

Changes in Employment Skills and Quality of Life for Adults with Intellectual and  
Developmental Disabilities During Transition from Pre-Employment to Cooperative  
Employment

Lisa Whittingham, B.A. (Honours)

Centre for Applied Disability Studies

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Faculty of Social Sciences, Brock University

St. Catharines, Ontario

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## **Abstract**

Persons with intellectual and developmental disabilities are usually excluded from vocational training and education, and employment opportunities. While a variety of postsecondary opportunities do exist for persons with intellectual and developmental disabilities to receive vocational training and education and to be employed, there is no guarantee that these opportunities will lead to an increase in quality of life and benefits to the individual. This study builds on the findings of previous studies (Bishop, 2013; Owen, Li, et al., 2015; Owen, Readhead, et al., 2015; Readhead, 2012) and explored the impact on job skill development and quality of life for individuals participating in the training program for a social enterprise. Six students with a developmental disability from the training program were interviewed three times across the course of their training and entry to the partnership. They were divided into two cohorts based on when they started the program. The Quality of Life Instrumentation Package (Renwick & Myerscough, 2012), the Job Observation and Behavior Scale (Rosenberg & Brady, 2000), the JOBS: Opportunities for Self Determination (Brady, Rosenberg, & Frain, 2006), and a semi-structured interview were administered to the participants. The scores and the narratives provided as part of the interview were analyzed for changes. Scores on both measures did not reveal a trend indicating a change in quality of life or job skill development; however, analysis of the narratives indicated changes in both quality of life and job skills. Furthermore, participants described changes in self-determination and the limitations of participating in work. These findings are discussed in terms of previous research completed with Common Ground Co-operative, the limitations of the selected instruments and procedures; and considerations for future research regarding the impact of social enterprises on quality of life.

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## Changes in Employment Skills and Quality of Life for Adults with Intellectual and Developmental Disabilities in a Cooperative Model of Employment

Despite the increased understanding of the role that the environment plays in creating the experience of disability, and the commitments enshrined in the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD), persons with intellectual and developmental disabilities (IDD) continue to face barriers to meaningful employment in their daily lives, including lack of opportunity to find competitive employment, poor access to training programs, and limited access to on-site job support (Butcher & Wilton, 2008). In Canada, it has been estimated that 25% of persons with IDD are gainfully employed (CAACL, 2011). Furthermore, as Hall (2005) has suggested, when individuals with IDD *do* secure work, they often face exclusion and discrimination. This experience can impact an individual's perceived quality of life, "the degree to which they enjoy the possibilities in their lives" (Raphael, Brown, Renwick, & Rootman, 1996, p. 28). Quality of life is a subjective experience created by the interaction between personal and environmental factors; and the sense of enjoyment can be influenced by the opportunities and limitations each person has in his/her life (Raphael et al., 1996).

Historically, researchers have focused on how different types of environments can enhance or diminish the experience of inclusion and belonging for persons. Specifically, some researchers have proposed a social-ecological model as a means to understand how multiple systems are influenced by individuals with IDD and vice versa (Walker et al. 2011; Schalock, 1996). These models acknowledge the combined role of the multiple types of environmental influences (e.g., family, teachers, government policy), in addition to individual variables (e.g., motivation, gender).

The social-ecological model has been used to explain how self-determination can be



taught to persons with IDD as a possible mechanism by which they can impact the multiple spheres that influence their lives. Furthermore, self-determination has been linked to better employment opportunities and improved outcomes on indicators of quality of life, such as opportunities to participate in a community, opportunities to develop skills, and freedom of movement (Wehmeyer & Palmer, 2003).

This research is part of a broader research project intended to examine the impact of Common Ground Co-operative (CGC). Previous research completed with CGC has demonstrated a positive impact on Partners in regards to social inclusion, skill development, and enjoyment (Owen, Li, et al., 2015; Owen, Readhead, Bishop, Hope & Campbell, 2015; Readhead, 2012). Research was also completed with CGC staff regarding the impact of the businesses on the Partners (Bishop, 2013). The purpose of this research was to further explore the impact of CGC on stakeholders, specifically the development of job skills and changes in quality of life for students of the Foundations Training Program and new Partners voted into the businesses.

