trajectory: Engagement started low, as expected, and curiosity peaked during high school years. Attending university and various events like rallies, organizational AGMs and fundraisers for assorted causes contributed to a significant increase in engagement during the postsecondary years. The period after university exhibited more variability in engagement. The reasons for this will be explored in the discussion section. Graphing participant engagement also helped remind the participants about how far they have come, eliciting a sense of surprised pride in their achievements. Kayla exclaimed, "wow, I've done a lot more than I thought!" and Ryan said, "this was a great exercise to help me remember everything I've done."

During the interviews, participants often had comments and feedback, which contributed to the iterative process of developing the method. The graph was first imagined for participants to simply plot episodes of engagement activities with which they participated over time. Early on, it was remarked that the graph was not a fair representation of how they *felt.* From the second interview, I asked participants to integrate another line, which denoted their interest, or passion for the subject. The discrepancy in the lines became a great source of discussion regarding possible reasons for why the gap was so big or what caused them to intersect. For instance, they commonly cited barriers such as time constraints with school, completing life priorities or simply not finding any interesting opportunities where they could effectively use their skill set. To this point, Carly said, "it's hard because I can sort of think of general things that happened but it is

hard to plot when my engagement shifted. But it's hard to say when it really went down. I guess that's where the passion line also comes in." Generally, the feedback on the engagement graph exercise was positive, and even described as "really cool" (Kayla), "really helpful" (Martha), and "a great exercise" (Paul).

Discussion

I began investigating this topic for my thesis because I was troubled by a couple of phenomena present in our culture: first, the escalating environmental degradation and the obvious need for continued collective action to mitigate these problems; and second, my own experience with burnout and seeing how some young activists were disengaging while others seemed to remain on course. I embarked on this thesis project trying to understand: What are some of the paths of youth's engagement in environmental action that either lead to sustained engagement or disengagement? And, (2) How do conferences, like *IMPACT!,* contribute to the process of sustaining motivation to engage in environmental action among young people? The interviews I conducted using a narrative approach helped me to gain a more in-depth understanding of the process; the larger picture of how engagement in actions and motivations intersect became more clear as the interviews progressed.

The findings in this study provide evidence that sustained engagement is a complex and cumulative process. Even within my limited sample, three predominant factors were present in each engagement, which appear to be ordered, mutually reinforcing, and strengthened over time when repeated: action competency, identity development and relatedness. The study participants demonstrate that a strong sense of an environmental identity, developed over years of experience with engagement activities, reduces the likelihood of disengagement.

I will begin by presenting a model that I developed to interpret the findings. Drawing upon existing literature, most notably Self-Determination Theory, I will explain its theoretical grounding in the literature, and its application using an example from my research as demonstration. For the discussion in the subsequent sub-sections, I will periodically refer to the model and link my findings to the literature reviewed.

Sustaining Motivation for Environmental Engagement Model

Deci and Ryan's (1985) Self Determination Theory emphasizes three pillars of innate psychological needs: competence, autonomy and relatedness. In essence, these three components can be thought of as a process of empowerment; all appear in some form in theories of youth empowerment that emphasize collective efforts to create sociopolitical change (Drury & Reicher, 2005; Jennings, 2006; Pancer et al., 2007; Zimmerman, 1995). In my model (Figure 1 below), Deci and Ryan's three pillars are slightly modified based on the current findings: action competency, identity development, and relatedness and community support. These are represented as background colours; all three were found to be present at some level in the action engagement process, with different levels of intensity. In order to avoid too much complexity, components are ordered and cumulative, yet non-exclusive, to emphasize how a person grows with the accumulation of skills and experience over time. These components are supported by another theory of engagement consulted for my model developed by Riemer and colleagues in a study called *Youth Leading Environmental Change* (YLEC). YLEC was an international study investigating how youth take environmental action. The YLEC theory of engagement highlights the need for youth to have action competence, opportunity and support, which are congruent with the three components of both the model presented below and Deci and Ryan's SDT model (Hickman, Riemer, & the YLEC Collaborative, 2016). To explain the model below and to best

illustrate how the model is related to the current data, I will refer to Roy's case and his graph as a representative of all other participants' graphs. See Appendix D for Roy's graph along with the other participants, see Figure 2 as Roy's engagement line overlaid on the model.

Figure 1: Model for sustaining motivation for engagement in environmental action

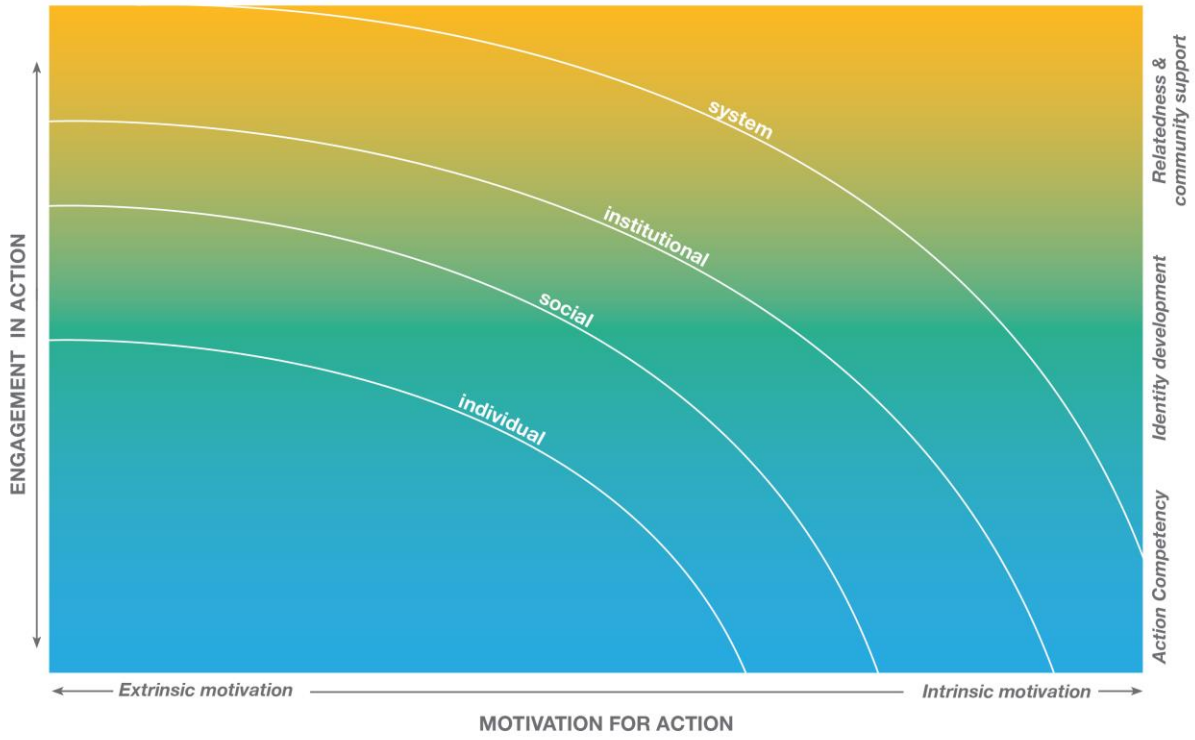
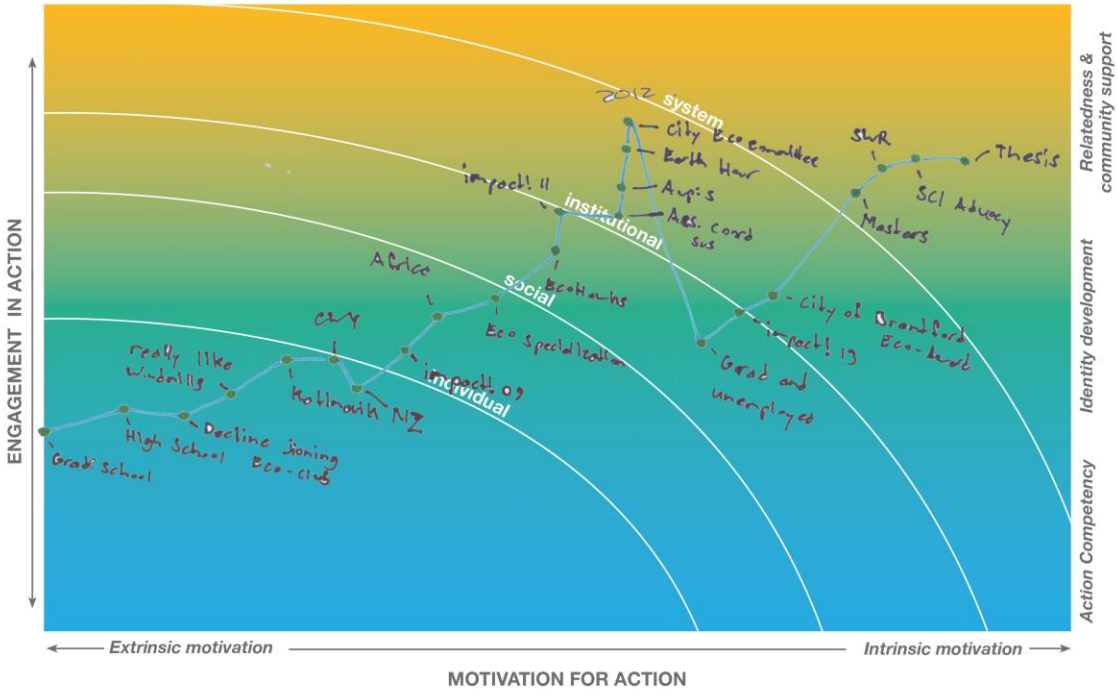


Figure 2: Roy's engagement action line applied in model



Action competency. The notion of action competence is tied to knowledge of an environmental issue and paired with skill development and self-efficacy toward action on the concerns (Jensen & Schnack, 1997; Whelan, 2002). Action competence was demonstrated when my participants first learned of an injustice or environmental issue, they possessed skills and abilities to take action on the issue – an early step on their path towards prolonged environmental action. This aligns with what is found in the literature where studies reporting initial feelings of empathy towards a plight of injustice are common as an initial motivator, creating powerful emotions and an urging desire to help (Beauchamp, 2009; Berenguer, 2007; Chawla, 1999; Hickman et al., 2016). The ability to experience empathy has been found to be a core part of action competency (Almers, 2013), and research had found it to be the basis of initiation in any engagement (Jensen &

Schnack, 1997). I found a similar situation in my data; thus, it forms the foundation of my model. For example, when Roy learned of the high level of carbon emissions attributed to meat production, he was troubled by this and took action by eliminating beef and pork from his diet. He later considered this act to be one avenue he advocated to his friends to make sustainable food choices.

Identity Development. As feelings of action competence strengthened in university, my participants experimented with engagement actions on their campuses that became progressively more collective as they found like-minded peers, Attending university provided opportunity to affect change at an institutional level as my participants described challenging policy at the administrative level on campus and experienced creating tangible change. The sense of accomplishment felt by my participants in this study deepened their development of an environmental identity; a phenomena also found in previous studies on environmental leaders (Beauchamp, 2009; Bourassa, 2017; Chan, 2009; Chawla & Cushing, 2007; Harré, 2007). By looking at the paths in this study collectively, it is clear that small actions add up to reinforce deeper identity development towards environmental action, echoing what was found in the literature reviewed for this study (Harré, 2007; Pelletier, 2004).

In the case of Roy, he participated in many clubs and sustainability-related events in university. Most notably, he joined the student union and later became the leader of the sustainability club on campus where he was able to put forth actions like banning water bottles from campus. Because of his experiences and actions he took, Roy spoke of himself to be known as “the sustainability guy.”

Not all participants experienced success with these actions. The feeling of making a difference seems to have influenced the level of effort put forth in if participants continued.