## **Literature Review**

### **Paradigms of Disability**

A universal definition of intellectual/developmental disability (IDD) has not been developed. This is in part due to persons with IDD being a large and diverse group, but also due to the varied spheres in which definitions are needed, including research, educational and clinical practice and advocacy (Owen & MacFarland, 2002; Wehmeyer, 2013). Despite the variations in definitions, most resemble the American Association on Intellectual and Developmental Disabilities (AAIDD) definition, which defines intellectual disability as being “characterized by significant limitations in both intellectual functioning and adaptive behavior, which covers many

everyday social and practical skills. This disability originates before the age of 18” (AAIDD, 2013). Specifically, limitations in intellectual functioning are identified as being the deficits in cognitive areas such as problem solving, reasoning, and/or learning, whereas limits in adaptive functioning include limitations in areas such as social skills or home management (AAIDD, 2013). This is different from a developmental disability which is “an umbrella term that includes intellectual disability, but also includes other disabilities that are apparent during childhood” (AAIDD, 2013). Since developmental disabilities can include intellectual disabilities, this paper will refer to both as intellectual/developmental disabilities (IDD).

The focus on impairments or deficits as the defining characteristic of IDD may be due in part to the historical perspectives of persons with IDD; that is, they have been understood from a medical model of disability (Shogren, 2013). This model focuses on the physical deficits that are the root causes of an individual’s limitations. That is, there is something inherent in the individual that causes the disability, namely, cognitive deficits in persons with IDD (Wehmeyer, 2013). The functional limitation model of disability took hold at the beginning of the 1900s against the backdrop of the social hygiene movement – a group of reformers interested in controlling vice, crime, and moral decline through sterilization and segregation. In 1910, Henry Goddard was the first to propose a nomenclature to evaluate and classify persons with developmental and intellectual disabilities (Wehmeyer, 2013). He proposed that intelligence testing could be used to determine which category of mental defectiveness a person fell into, ranging from “moron” to “idiot.” He also proposed that persons who met the criteria for IDD (i.e., “feeble-mindedness”) be involuntarily sterilized for the protection of society. Despite recognizing the challenges associated with this recommendation, it gained widespread acceptance and grew to also promote the segregation of persons with IDD in institutions

(Wehmeyer, 2013). Subsequent policies and legislation created based on this understanding of disability lead to widespread social oppression and segregation individuals with cognitive deficits. This oppression and segregation was extended to other groups of individuals who were perceived as “feeble-minded” and subsequently as a risk to society, including immigrants, individuals with low socio-economic status, and other groups of people perceived to contribute to the moral decline of society, such as prostitutes, rapists, and criminals.

Perceptions regarding persons with disabilities began to change in the 1940s and 1950s. With improved medical treatment, such as vaccinations for polio, and increased disability due to war veterans returning from World War II, there was a change in the public perception of the nature and impact of disability (Wehmeyer, 2013; Simmons, 1982). Specific to persons with IDD, parent groups began to form and challenge the public perception that their children were public nuisances, causing a shift in the perception of persons with IDD from public nuisance to “perpetual child” (Simmons, 1982). That is, persons with IDD were regarded as having the bodies of adults but the minds of children. This shift in perception led to the consensus that persons with disabilities were victims in needs of charity; and they were perceived as individuals in need of fixing or curing rather than as hopeless causes contributing to the decline of society (Wehmeyer, 2013). Furthermore, parents of persons with IDD rejected the belief that their children would be better off in institutions and formed groups to advocate for alternative options for their children, including rehabilitation and training for their children. Despite these efforts, few community options (e.g., employment, residential) outside of a few special education classrooms existed for parents (particularly mothers) who chose to keep their children at home, rather than surrender them to the institutions (Wehmeyer, 2013; Simmons, 1982). Sadly, the tension between parents’ beliefs and the available community resources to support children with

IDD resulted in negative consequences, such as stressed family relationships and maternal depression. This perpetuated the beliefs of professionals that these children belonged in institutions and not at home. It also caused some families to become socially isolated if they chose to keep their children with IDD at home (Lord & Hearn, 1987).

In the 1960s and 1970s, social rights movements challenged the current paradigms of understanding differences in humanity. With regards to disability, members of these movements challenged the medical understanding of disability and the roles that persons with a disability could occupy within society. Rather than an individual deficit, the disability rights movement advocated that disability was the result of a mismatch between the individual and the environment (Owen & Griffiths, 2009; Shogren, 2013). That is, “disability [is] a form of diversity and the barriers experienced by people with disabilities [are] not [seen] as inherent to the individual but as a result of oppression and discrimination from a society that did not integrate and accommodate people who learned, moved, and interacted in diverse ways” (Shogren, 2013, p. 26). Due to this shift, the models of disability that focused on medical explanations and remediation were replaced with social constructionist models that acknowledged that ability could shift based on accommodations and barriers in the environment, in addition to the limitations and strengths presented by a person’s capabilities (Shogren, 2013). From this perspective, the focus was no longer on remedying deficits in the individual; rather it was on the demands of the environment and the conditions needed for the optimal functioning of individuals with disabilities (Shogren, 2013). Furthermore, the focus was shifted away from promoting “normal” development to emphasizing quality of life as defined by the individual and by other significant persons in their lives (e.g., spouse, parents).

With this change in paradigm, increased attention was paid to integration opportunities and deinstitutionalization (Bigby, 2012; Wolfensberger, 1972). Increasingly, emphasis was placed on changing society's perception of individuals with IDD by promoting their social roles. For example, Wolfensberger (2000) developed the theory of Social Role Valorization (SRV) to emphasize the importance of honest community integration promoting the perception of persons with IDD as valued community members. In addition to SRV, the Disability Rights Movement brought increased interest in the rights of individuals with IDD to be causal agents of their own lives with regards to employment, recreation, and autonomy (Shogren, 2013). Combined, these two currents of social change increased the number of opportunities for individuals with IDD to engage in community-based living, including recreation, employment, residency, and education.

A more recent development in the history of persons with IDD was the creation and ratification of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) (United Nations General Assembly, 2007). This international document asks countries endorsing it to “promote, protect, and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity” (United Nations General Assembly, 2007). The desired outcome of this document and the human rights it enshrines is not only to protect the freedoms of individuals with IDD on the simple basis that they are human but also to ensure that measures are taken to promote the capacity of persons with disabilities to act autonomously in their own lives to the best of their ability (Endicott, 2011).

On the surface, these efforts have appeared to have a positive impact on individuals with IDD due to the closing of large-scale institutions and modifications to the education system to create accommodations. However, closer examination of the experience of persons with IDD has

revealed a culture of the “asylum without walls” (Hall, 2005, 2010). That is, evaluation of the objective circumstances indicates a positive shift for the lives of persons with IDD; however, the subjective experiences of persons with IDD indicate a life defined by discrimination and isolation (Hall, 2005, 2010). Furthermore, the inclusion of persons with IDD has not been widespread; and despite the rights set out in the articles of the UNCRPD, which include the rights to employment and community inclusion among others, persons with IDD still regularly experience limitations and restrictions in their lives. For example, more than seventy percent of adults with IDD are not actively participating in the workforce (CACL, 2013). Despite the historical changes regarding the nature of disability and the development of the UNCRPD, there is still on-going development needed regarding the treatment of persons with IDD and their ability to participate fully as citizens.

Consistent with the change in perception that the causes of disability are the combination of individual, environmental, and social factors, the social-ecological model has emerged to conceptualize these variables as both enabling and disabling (Simplican, Leader, Kosciulek, & Leahy, 2015).