Relatedness and community support. Relatedness, or community, refers to the support

available for taking action. The findings in this study confirm that peer support is seen as a critical component of long-term sustained engagement. A study by Harré et al., (2009) looking at the lives of long-term political activists, found community both "in relation to developing friendships and close bonds with others, as well as in terms of feeling part of a larger community with a common goal" (p.332). In the field of Community Psychology, this is referred to as experiencing a *sense of community* (Sarason, 1974). In my findings, aspects of action competency and identity development were clearly evident throughout high school and continued to develop during university. The key to creating conditions ripe for engagement was settings that presented an opportunity to create change and a competent and supportive community to take collective action. A supportive community with shared goals demonstrated positive outcomes like strong collective empowerment that strengthen both further action competency and supported identity development. Sustained engagement after university was often closely associated with the element of relatedness for participants. For instance, Roy's trajectory of his engagement was on an upwards trend while in university, given that there was ample and easy opportunity to be engaged in a supportive community of his peers. The drop in engagement shown on his graph occurred after he graduated and lost that sense of community. His engagement in action was reignited as he enrolled in a Masters degree, and continued as he found a job as a sustainability consultant.

Motivation for action. The continuum of motivation across the x-axis of the model is adapted from Deci & Ryan's (1985) Self-Determination Theory (SDT), but is presented as a continuum to reflect the fluidity of motivation present in this study's findings. Extrinsic motivation can be viewed as an external source creating pressure to take action. External pressure (e.g., strong social norms) or incentives (e.g., financial savings) present to act in a particular way (Kollmuss & Agyeman, 2002). In the case of this study, early examples of

extrinsic motivation were when participants described parents encouraging recycling at home. Later in life, social norms of friend groups were sources of extrinsic motivations. Actions that are intrinsically motivated are considered more sustainable because they are shaped by values and the person carrying them out is doing so of freewill and find it interesting or meaningful (Deci & Ryan, 1985; Kollmuss & Agyeman, 2002). People will be more likely to internalize and integrate a goal if they have the relevant skills, confidence and understanding to accomplish it – that is, strong action-competency. When supportive social conditions are present along with the freedom to act in correspondence with values, the behaviour is more likely to occur repeatedly. The repetition produces a positive-reinforcing loop that integrates action into identity development, reinforcing internalized motivation. My study participants seemed to get at this point through individual and collective processes of critical reflection and reflective action to address social injustice and inequities in various capacities. The repetition reinforced self and collective identity as sustainability leaders, thus internalizing their motivations to engage. Roy spoke of the time when he was relatively disengaged after he graduated university as a time of discomfort and guilt because he was not as engaged as he once was. It appears here that there was a dissonance between how he perceived himself as a "sustainability guy" and his current level of engagement.

Spheres of action. The various levels of commitment and action are derived from the literature review on youth environmental engagement discussed in the literature review above (Centre for Excellence for Youth Engagement, 2007; Jensen, 2002; Pancer et al., 2002; Schusler & Krasny, 2010; Stern, 2000), and are based on the ecological model central in community psychology (Bronfenbrenner, 1989). The individual level tend to require less effort, while action with the intention of influencing system-level change, requires typically much more., as described in the Environmental Action Scale used in this study, by Alisat & Riemer (2015).

These levels have a natural progression, which was demonstrated in the findings as participants' actions evolved to become oriented towards collective action. My participants began their path by citing individual actions like changing diet to reflect environmental values (local, vegetarian, etc.) or committing to composting at home. Then they began influencing their social circles, which became an iterative process of influence among eco-friendly peers. The participants at the time of this study are best defined by their actions in the last two levels in the public sphere: institutional and system. These four levels are cumulative along the engagement graph. Engagement in the top two levels fluctuate, which is not surprising considering the high level of commitment needed to maintain engagement at that level. But the foundational level of personal commitment did not wane, even among those who self-described as no longer being engaged in environmental action. This progression is demonstrated by the evolving nature of Roy's actions. His engagement path began with a personal change in his diet in an effort to curb his own carbon emissions. His efforts progressed over time by joining clubs on campus and then eventually his city's sustainability council in an effort to create widespread policy change in his city.

Applying the model. The model is used as a reference in interpreting the findings from the study. The model was designed with the engagement graph exercise in mind; the paths drawn by participants can be overlaid onto the model (see in Figure 2). Participants started with external motivations to engage in small, private-sphere actions at home, such as recycling as children. As they grew up and built competency, in both knowledge and skills, they gained confidence to increase their engagement, effectively moving on a path towards the top right of the model. Another way participants move between levels was by changing their context (e.g., moving away to university, developing new friendships, travelling). For most participants, engagement was highest during their time at university while completing an undergraduate degree with high levels of action competency, identity development and relatedness. This was the first time my

participants attempted to create change on issues they identified on campus or in the community. For example, banning water bottles on campus or lobbying for energy retrofits. This can be considered change at the institutional level. With members of close social circles that supported these initiatives dispersing after university, participants reported that their engagement in action fell, while motivations stayed high. Although not all actions can be deemed entirely intrinsically motivated, the repetition of participating in collective actions moved them closer to this kind of motivation and began to shape and solidify their identity as an environmentally engaged citizen.

New opportunities to take action also move people's relative position in the model, similar to what was found in the YLEC model (Hickman et al., 2016). For an example related to the findings of this study, one can look to the opportunities created through the *IMPACT!* conference: for example, by allowing young people access to role models, hosting skill development workshops, and then providing the opportunity to apply for seed funding to finance their own projects. About half the participants took advantage of the *IMPACT!* fund, which participants reported as boosting their engagement, even when projects were unsuccessful.

The Impact of Conferences on Engagement

The majority of the participants rated the IMPACT! conference as high or at the pinnacle of their overall engagement to date, mostly due to the sense of community they felt. Experiences with peers at conferences or significant gatherings have been shown to nudge young people from a position of interest to a place in which they feel confident taking action on environmental issues (Arnold et al., 2009; Blythe & Harré, 2012; Chawla & Cushing, 2007; Fielding, McDonald, & Louis, 2008; Pancer et al., 2002). The effect of conferences, like *IMPACT!*, on participant's engagement graphs supported what other research has found: there was an overwhelming positive impact on people's paths. Roy described *IMPACT!* as "a great way to

recharge your batteries," and was regarded as what Chawla (1998) would refer to as a "significant life experience."

The effect of conferences on the model appears to boost all three components, action-competence, identity development and relatedness. My participants describes particularly impacted by being exposed to other young people who were just as passionate as them. In this sense, all attendees at the *IMPACT!* conference could be considered peer role models. On multiple occasions, participants would remark how impressed they were by all of the activities with which their peers were engaged, causing them to be inspired to push themselves to take more action. Chawla and Cushing's 2007 study found that peer education and role modeling fostered conditions for environmental action as well as the development of individual and collective competencies.

Attending *IMPACT!* encouraged my participants to reflect on their own perspectives on sustainability and become open to new ideas on how to better incorporate it into their work. Similarly, Blythe and Harré (2012) found that young people at an eco-retreat experienced a transformational shift in worldview as a result of the immersive nature of the gathering, modeling eco-friendly living, and the presence of inspiring peer role-models. Organizations or groups, have been shown to be motivating because they foster a sense of community, belonging, and connectedness that feeds the process of internalization of identity (Harré et al., 2009; Passy & Giugni, 2000) Finally, like the studies mentioned in this section and the literature review, peer support and role modeling was a significant outcome influencing future sustainability actions. Conferences and gathering evoke a sense of collective agency and a shared appreciation for small wins that have been shown to support long-term involvement (Martínez et al., 2012).

Connections from peers and other role models at *IMPACT!* undoubtedly inspired action amongst all participants and was the most powerful individual outcome of the conference.

However, elevated feelings of connection and inspiration cannot be sustained at high levels over time. Participants described a feeling of "leveling off" and "losing touch"; geographical distance between conference attendees was often a factor. For those that made connections that would later result in some form of action, they tended to be from the same school or at least in close proximity to each other. And, although there is an online *IMPACT!* forum for people to stay in touch, it does not appear to have contributed to collective actions; in-person meetings create the most meaningful outcomes. This can be applied to the model in that conferences are a boost to all three of the components, which result in an increase in engagement. However, the intensity during the conference cannot be sustained afterward, nor is it realistic to think so, it is expected that engagement will diminish. The degree of the decrease in engagement varies, and depends on how well the components can be supported outside of the conference. For instance, *IMPACT!* conference organizers provided an opportunity to receive funding for projects, a mentorship program and supported ongoing dialogue through online platforms. Overall, participants' graphs show that *IMPACT!* was a positive force on their overall engagement path.

Paths of Engagement

The patterns in the participants' graphs revealed interesting insights into the nature of engagement and how there is no one "ideal" path to engagement. However, there are various factors and contexts that help to stabilize and promote engagement. These factors help to support the components of action-competency, identity development and relatedness outlined in the model. The engagement line exercise revealed insights into the cognitive and affective factors of engagement, which will be discussed to frame the paths as a whole before moving into the discussion of specific instances of motivation and engagement.

Initial motivation. While the research question guiding this study was not about initial motivators of commitment, these motivators played an important role at the beginning of participants' journey towards engagement. No single reason could exclusively explain the initial motivation for engagement. My findings regarding formative influences on the development of environmental engagement are consistent to the literature; participants credited their early influences, like mentors and experiences in nature, as foundations of their engagement path (Almers, 2013; Chawla, 1999; Dono et al., 2010; Kollmuss & Agyeman, 2002; Pearce & Larson, 2006). My participants all described a combination of factors, and sometimes cumulated to an "ah-ha" moment that set the new path of becoming an environmentally conscious citizen.

Sustained engagement paths. My participants' pathways into engagement confirm that there are various developmental histories that can lead to sustained engagement. My study demonstrated that when people reach a level of consciousness about environmental issues, they tend to seek out ways to act upon it. Taking action on a personal level by adopting a more sustainable diet was often the first step practicing of action-competence for my participants,. The individual behaviour itself may have only little actual environmental impact, but participants used it as a means by which to advocate in favour of small-scale environmental action among social circles. The natural progression that unfolded with regards to the my participants broadening their influence over time aligns with Jensen (2002), who suggests for young people to "act at the personal and societal levels, that is, to increase their action competence" (p.333). Taking action and starting to build an environmentally oriented identity related to these causes demonstrates the beginnings of internalized commitment, and motivation, which was demonstrated in my study to be carried out into early adulthood.

The current analysis suggests that by the time participants got to university, their engagement and level of action competence was already starting to ramp up significantly, and they had begun

to participate in more collective action, which was building a more cohesive environmental identity. A study by Rupp and Taylor (1999) found that identity is further fortified by virtue of participating in collective action, especially action that carries risk Although the activities that may participants reported to be engaged in were not necessarily high-risk in regards to safety - such as a highly charged political protest – they were risking potential ego damage by trying something new. The persistent actions via a sense of action-competency and sense of camaraderie with peers over time, gave the participants confidence to push their own boundaries and try something new.

Even after failure, participants persevered and continued to engage. Using the graphs, they would describe failures as resulting in a temporary disengagement, which would bounce back if there was community support. By continuing their engagement, participants demonstrated their tenacity as a product of a strong environmental identity. Insights gained from early failures, successes, and shared risks in collective action with peers while being at university helped solidify their identities as sustainability leaders. It could be seen that the participants' identity as an engaged leader is ultimately what drives the behaviour, and the environmental outcome of the action itself, is secondary.