### **The Social-Ecological Model**

Social-ecological models have been used by many researchers to explain changes in human behaviour by conceptualizing ability as an interaction between the person and the environment, (Llewellyn & Hogan, 2000; Walker et al., 2011; Wehmeyer, Shogren, Zager, Smith, & Simpson, 2010). The benefits of using a social-ecological model include distributing the responsibility of change between “enhancing the capacity of the person and changing the expectations or characteristics of the environment or context” (Walker et al., 2011, p. 9). That is, a more holistic understanding of how to enhance individual functioning can be garnered through

identifying the different influences within the individual, various circles of environmental influence, and how they interact. The two most common models described in disability literature are the World Health Organization's (WHO) International Classification of Functioning, Disability and Health (ICF) structure and Bronfenbrenner's ecological systems model (Bronfenbrenner & Morris, 2006; World Health Organization, 2001; Verdonshot, de Witte, Reichrath, Buntinx, & Curfs, 2009). Although both models identify and highlight the interaction between the environment and the individual to create the experience of disability, Bronfenbrenner's model was selected for this study because it is commonly used by other researchers studying quality of life and self-determination (e.g., Walker et al., 2010; De Ruyscher et al., 2016).

The WHO International Classification of Functioning (ICF) provides a conceptual framework to understand the process of how environmental and individual variables intersect to create the experience of disability (Luckasson & Schalock, 2013; Walker et al., 2011; World Health Organization, 2001). The ICF identifies that, "An individual's functioning in a specific domain is an interaction or complex relationship between the health condition and contextual factors" (World Health Organization, 2001, p. 17). According to this dynamic model, disability can be multifaceted (i.e., a change in one domain may influence change in another), and bidirectional (e.g., the individual can influence the environment and vice versa) (World Health Organization, 2001). Simplican et al. (2015) identified that further research is need regarding the social inclusion for persons with IDD using the ICF ecological model. They suggested that "conceptualizing interventions within an ecological model may help [to] sustain their effectiveness, as individual behavioral change is most successful when situated in organizations, communities, and political climates that are supportive" (Simplican et al., 2015, p. 27).

In addition to the ecological model, the ICF also identifies four potential environmental factors that may interact with an individual's impairment to exacerbate the experience of disability. These factors include the availability of products and technology (e.g., assistive technology), support and relationships (e.g., staff providing support to an individual), attitudes (e.g., values regarding the disabilities of the people within the environment) and the services, systems and policies designed to meet the needs of individuals (e.g., legislation). Verdonschot et al. (2009) conducted a systematic evaluation of the literature regarding which ICF environmental factors have an impact on community participation of persons with an intellectual disability. They found that research conducted before 2009 indicated that various environmental factors had a positive impact on community participation, including having opportunities to make choices and to participate in policy making, positive staff attitudes and family involvement, and opportunities for vocational services (Verdonschot et al., 2009). They also found that there were various environmental factors that could negatively impact participation, including lack of transport and not feeling accepted (Verdonschot et al., 2009). Finally, they identified that very little research has used the ICF framework specifically to understand the impact of broader environmental factors on community participation. Instead, the research emphasis has tended generally to be on the impact of services on community participation.

Other ecological models of disability are based on the work of Bronfenbrenner (1986). Bronfenbrenner (1986, 1999) proposed that the social development of an individual over the course of their lifespan could be understood in the context of their interaction with social environmental systems, including family, school, work, community, and government (Law et al., 1996). Initially, he proposed that human development needs to be understood in the context of four environmental systems, similar to the framework proposed by the ICF: the microsystem



(i.e., persons closest to the individual; e.g., family), the mesosystem (i.e., the interaction between two members of the microsystem; e.g., family and school); the exosystem (i.e., the structures influencing the microsystem; e.g., family socio-economic status); and the macrosystem (i.e., cultural or social influences; e.g., government legislation) (Bronfenbrenner, 1986). Later advances in the model proposed that development was best understood in the context of process-person-context-time (PPCT), which became the foundation of his ecological model (Bronfenbrenner, 1999).

Process is the primary mechanism for development. Bronfenbrenner (1999) identified that frequent, ongoing interactions between the individual and the immediate environment was necessary for development. Furthermore, he identified that the characteristics of these interactions vary based on both the characteristics of the individual and the environment (including all ecological systems).

Person encompasses the personal variables within the individual that influence interactions. Specifically, he identified demand (e.g., age), resource (e.g., past experience), and force (e.g., motivation) characteristics that may influence the environment (Tudge, Mokrova Hatfield, & Karnik, 2009). In his view, the combination of these characteristics explain how similar individuals may differ. For example, two individuals who have attended the same program may differ in their ability to acquire a job based on force characteristics, such as persistence or motivation.

Context refers to the original four environmental systems proposed by Bronfenbrenner (1986). It also includes the chronosystem that focuses on historical events that may influence the individual's interactions with the other systems in the model (Bronfenbrenner, 1999; Tudge et al., 2009). For example, an unsuccessful co-op placement at school may influence an

individual's willingness to participate in competitive employment in the future. Finally, Bronfenbrenner (1999) proposed that time influences the nature of interactions between individuals at the micro-level (e.g., changes in parent-child communication as the "child" matures), the impact of processes within the individual's environment (e.g., the school year), and conceptual changes within the culture in which the individual lives (e.g., the shift from a medical to social model of disability).

Schalock et al. (2010) proposed that the social ecological model could be used to understand and shape policy influencing persons with IDD. Furthermore, Luckasson and Schalock (2013) proposed that this model "not only enhances the understanding of the person's disability, but also changes the approach to classification and supports planning, provision and evaluation" (p. 659). Walker et al. (2011) emphasized that the social-ecological model could be used to assist in the understanding of self-determination for persons with IDD. Similar to the understanding of disability, a social-ecological approach to self-determination stresses the importance of the interactions between the person and their environment. It also distributes the responsibility for self-determination between the strengths and abilities of the individual and an environment that will empower the individual to make decisions (Walker et al., 2011).

### **Self-Determination**

One of the underlying themes in both the Disability Rights Movement and the UNCRPD is the concept of self-determination. Self-determination refers to:

A combination of skills, knowledge, and beliefs that enable a person to engage in goal directed, self-regulated, autonomous behavior. An understanding of one's strengths and limitations together with a belief in oneself as capable and effective are essential to self-determination. When acting on the basis of these skills and attitudes,

individuals have greater ability to take control of their lives and assume the role of successful adults. (Field, Martin, Miller, Ward, & Wehmeyer, 1998, p. 2)

Within the framework of the social-ecological model, Walker and his colleagues (2011) referenced three necessary dimensions to promote self-determination, namely, causal agency, proxy agency, and the opportunity to act upon the environment. The first dimension, causal agency, refers to the ability of an individual with IDD to make decisions that assist him or her to achieve personal goals and to participate in the necessary process to achieve them (Vatland et al., 2011; Walker et al., 2011). The second dimension is proxy agency, or the person's opportunity to act cooperatively with other people when necessary. That is, they are able to recognize when help is needed, and to ask for it (Vatland et al., 2011; Walker et al., 2011). As identified by Bandura (2001), individuals do not have control in several spheres that influence their lives; therefore, it is necessary to secure the assistance of other individuals with influence in these spheres to represent them. The final dimension is environmental opportunities to act. This means that persons with IDD should have the opportunity to participate in both activities that are specialized for adults with IDD; and in those that are designed for the general population (Vatland et al. 2011; Walker et al., 2011). That is, they should have access to enriched environments that allow for a range of experiences that include independent interaction with people who are not paid to support them. As identified by Hall (2005, 2010), it is not enough for persons with IDD to occupy public spaces in these environments; they must also be afforded opportunities to participate actively and safely, rather than passively and in an isolated way.