Perhaps the most unique characteristic of this time is that the risk of innovative action is mitigated compared to professional risks that arise when entering the workforce. Participants expressed some discomfort as they try to navigate how to integrate their values and express their environmental identity within in the context of their budding careers. The variety of paths taken expose variations into how engagement is materialized a professional context. Some participants chose to deeply integrate their passion for sustainability into a career directly, like Paul who became a sustainable transportation consultant. Others were still highly engaged, but chose to do so through community volunteer work. The study results suggest that as young people develop a

sense of an environmental identity and the action competence to engage in meaningful action, long-term commitment does not have to be directly related to an environmental outcome. The values entrenched in these young people are naturally manifested in the work they choose to engage in. Providing opportunities for regular and meaningful experiences in some form of civic engagement that allow young people to live out values reinforcing their identity of an environmentally-conscious citizen are the foundation for continued environmental engagement.

On Activism

When researching youth engagement, I reported that the literature found youth engagement to be transforming in a way that young people are more apathetic towards formalized political institutions, hierarchical organizations, and the passive consumption of mainstream news (Bermudez, 2012; MacKinnon et al., 2007; Watts & Flanagan, 2007). When this apathy is used to engage in counter-culture activities, I would consider this to be "activism" - creating change that favours and reflects one's worldview. Both my participants and the literature find the term "activist" itself is contentious, as what constitutes an activist and what actions can be defined as activism are often contested (Baumgardner & Richards-Schuster, 2000; Bobel, 2007; Butler, 2011). Evidence of this can be found in the emergence of modern colloquial terms like "slacktivism" and "clicktivism"[1] (Butler, 2011). Carly identified that she understood that activism occurs on different levels (e.g., online activism versus in the streets activism), and admitted to signing online petitions, but would not consider herself an activist. All participants in some form echoed this sentiment. They did not consider themselves to be an activist, but they did acknowledge that they had engaged in acts of activism in the past, such as attending a protest or

[1] "Slacktivism" is a combination of the words "activism" and "slacker." "Clicktivism" is a combination of the words "activism" and "click." They are informal terms generally regard to be actions performed via the Internet in support of a political or social cause but regarded as requiring little time or involvement, e.g., signing an online petition or joining a campaign group on a social media website.

rally. It was unclear if they considered themselves to be an activist in the past, but no longer identified with that label, or if they never saw themselves as an activist.

The term "activist" creates a division between those who define themselves as activists and those who carry out activism. Being labeled an "activist" is to adhere to a collective identity linked to participation in collective action or a social issue (Bobel, 2007). In the traditional sense of the word, Baumgardner & Richards-Schuster, (2000) describe how activists are often perceived,

> To most people, the image of an activist is someone who is out of the ordinary – someone who hoists picket signs in front of the Pakistani Embassy, marches on the Washington Mall demanding money for cancer research, or chains him- or herself to trees. Given these images, it's easy to imagine that activists are 'other' people – weird or dauntingly benevolent. (p.282)

Expressions of activism have taken on more pluralistic forms, and much like the changing nature of engagement itself explored in the literature review, "activism" is changing as well. Among the participants, they clearly still viewed activism as a confrontational persona whom they chose to distance themselves from. Considering the importance of identity in meaningful, collective environmental action (Duncan, 2012), it is important to note that these young people were uninterested in aligning themselves with a traditional notions of "activist". This makes sense considering risks associated with traditional activism and the importance of identity-politics for careers that some of my participants either already are starting or are looking to start, such as civil servants, economic development officers, and environmental consultants.

Reactions to the term activist were common in a study by Chan (2009) investigating various identity constructs in adult environmental leaders. Chan's participants identified identity-related barriers to environmental activism, such as distancing themselves from being labeled a "radical activist" which may influence the types of behaviour they engage in. Overall, I agree

with Chan in that I found my participants had a strong sense of motivation to maintain their identity by finding coherence in how they view themselves socially and how they engage in the world.

Practical Implications

The findings from the current study found that sustained engagement is a learned and complex process consisting of an accumulation of small actions that build an environmental identity. The participants in this study were exemplars that shared their insights on a variety of paths to engagement. How should these insights be applied to foster more young leaders and support their commitment to remain engaged? From the findings, I would suggest that the process of engagement in each experience is just as important as the outcome. All of the experiences that my participants spoke of built upon each other to form a path. Early opportunity to take action was critical to my participants' beginnings, but many small actions occurred subsequently. Although single action may not have been sustained, the lessons learned were carried forth to the next action, and so forth, thus, building a solid foundation of action competency.

University is a critical time to create meaningful opportunities to maximize young people's action competency at such an influential time of identity development. New programs could take the findings from this study and evaluate if their program maximizes a growth opportunity for action competency, identity development and foster a supportive community of other engaged young people. Participants of a new program could be asked to complete an engagement graph similar to the exercise executed with participants for this study and embark in a reflective process to identify where they need the most support.

All my participants raised concerns of their continued engagement after graduation; I see this as an opportunity to support sustained engagement. To encourage the momentum of engagement experienced in university, transition programs for young people could be established to utilize the skills developed and apply them to a project benefiting the wider community outside of the university. This could mean funding projects that are innovative with an elevated level of risk to encourage young people to continue to push the possibility of what a solution to an issue looks like. My participants demonstrated that with an established environmental identity and a pattern of engagement, they are looking for meaningful opportunities to become more engaged in their community.

Limitations

The goal of this research was not to be representative of all young people or to be generalizable. I intentionally chose a narrow sampling pool used that represents a small and privileged section of youth already highly engaged in environmental actions and sustainability initiatives and are specific to the *IMPACT!* conference. Thus, this study cannot be extended to encompass all environmental action or engagement for youth. Rather, by targeting youth that are already identified to be leaders in environmental action, much can be learned about the complex processes contributing to intrinsic motivation. The narrative approach allows for a more intimate understanding of the mechanisms that mediate the process of youth engagement in environmental actions. Understanding these processes more clearly can provide insights into how to design better programs and how to best support youth interested in taking environmental action.

One of the most important limitations and threats to validity to note is recall bias or memory bias in relation to identity (Hassan, 2006; Wilson, 2003). During the interviews,

participants were asked to recall personal experiences from the past. By reflecting back, participants may have interpreted their experience through a different lens or their current context, rather than recalling it from the context in which they originally experienced it. That is, current self-views influence recollections of past events (Wilson, 2003). Participants may have missed details, distorted or simplified stories to show how they see their current selves as competent and in a more positive light (Baumeister & Newman, 1994). Essentially, participants' personal narratives are socially constructed to fit their identity. This relationship can be seen as reciprocal in that participant's current self-identity has been constructed as a result of these prior experiences. It should also be considered that time elapsed from the events may have given the participants a clearer or more sobering perspective to be critical of their experiences. While speaking to me, there were times when I heard hesitation to answer a question because of embarrassment or perhaps a social desirability bias of not living up to his or her own expectations or mine.

Future Research

The findings from this study contribute to the small, yet growing body of research in sustaining environmental commitment among young people. From the literature reviewed in preparation for this thesis, it is clear more research is needed to understand the processes underlying long-term engagement critical to the future health of the planet. The engagement graph activity developed for the purposes of this study served as both a map to see where participants came from and as a source of reflection when considering future paths.

Comments from the participants were encouraging; they described the exercise as a novel way to reflect on their lives and to see a snapshot of how far they have come. This could be used in the future as a means of personal motivation and career planning. In terms of a program or

conference evaluation tool, it may be useful when following up with participants to determine how the gathering affected their engagement over time and identify shortcomings. One barrier to environmental engagement found in this study was the disruption of place by moving for career opportunities. Given the changing nature of young people and the increasingly mobile nature of modern workplaces, fewer young people are seeing a need to stay rooted to a single location over the course of these career(s). Further research could explore how young people seek and develop a sense of community and sustain active sustainability citizenry given these trends. Lastly, a longitudinal study following the environmental commitments of young people throughout their life and into their careers is required to truly understand long-term engagement.

Concluding Thoughts

By investigating different pathways and journeys of young people's sustained commitment to environmental action, this research has provided some insights and contributions to understanding of the contexts in which youth thrive and motivate themselves to engage in environmental action. Finding and connecting to a community of like-minded people along with the action-competency and resources required is fertile ground for groundbreaking changes. In order to sustain engagement, we as a society, must create opportunities and conditions for young people to becoming sustainability citizens with a collective environmental identity. The model created from the findings can be used to highlight what support is needed to encourage young people to take action and continue their sustainability commitments. A high level of collective action and a cultural shift towards sustainable lifestyles is critical to addressing massive environmental problems like climate change. This can be achieved through collective and sustained effort that young people are well positioned to lead; they have the most to gain and lose in the next 50 years.

APPENDIX A - Interview Guide

Youth Leaders for Environmental Action:

A study investigating ongoing motivation in sustaining environmental commitment

Hi and thank for you agreeing to participate in this interview. As a reminder, the purpose of this study is gain a deeper understanding of the context, conditions and processes that contribute to sustaining young people's motivation to engage in environmental action. The findings of this research will contribute to a growing body of academic literature and will provide information to organizations and programs supporting youth environmental leaders. Please know that my purpose in doing this interview is not to figure out what is wrong with you or to do some kind of deep clinical analysis! Nor should you think of this interview as a "therapy session" of some kind. The interview is for research purposes only, and its main goal is simply to hear your story. Everything you say is voluntary and confidential.

Do you have any questions before we begin?

I would like you to think about your experience with environmental action as a story. Like a story, it has a beginning, middle and an ending or anticipated future. Please think carefully about what the root of you activism was and how you felt about it in the beginning, the ups and downs, significant events, as well as the people who have been part of your story and how it has fit into your life as a whole. Please also think about where you think your story of environmental action will go from here. I would also like to emphasize that this interview is about the *process*, and there is no right or wrong answers or something too insignificant.

Although my research is focused on environmental activism, I am referring to "environmental" in a holistic sense. That is, I am also interested in activities that would be categorized as "sustainability activities" (social, economic, environment) as I see all this work being connected! Just keep that in mind when answering the questions. Lastly, because it is about the *process* don't worry about going on tangents on a side story – if you think it's important enough to tell, please do!

Let's get started….

Current engagement

What kind of environmental or sustainability work are you currently involved in?
- *affiliated organizations?*
- *role at organization?*
- *current projects?*
- *length of time?*

Line Exercise: Summary of personal journey

If you remember back to the questionnaire you filled out, you were asked to choose a line on a graph that best depicts your path in engagement in environmental action over time. I would like to re-visit that, but have you draw your own line from when you first became engaged up until now. Try to be detailed and let the line reflect your life experiences and how they affected your engagement. After you draw it, I'll have you take me through it and summarize it to me (in about 5-10 minutes). I'll be asking you to elaborate on the details of it afterwards.

Paid and unpaid work

Life events & development

Adapt this line of questioning to the participant and the line that they drew. Note any times that it went up sharply or down and probe for the context of those times.

Looking at your line, I would like you take me through some of the events in your life that have had an impact on the trajectory of the line. It may be possible to identify certain key moments that stand out as turning points -- episodes that marked an important change in you or your personal story as an environmental activist. Please identify a particular episode involving environmental action that you now see as a turning point. If you cannot identify a key turning point that stands out clearly, please describe some event or events in your life wherein you went through an important change of some kind (*line moving up or down).* For these events please describe what happened, where and when, who was involved, and what you were thinking and feeling.

***Why** did you first get involved with environmental activities? – Values? Experience with nature? Significant people?*

Probe for deeper explanation in areas in line that went up and down.

What initially drew them into environmental work (first significant event?)

How they felt at each event

Coping strategies

Turning points?

Probe for each event: Ask who/what/where/when/ how?

What did the event mean to you in the context of your journey as an environmental activist?

How did this event contribute to you who you are today? Developing character…

Encourage stories and elaboration from the participant on events, how they unfolded, what happened after, who was involved, detailed timelines (duration) of ups and downs - Important or significant people

Note experiences of nature and place

Thinking back to September of 2009, can you tell me about your experience at the

IMPACT! conference and if it had any impact on your level of engagement (*where on graph?)*? Think to how you felt before and after the conference, who you met there, what you did after, etc.

Remember to give space for criticism

"What were the highlights and lowlights of the conference experience?"

"Was the IMPACT! conference a turning point?"

Note if they included IMPACT! as an event on the line

Relationships from IMPACT!

Nature of them

Duration – still going?

Feelings after? Sustained?

Any lasting impacts or outcomes from conference?

i.e. skills, knowledge, only motivation/inspiration?

Final questions & wrap up

For the last question, I would like to know based on your experiences, what advice would you give to someone starting out their own journey in environmental action.

Most salient lessons learned

If you were to mentor someone…

Thank you for the interview. I just some last follow up questions about this interview process, but before those, is there anything else you would like to add that you think I should know about? Or perhaps something we didn't touch on in the interview?

Great, thanks. What were your thoughts and feelings during the interview? How do you think this interview has affected you? Do you have any other comments about the interview process?

APPENDIX B – Informed Consent Statement

Wilfrid Laurier University

INFORMED CONSENT STATEMENT

Youth Leaders in Environmental Action:

A study investigating ongoing motivation in sustaining environmental commitment

Sara Wicks, MA student, Wilfrid Laurier University (Principal Investigator)
Dr. Manuel Riemer, Professor, Wilfrid Laurier University, Department of Psychology
(Academic Supervisor)

Thank you for agreeing to participate in this interview. The purpose of this study is gain a deeper understanding of the context, conditions and processes that contribute to sustaining young people's motivation to engage in environmental action. The findings of this research will contribute to a growing body of academic literature and will provide information to organizations and programs supporting youth environmental leaders.

Please carefully read the information below and decide if you are still willing to participate:

INFORMATION

Participants of this study will be alumni from the 2009 IMPACT! Conference. Students being interviewed were selected from of a pool of respondents to an online questionnaire asking about levels of environmental activism and motivations. These students were chosen to represent a diverse sample based on varying levels of engagement. There will be approximately 10-12 interviews in total. Each interview will last about 90 minutes.

RISKS

Although there are not any foreseeable significant risks resulting from this research, it is possible that you may feel self-conscious, embarrassed, guilty or inadequate if they are reflecting on negative memories or life experiences. These feelings are normal and should be temporary. It is important to note that the purpose of the research is not to assess or evaluate any individual's contributions to environmental action but rather to understand variables contributing to motivations in environmental action. Please be advised that your participation is completely voluntary and you may exit participation at any time.

BENEFITS

By participating in this research study you will be contributing to a growing body of academic research in youth's environmental engagement and activism. In offering your insights, you will

be contributing to the creation of knowledge to inform program design and development to help sustain young people's motivation to engage in environmental action.

CONFIDENTIALITY

Only a limited amount of identifying information will be collected and no identifying information will be shared without explicit consent of the participant. All data will be securely stored in a locked area and encrypted where mobile storage is involved. Only the identified researchers will have access to data.

The researcher acknowledges that the host of the online survey (Qualtrics) may automatically collect participant data without their knowledge (i.e., IP addresses). Although this information may be provided or made accessible, the researcher will not use or save this information without participants' consent.

CONTACT

If you have questions at any time about the study or the procedures you may contact the researcher, Sara Wicks at wick3120@mylaurier.ca. If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Dr. Robert Basso, Chair, University Research Ethics Board, Wilfrid Laurier University, (519) 884-1970, ext. 4994

PARTICIPATION

Your participation in this study is completely voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any time without penalty. You have the right to omit any question(s)/procedure(s) you choose.

FEEDBACK AND PUBLICATION

The results of this research may be used to inform program design in environmental organizations. Dissemination of this information may include presentations, electronic transfer and reports. Resulting reports will be shared with project partners and the wider academic community. Participants will be informed of the results via email.

CONSENT

Use of Quotes

Sometimes researchers like to use quotations of research participants to emphasize certain points in presentations and published papers. We would like to ask for your permission to use quotations from your data.

❑ My quotes may be used in any way (e.g., publications, presentations)

❑ My name may be used in conjunction with my quote

❑ My quote may be used absent of identifying information

❑ You can quote me, but I want to review how the quote is used (e.g., in a publication or presentation) before it is published. *Quotations will be sent to you for review via email. Please provide your email address:* _____

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

Participant's Name (please print)	Participant's signature	Date

Investigator's Name (please print)	Investigator's signature	Date

APPENDIX C – Online Questionnaire

Youth Leaders in Environmental Action:

A study investigating ongoing motivation for sustaining environmental commitment

-- Questionnaire --

Conducted by Sara Wicks

Wilfrid Laurier University, Canada

wick3120@mylaurier.ca

*adapted from Alisat, S., & Riemer, M. (2014).

Thank you for participating in this survey. Please complete the following information honestly and to the best of your knowledge. If you made a mistake and need to change your answer choice, please clearly mark off the old choice and write "correct" next to the correct choice.

What is your first/given and last/family name? (This information will only be used to link your surveys and will be replaced with a unique ID number. You name will not appear in the final data file nor in any publications and reports)

First/Given Name: _____ Last/Family Name: _____

Today's date (DD/MM/YY): __ __/__ __/__ __

Background Information

This background information will provide us with general information about the people who participate in this survey. We will not use your individual information in any reporting. We will combine this information with what we receive from our other participants to describe the general characteristics of our sample.

1 How do you identify yourself: Male Female Other

2. What best describes where you currently live?

☐ In an urban area
☐ In a sub-urban area
☐ In a rural area

3. Which of the following best describes your current occupation?

☐ Management Occupations
☐ Business and Financial Operations Occupations

☐ Computer and Mathematical Occupations
☐ Architecture and Engineering Occupations
☐ Life, Physical, and Social Science Occupations
☐ Community and Social Service Occupations
☐ Legal Occupations
☐ Education, Training, and Library Occupations
☐ Arts, Design, Entertainment, Sports, and Media Occupations
☐ Healthcare Practitioners and Technical Occupations
☐ Healthcare Support Occupations
☐ Protective Service Occupations
☐ Food Preparation and Serving Related Occupations
☐ Building and Grounds Cleaning and Maintenance Occupations
☐ Personal Care and Service Occupations
☐ Sales and Related Occupations
☐ Office and Administrative Support Occupations
☐ Farming, Fishing, and Forestry Occupations
☐ Construction and Extraction Occupations
☐ Installation, Maintenance, and Repair Occupations
☐ Production Occupations
☐ Transportation and Materials Moving Occupations
☐ Student

4. a) Are you currently enrolled as a student?

☐ No
☐ Part time
☐ Full time

b) What is/are you degree and major(s)/field of study: 1) _____ 2) _____

9. How many hours per week do you volunteer? (If it varies, please provide the average number of weekly hours over the past four weeks.)

Do not volunteer	Less than 5 Hours	5.5 – 15 hours	15.5 - 25 hours	25.5 – 35 hours	More than 35 Hours
☐	☐	☐	☐	☐	☐

10. How many hours per week do you work (volunteer and paid work) for an environmental cause or organization? (If it varies, please provide the average number of weekly hours over the past four weeks.)

Less than 5 Hours	5.5 – 15 hours	15.5 - 25 hours	25.5 – 35 hours	More than 35 Hours
□	□	□	□	□

Environmental Activities & Actions

The following is a list of environmental activities and actions that people can get involved in. For each, please use the following answer options to indicate how often, *in the last 6-months* you were involved in any of these activities or actions.

We understand that many people are not engaged in these types of activities. For our research it is important that you answer honestly and not based on what you think we, your friends or others may want to hear. That is why we handle your answers with a high level of confidentiality.

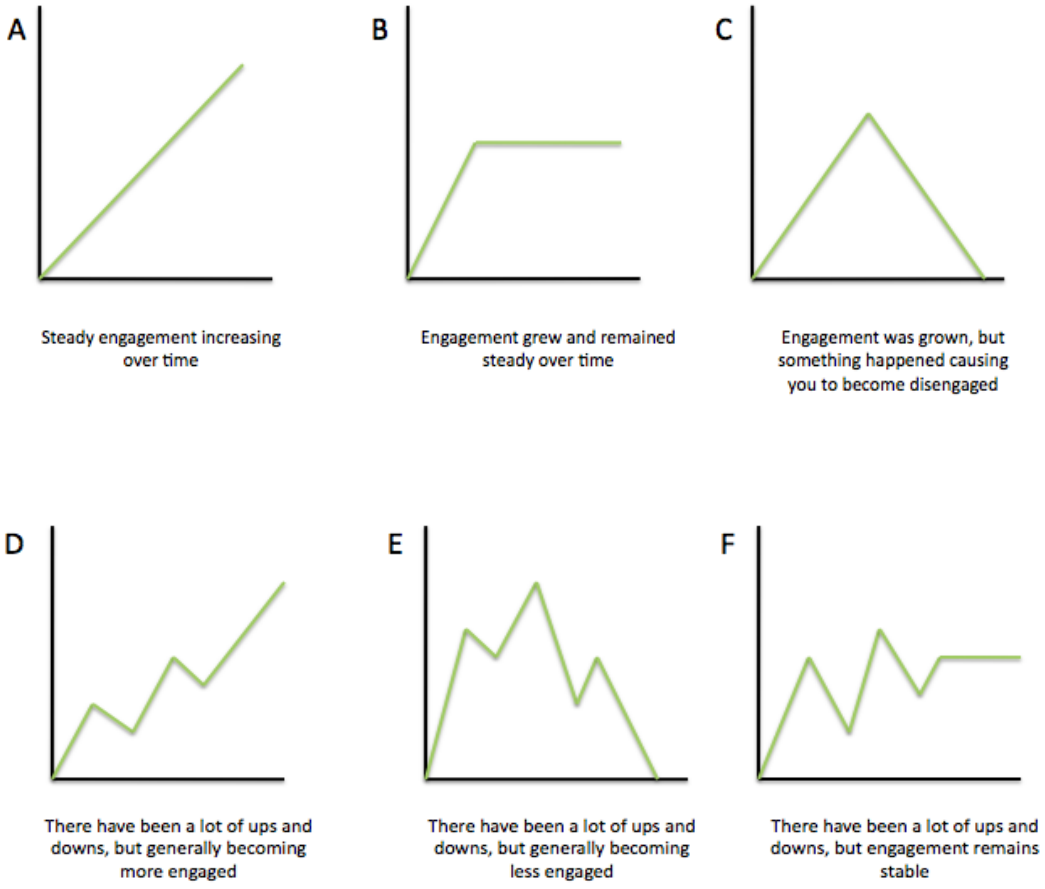
Some of the activities listed below appear to be similar; it is important to read each item very carefully as they are all slightly different. Circle the one number that best represents your answer choice.