In addition to identifying the dimensions of self-determination, Wehmeyer and Schalock (2001) identified that there are four characteristics of self-determined behaviour: *behavioural autonomy, self-regulated behaviour, acting in a psychologically empowered manner, and self-*

*realization. Behavioural autonomy* is when an individual acts according to his or her own concern and free of external influences. *Self-regulated behaviour* is making decisions regarding behavior based on what is appropriate to the environment and revising as necessary. *Acting in a psychologically empowered manner* is the belief that an individual has control over his or her behaviour, has the necessary skills, and expects the outcome he or she predicted when choosing to act. Finally, *self-realization* is personal insight regarding one's own strengths and weaknesses and acting accordingly. Wehmeyer and Schwartz (1998) identified that not all self-determined individuals have the same profile of characteristics and will often exhibit different characteristics of self-determination based on their environment and circumstances. In addition, and importantly, Wehmeyer and Schwartz (1998) and Wehmeyer and Boulding (1999) established that IQ is not a significant contributor to a person's ability to be self-determined.

Although many researchers and theorists conceptualize self-determination as a skill to be learned by persons with IDD, Leake (2014) identified that self-determination also requires social capital, the benefits of a relationship that can help to achieve an outcome, to be successful. He proposed that in addition to individual capacity to make decisions and an enabling environment that provides opportunities to make choices, individuals with IDD need to be connected to a genuine circle of support, one characterized by interdependence. Similar to Hall (2004), Leake (2014) argues that without a genuine sense of belonging within the community (social capital), individuals with IDD will not achieve self-determination, regardless of skill, due to discrimination and isolation within community environments. He also identifies that persons with IDD lack the opportunity or skill to completely act independently and rely on the advice, judgement, or suggestions of another trusted person. Therefore, any model of self-determination needs to account for this "shared decision-making" (Leake, 2014, p. 39).

Research has established that self-determination is important to the improved outcomes of adults with IDD. For example, Wehmeyer and Palmer (2003) established empirical evidence for these outcomes of self-determination. They evaluated the outcomes of 94 students with a learning disability or developmental disability leaving high school. Each participant was asked about their self-determination in six areas of living, including home, employment, transportation, recreation, money management, and leadership. They were asked about outcomes using a survey one year and three years after graduation from high school. Results indicated that individuals with greater self-determination were more likely to be independent in numerous aspects of their life including finances and residence. In part, it appeared that these changes in circumstances appeared to be associated with the ability of the individual to secure employment. In addition, they were more likely to obtain job benefits, such as health insurance and vacation time.

Furthermore, self-determination has been associated with both good quality of life and employment in individuals with IDD. Schalock (1996) identified self-determination as one of the core dimensions involved in his model of quality of life, with exemplars including choices, autonomy, and self-direction. Wehmeyer and Schwartz (1998) studied the link between quality of life and self-determination in fifty adults with IDD living in group homes. Controlling for variables such as intelligence, they found that individuals with higher self-determination had a stronger sense of having a good quality of life. This link between self-determination and good quality of life has also been confirmed internationally. Lachapelle and colleagues (2005) examined the relationship between self-determination and quality of life in adults with IDD across four countries (i.e., Canada, Belgium, France, and the United States). They defined self-determination using the same criteria as Wehmeyer and Schalock (2001) and found similar results: persons with IDD with opportunities for greater self-determination reported having better

quality of life. In sum, evidence appears to indicate that, regardless of cultural differences, when persons with IDD are given the opportunity to make choices and operate independently according to the criteria laid out by Wehmeyer and Schalock (2001), they report better well-being.