11. In the last *6 months*, how often, if at all, have you engaged in the following *environmental* activities and actions:		0 Never	1	2 Sometimes	3	4 Frequently
1.	Educated myself about environmental issues (e.g., through media, television, internet, blogs, etc.)	0	1	2	3	4
2.	Participated in an educational event (e.g., workshop) related to the environment.	0	1	2	3	4
3.	Organized an educational event (e.g., workshop) related to environmental issues.	0	1	2	3	4
4.	Talked with others about environmental issues (e.g., spouse, partner, parent(s), children, or friends).	0	1	2	3	4
5.	Used traditional methods (e.g., letters to the editor, articles) to raise awareness about environmental issues.	0	1	2	3	4
6.	Used online tools (e.g., YouTube, Facebook, Wikipedia, MySpace, Blogs) to raise awareness about environmental issues.	0	1	2	3	4
7.	Made environmentally conscious food choices (e.g., organic, locally grown, sustainable, seasonal).	0	1	2	3	4
8.	Tried to keep my energy consumption low (e.g., unplug appliances, turn off lights, not use air conditioning).	0	1	2	3	4
9.	Personally wrote to or called a politician/government official about an environmental issue.	0	1	2	3	4
10.	Became involved with an environmental group (e.g., conservation group, political party, volunteer, summer job).	0	1	2	3	4

11. In the last *6 months*, how often, if at all, have you engaged in the following *environmental* activities and actions:		0 Never	1	2 Sometimes	3	4 Frequently
11.	Financially supported an environmental cause.	0	1	2	3	4
12.	Took part in a protest/rally about an environmental issue.	0	1	2	3	4
13.	Made a decision to reduce my consumption of material goods by buying less.	0	1	2	3	4
14.	Organized an environmental protest/rally.	0	1	2	3	4
15.	Considered how the production of a product might have impacted the environment before you purchased it.	0	1	2	3	4
16.	Organized a boycott against a company engaging in environmentally harmful practices.	0	1	2	3	4
17.	Organized a petition (including online petitions) for an environmental cause.	0	1	2	3	4
18.	Consciously made time to be able to work on environmental issues (e.g., working part time to allow time for environmental pursuits, working in an environmental job, or choosing environmental activities over other leisure activities).	0	1	2	3	4
19.	Participated in a community event which focused on environmental awareness.	0	1	2	3	4
20.	Organized a community event which focused on environmental awareness.	0	1	2	3	4
21.	Participated in nature conservation efforts (e.g., planting trees, restoration of waterways).	0	1	2	3	4
22.	Spent time working with a group/organization that deals with the connection of the environment to other societal issues such as justice or poverty.	0	1	2	3	4
23.	Tried to influence people around me to live or act more sustainably.	0	1	2	3	4
24.	Promoted/ worked for sustainability within my school / university / workplace.	0	1	2	3	4
25.	Promoted/ worked for sustainability within an organization / group that I am involved in (e.g., a church group or sports club.)	0	1	2	3	4
26.	Promoted sustainability within my neighbourhood / community.	0	1	2	3	4

Your personal journey through environmental engagement

For this exercise, pick the graph that **best represents** your path in environmental engagement. Of course this will be a simplification, but you will have the opportunity to expand and elaborate on this if you are selected for an interview.



WHY ARE YOU DOING THINGS FOR WHY ARE YOU DOING THINGS FOR THE ENVIRONMENT?

There are many things that one can do for the environment such as the type of activities in the previous question. Listed below are several statements concerning possible reasons why people might do things for the environment. For each item, circle the one number that best represents your answer choice.

12. Using the scale from 1 to 7 on the right, please indicate the degree to which the proposed reasons correspond to your reasons for doing things for the environment by selecting the appropriate number to the right of the item.		Does not correspond at all			Corresponds moderately			Corresponds exactly
1.	Honestly, I don't know; I truly have the impression that I'm wasting my time doing things for the environment.	1	2	3	4	5	6	7

12. Using the scale from 1 to 7 on the right, please indicate the degree to which the proposed reasons correspond to your reasons for doing things for the environment by selecting the appropriate number to the right of the item.		Does not correspond at all			Corresponds moderately			Corresponds exactly
2.	For the pleasure I get from contributing to the environment.	1	2	3	4	5	6	7
3.	For the recognition I get from others.	1	2	3	4	5	6	7
4.	Because I would feel bad if I didn't do anything for the environment.	1	2	3	4	5	6	7
5.	Because being environmentally conscious has become a fundamental part of who I am.	1	2	3	4	5	6	7
6.	Because I think it's a good idea to do something about the environment.	1	2	3	4	5	6	7
7.	Because environmental degradation (e.g., global climate change) is negatively affecting the livelihood of people.	1	2	3	4	5	6	7

IMPACT! CONFERENCE

Think back to the IMPACT! Conference you attended and how the event influenced your path in environmental action. For each question, circle the number that best represents your choice regarding your experience at IMPACT! If you're not sure, pick the option that *best* represents your experience

13. Using the scale from 1 to 7 on the right, please indicate the degree to which your experience with IMPACT! corresponds to each question		Not at all			To some extent			A great deal
1.	To what degree was attending IMPACT! an important turning point, if at all, in your environmental engagement?	1	2	3	4	5	6	7
2.	To what degree did you obtain the following as a result of attending the IMPACT! conference?	-	-	-	-	-	-	-
2a.	New peer connections	1	2	3	4	5	6	7
2b.	New professional connections	1	2	3	4	5	6	7
2c.	Inspiration to take action	1	2	3	4	5	6	7
2d.	New skills	1	2	3	4	5	6	7
2e.	New knowledge	1	2	3	4	5	6	7

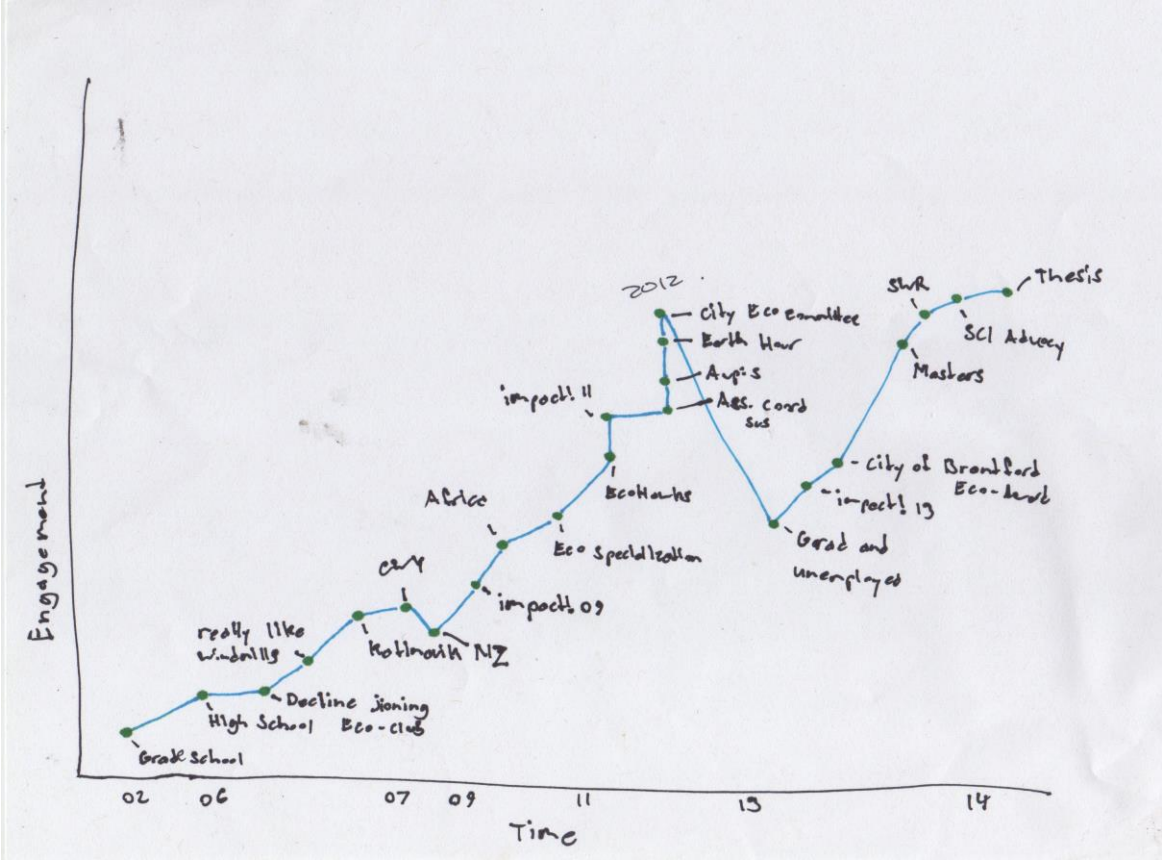
14. Did you develop anything else from IMPACT! not listed above? Please explain	
15. Overall, how would you describe your experience at the IMPACT! conference?	
16. The final word is yours! Would you like to add or comment on anything else?	

Thank you for completing the survey!

APPENDIX D – Participant Vignettes

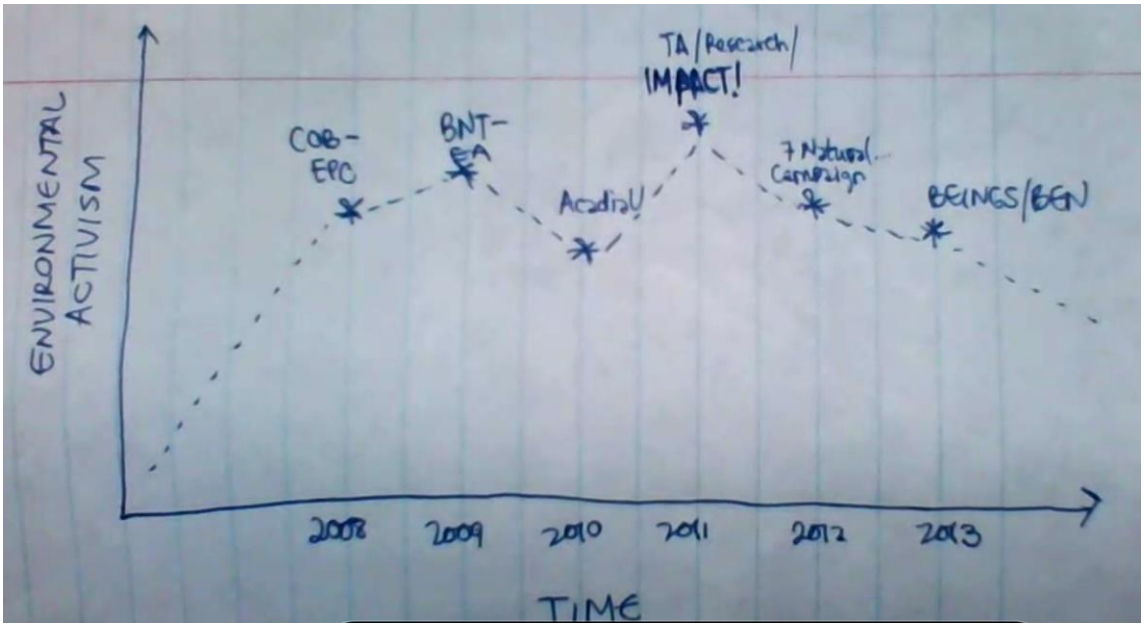
Roy

Roy grew up in a very conservative household and was known for being active in conservative political campaigns in early high school. Later in high school, he discovered the power of wind turbines and found it a novel concept and solution to some of the energy problems he was just learning about. Roy was in the military reserves and was known for his leadership skills and adventurous nature, which prompted him to travel extensively and see the world through different perspectives. Lessons from his travels prompted him to attend university in a leadership program where he specialized in sustainability on his campus. He's a pouletarian (vegetarian that eats chicken and fish) and a self-proclaimed "sustainability guy. While in university, he led many eco-clubs and won awards from his university and municipality. At the time of this interviw, he had just finished his Masters degree and is currently working as a sustainability consultant.



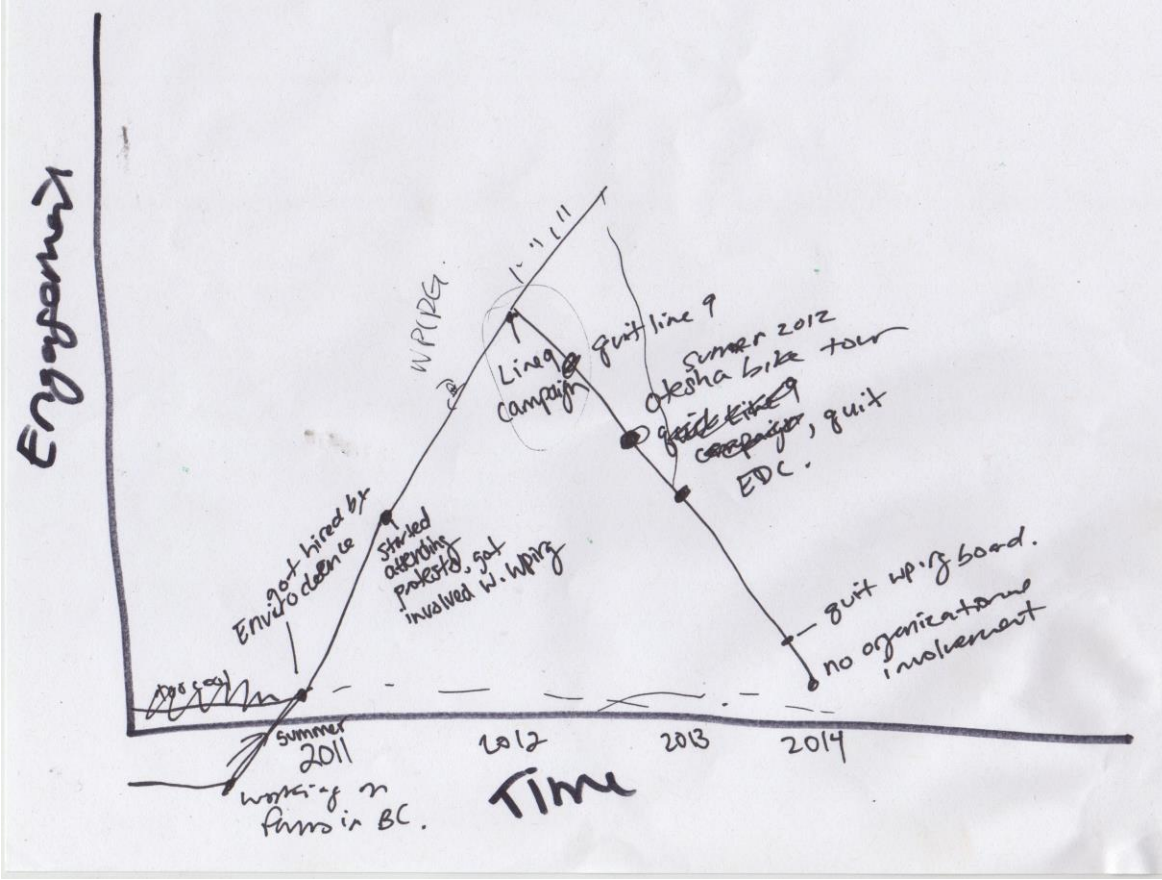
Kayla

Kayla grew up in Bermuda where she spent a lot of time in the natural environment and participating in community beach clean ups. Under the guidance of early mentors, she was given opportunity to lead environmental initiatives in her community and high school, which grew into a passion that she pursued at university in Canada. While in university, she attended IMPACT!, which had a "transformative impact" on how she viewed sustainability. Kayla took her holistic sustainability perspective and was completing a Masters in Climate Change Adaptation at the time of her interview.



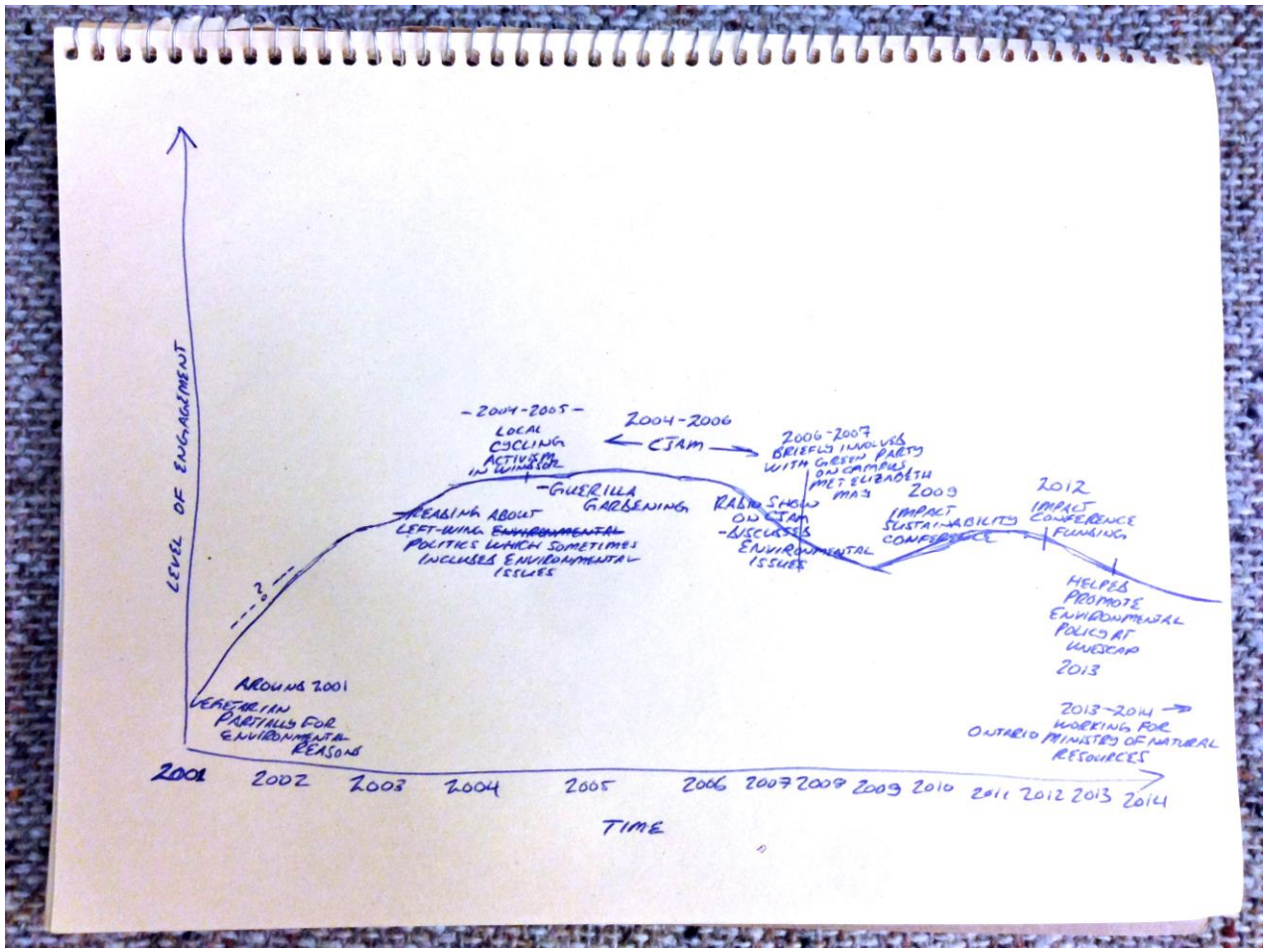
Priscilla

Priscilla described herself as apolitical and unengaged in current issues up until the point of university. As she became exposed to liberal political views and discussions of injustice, she became involved in more radical ways than the other participants. Priscilla started working for an environmental NGO where she spearheaded active campaigns using protest and occupation to stop pipeline projects. The work was very demanding. Lack of support from her organization, the lack of commitment from other young volunteers she recruited, not seeing any positive results from her work, caused Priscilla to experience burnout. She became very frustrated and cynical and left her position at the environmental NGO. However, during that time, she also learned more about Aboriginal injustices. Since this interview, she has started a position at an Aboriginal environment office as a researcher.



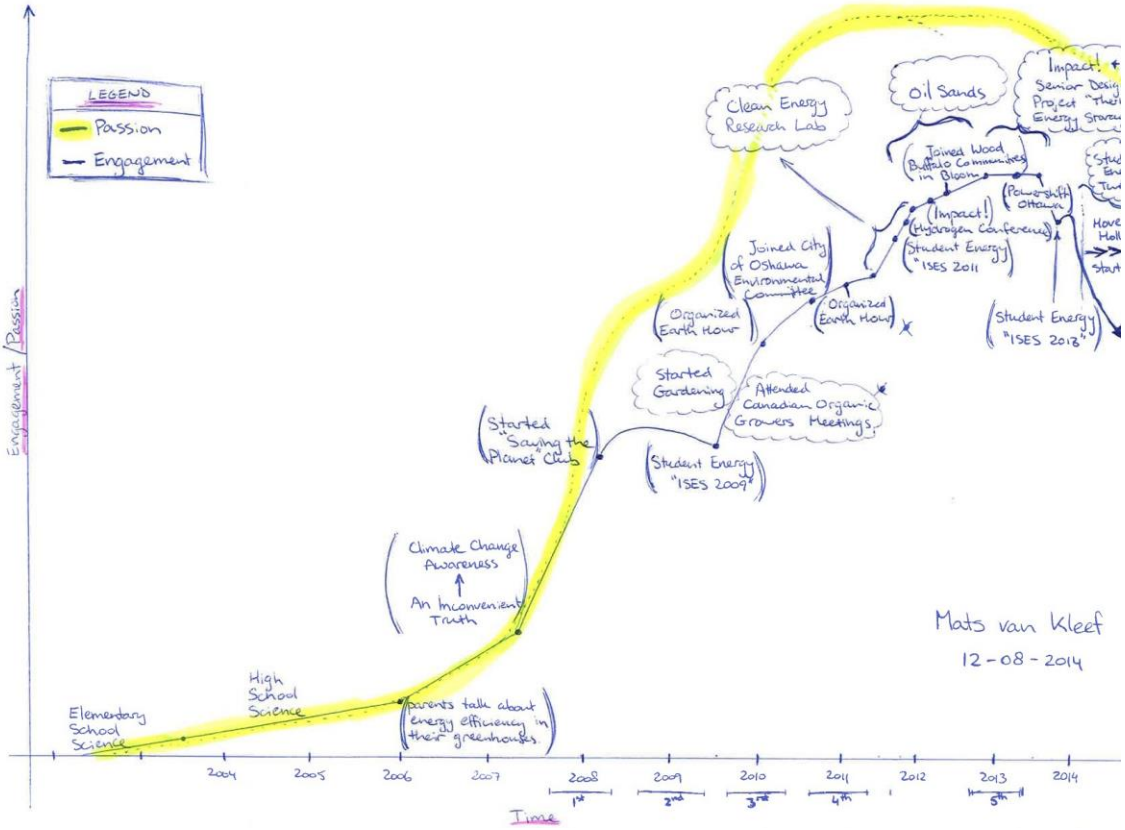
Ryan

Ryan started to become more aware of environmentally issues at the end of high school, and took action by becoming a vegetarian and was deeply influenced by the people around him. He started showing up to rallies because of a crush on a girl who was active in that community. Ryan passively participated in most environmental actions on campus, with the exception of a garden that he helped start. He revealed he did feel like he found his niche within the clubs at school. He was more interested in politics and spent a year interning at the UN in New York. He went on to do a Masters in communications and now works overseas as a Public Relations consultant.



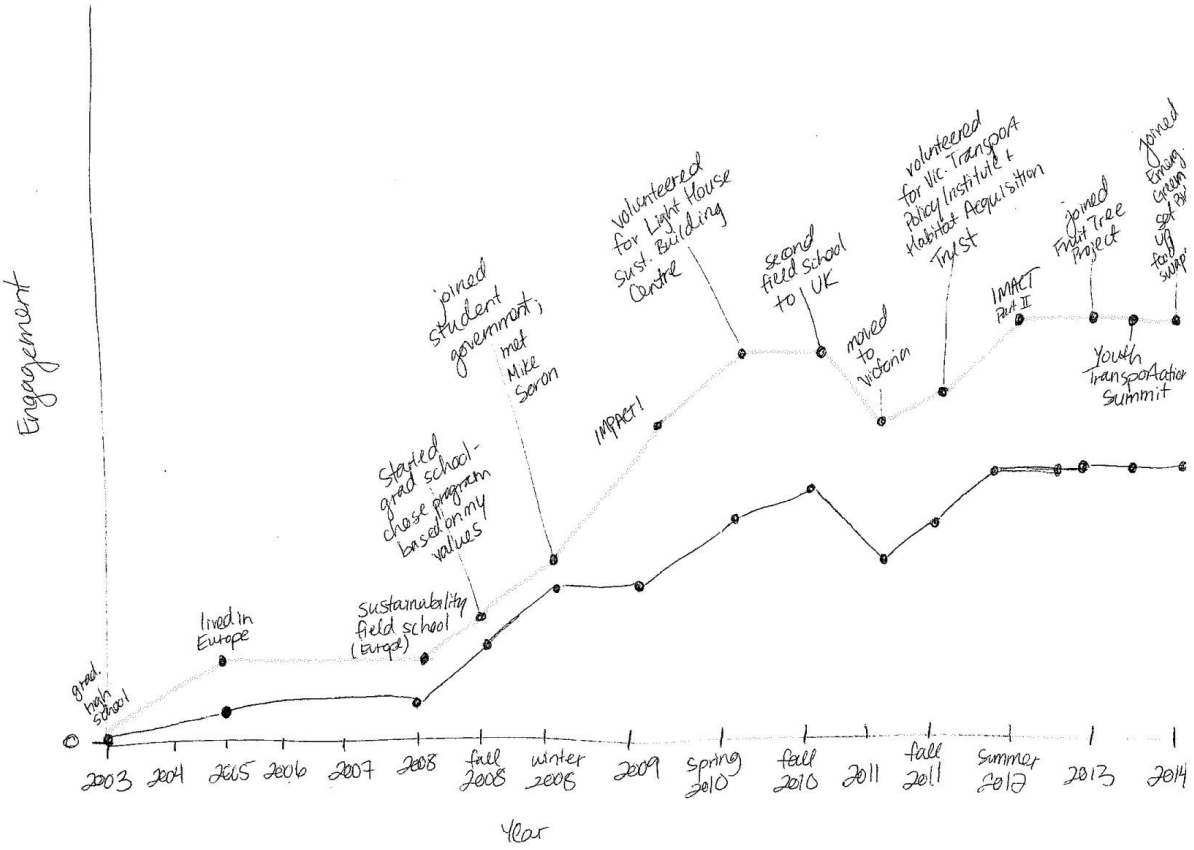
Mike

Mike grew up in a household that was always very conscious of energy efficiency and conservation as a cost-savings measure because his parents owned and operated a greenhouse. In school, he learned more about the science of energy and went on to study engineering. Al Gore's climate change movie, an Inconvenient Truth shocked him because had never heard of climate change before. This led him to start environmental movie nights at his school, where Mike says the student body was not environmentally active. Despite low turnouts, Mike persisted in learning more and now works overseas as an environmental engineer.



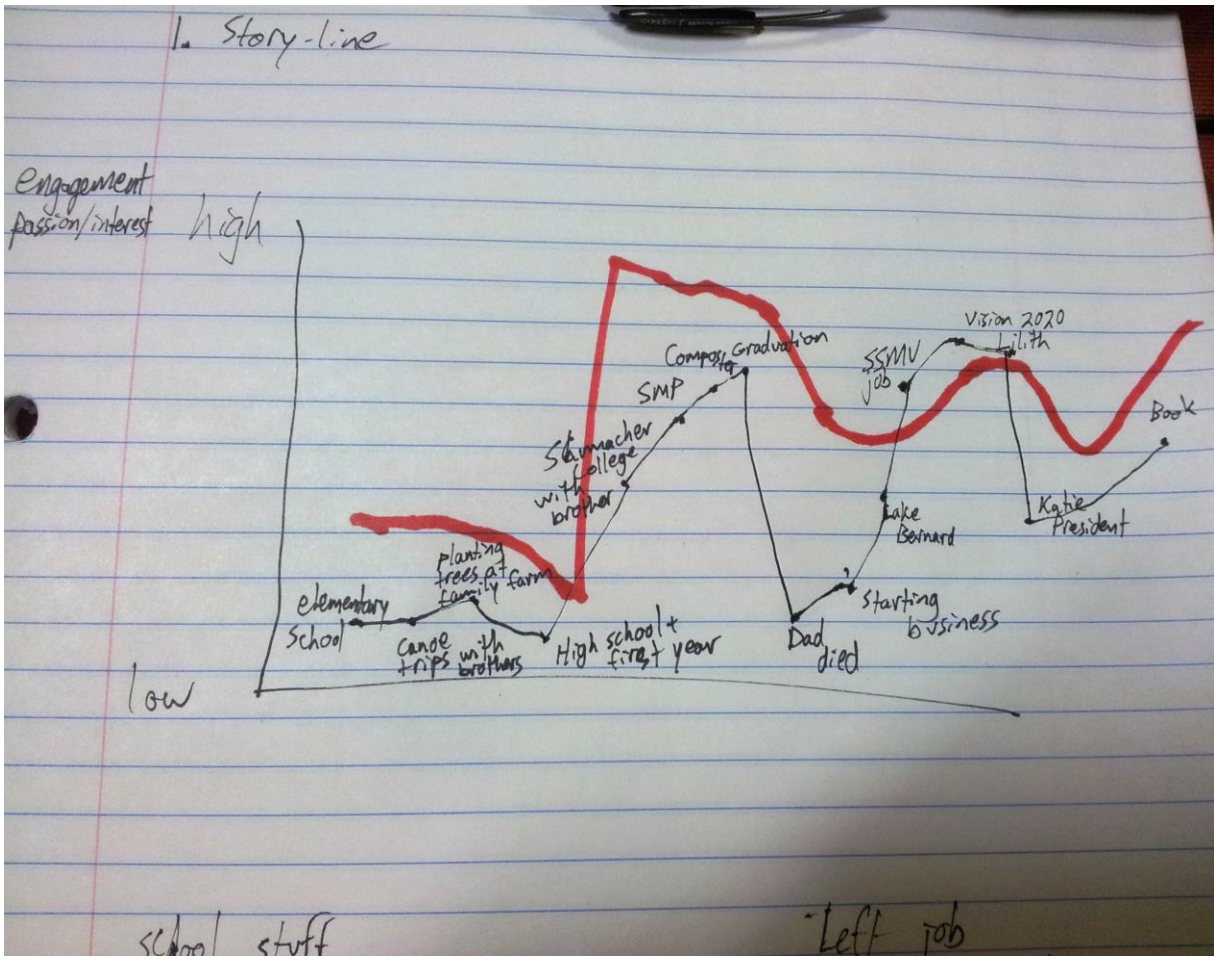
Carly

Carly grew up in a household that she described as "hostile towards environmentalism." Once she got to university and explored alternative perspectives on environmental conservation and climate change, her views changed and she joined with like-minded peers. Carly joined many clubs and rallies that supported pro-environmental policy. She learned the most through her travels and seeing how other people around the world live. Travelling acts a recharge for her engagement. She currently works for her provincial government as a urban planner, and volunteers her time at local food organizations.



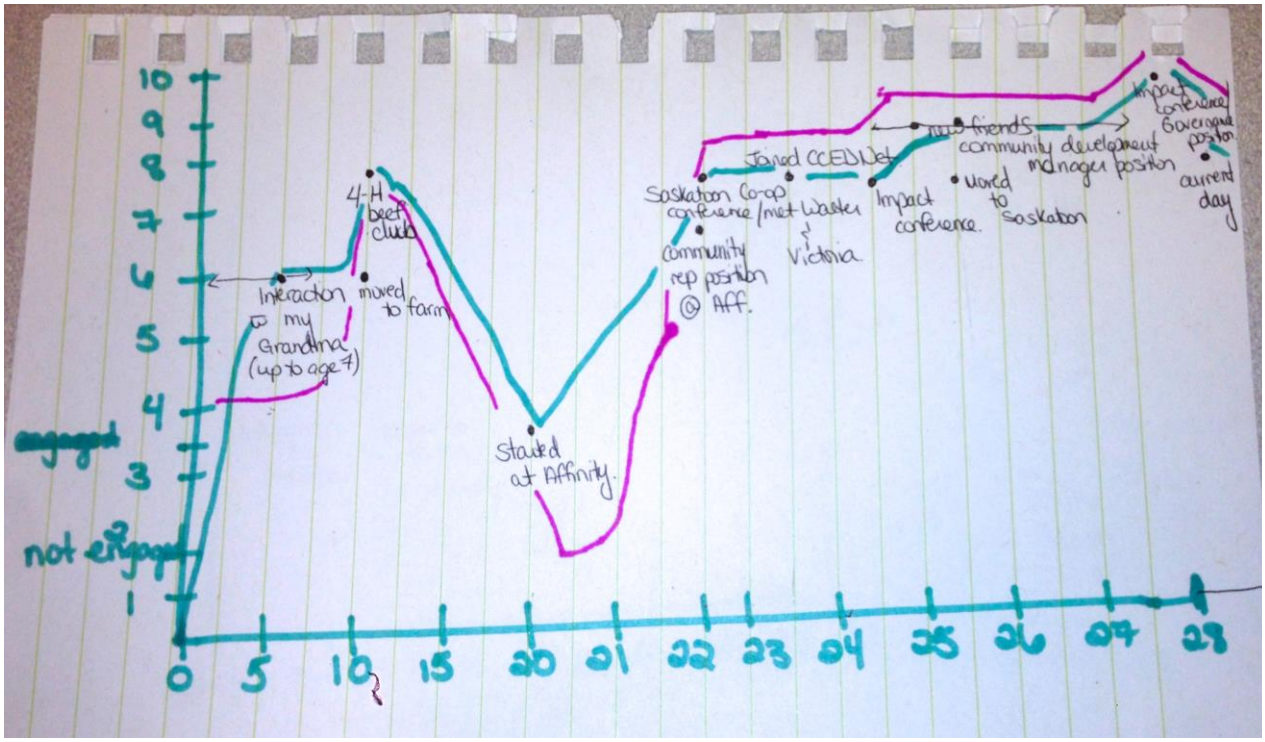
Daniel

Much of Daniel's childhood was spent outdoors camping, canoeing and planting trees with family. When Daniel went to the UL to visit his older brother at a radically progressive environmental college, he was amazed to immersed in such a sustainable form of lifestyle. The lessons he learned on his trip acted as a springboard for his engagement where he got heavily involved with sustainability at his school. When Daniel's father passed away, his engagement scaled back significantly, but his interest only slightly waned. His engagement returned over time and he became the sustainability coordinator at his university. Since graduating, Daniel has been working within his community to address economic disparity by encouraging wealthy people to contribute to grassroots media and climate change organizations.



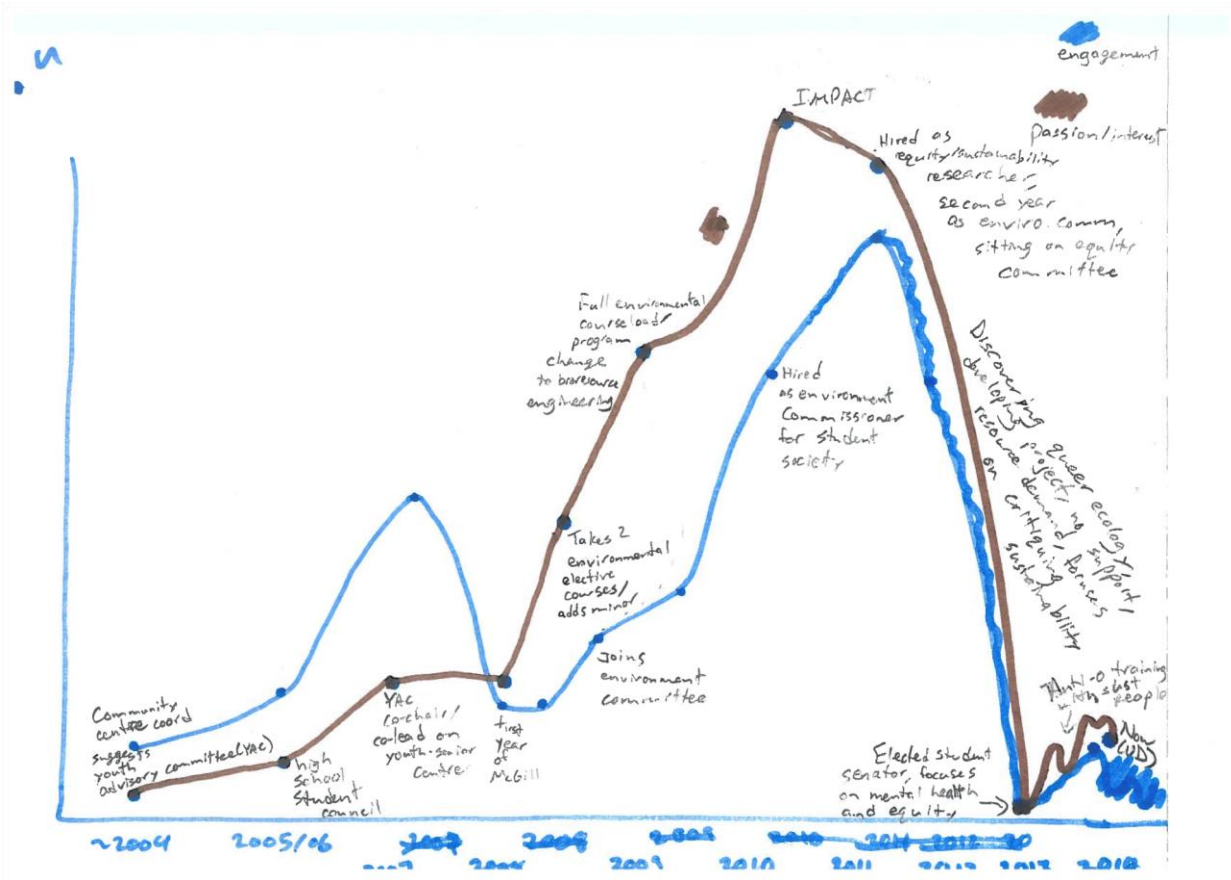
Martha

Martha grew up in a rural community and at the age of 10, her family moved to a cattle farm. In her community, she took on leadership roles on various committees and became interested in local economic development. Throughout university, Martha focused on community development in her studies, and once she came across the concept of sustainability, things clicked for her. The *IMPACT!* conference had a big influence on her as she learned about alternative models of organizations like the co-operative model. Once done university, she maintained her engagement within her community by gaining a position as a community development manager at a credit union. Now, she still works at the credit union, but has shifted to a policy development position where she uses her experience with grassroots organizations to inform policy that facilitates community improvements.



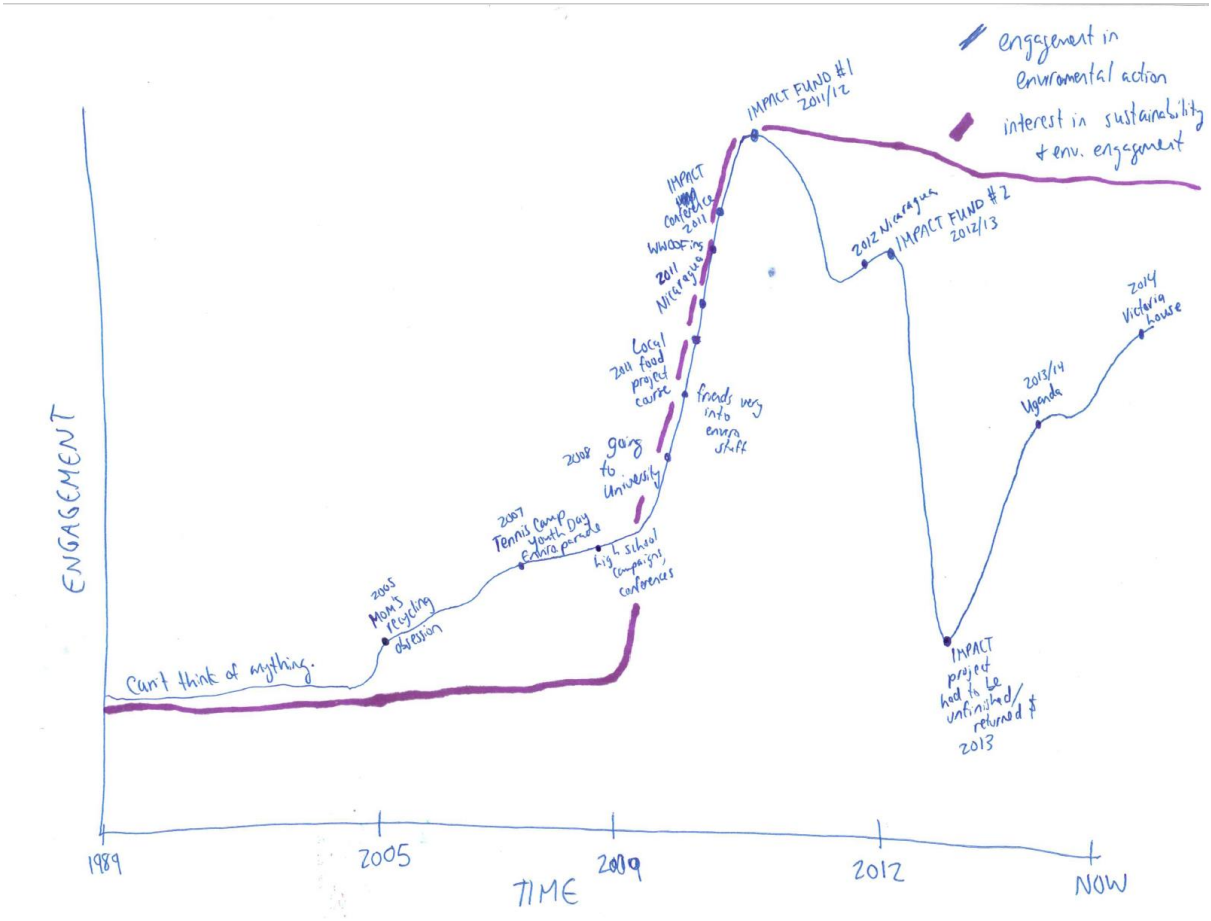
Chad

Chad started becoming engaged as a youth by participating in youth councils in his hometown. From here he came more aware of other committees that had an environment goal and also joined them. By the time Chad attended the IMPACT! conference, his engagement was at an all-time high because he felt like was matching his skills with his interests. As he learned more about environmental justice, radicalized communities and queer ecology, he found that there were missing voices at the table at his university. He received funding from IMPACT! to complete a full study on this, but found a lack of support from the sustainability office. This lack of support cause him to become disengaged with sustainability at his school, but he continues to be active as a voice in the queer community for accessibility rights.



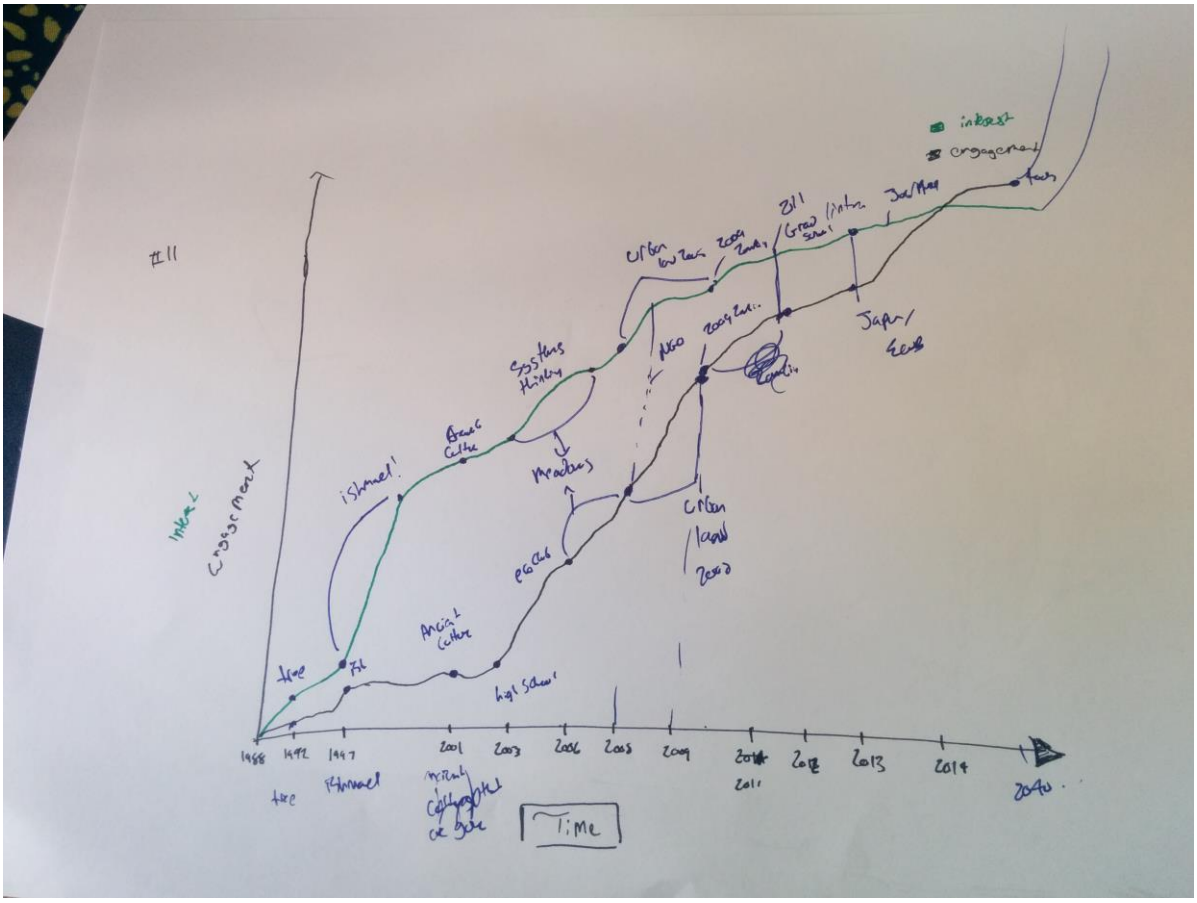
Lindsay

Lindsay grew up in a household that modeled pro-environmental behaviour, which included her "crazy recycler mom." Like so many others, Lindsay's engagement beyond environemtnal behaviour into environmental action started at university. A series of events including becoming more aware of the local food movement and then a couple of overseas trips to developing countries, really pushed her engagement further. While at university, she was heavily influenced by her social circle where sustainable lifestyles were the norm. Since IMPACT!, her interest has remained steady, but engagement has fluctuated due to faltering commitment with project partners.



Paul

Paul's remarkable insights and reflections on his life experiences started very early when he considered how his actions or inactions directly impact the world around him. He shared a story of when he planted a tree; because he did not care for the little sapling, he watched it die and reflected on the fragility of nature and his responsibility to be a steward of it. Paul's insatiable curiosity about the world has driven his engagement in many directions. In high school, he started an environmental club and developed a unique perspective on environmental issues by studying ancient cultures and worldviews. In his undergraduate degree, Paul founded an organization that aimed to bring together community voices to discuss current environmental issues and plan collaborative solutions to be acted out locally. Even though the organization failed, he applied the lessons learned to his future actions in environmental engagement. Paul completed his PhD in sustainable transportation where he is now a transportation consultant.



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