Furthermore, self-determination has also been linked with more positive outcomes in employment. Wehmeyer and Schwartz (1997) compared the outcomes of individuals with intellectual disabilities based on self-determination skills one year after leaving high school. They found that individuals who exhibited greater self-determination skills at the time of leaving high school were more likely to be in a paid employment role compared to individuals who exhibited low self-determination. In addition, individuals exhibiting high self-determination were making more money per hour than individuals exhibiting lower self-determination (Wehmeyer & Schwartz, 1997). Further evidence supports that individuals exhibiting greater self-determination are also more likely to find competitive employment (rather than being employed in sheltered workshops), to be employed for a longer period of time, and to achieve greater job satisfaction and higher performance ratings (Field et al., 1998; Wehmeyer, 1994, 1999; Wehmeyer & Palmer, 2003).

Finally, self-determination, quality of life, and employment appear to be interrelated, in addition to being connected separately. Wehmeyer and Bolding (1999) examined the relationship between self-determination and living and working environments (e.g., community employment versus segregated employment environments) of two hundred and seventy-three adults with IDD with age, intelligence, and gender controlled for. Using a variety of questionnaires, they found that individuals residing or working in community-based settings reported more self-determination than their counterparts in segregated settings. When post-hoc analysis of lifestyle

satisfaction, particularly job satisfaction, was conducted on individuals working in segregated versus non-segregated environments, it was found that individuals working in the community had higher lifestyle satisfaction and job satisfaction. Verdugo, Martín-Ingelmo, Jordán de Urríes, Vicent and M.C. Sánchez (2009) examined the impact on quality of life and self-determination for individuals with IDD in a Spanish supported employment program. They found that both internal factors (i.e., associated with the individual) and external factors (i.e., associated with the environment) had to be present to promote both good quality of life and self-determination. Furthermore, they found that the characteristics of the workplace could also influence both quality of life and self-determination (Verdugo et al., 2009). For example, they found that earning wages “[affected] their perception in terms of feeling more competent and more autonomous (the higher the wage, the greater the productivity and independence) and with a better quality of life” (Verdugo et al., 2009, p. 62).

### **Employment of Persons with IDD**

Article 27 of the UNCRPD outlines that persons with disabilities will be protected from employment discrimination and harassment (United Nations General Assembly, 2007). It also guarantees these individuals the right to gainful employment. However, despite these rights, persons with IDD continue to be underrepresented in all employment settings. Previous research conducted on the number of persons with IDD who are employed has indicated that “the employment rate for Canadians with intellectual disabilities is only one-third of the employment rate for people without disability (25.5% compared to 75.5%)” (CACL, 2011). In addition, it is estimated that for the work they do, the income of persons with IDD is lower than half of the people without a disability. This grim assessment of employment opportunities for individuals with IDD is not aligned with the provisions laid out in the UNCRPD; it shows that few persons

with IDD have the opportunity to reap the benefits of gainful employment that are available to the rest of the population.

It is likely that attitudinal, social, and structural barriers are among the reasons why persons with IDD are excluded from the job market. Bennett and Gallagher (2011) identified that one of the reasons that inclusion in employment is slow to materialize is what they referred to as the underlying “charity-based” philosophy of inclusion rather than a “rights based” commitment to participation. They suggested that a charity-based inclusion point-of-view means protecting persons with IDD and providing training and job opportunities in a segregated environment with their peers. They described the outcome of this perspective as being that individuals are denied opportunities to pursue personal goals and they develop few marketable employment skills. Rights-based inclusion ensures that persons with IDD have equal opportunity to a variety of employment options and barriers are removed throughout the employment process (i.e., recruitment, orientation, assessment, and performance) (Bennett & Gallagher, 2011).

In addition to the provisions laid out in the UNCRPD, employment can be perceived as an important aspect of adult life since it provides self-sufficiency, autonomy, and sense of self-worth (Burge, Ouellette-Kunz, & Lysaght, 2007). Previous research has also identified that employment can produce positive outcomes for an individual with IDD, including changes to society’s perception of adults with IDD, increasing the number of opportunities for independence, and providing the opportunity to learn new skills – both personal and job-related including independence and social skills (Burge et al., 2007; Lysaght, Krupa, & Bouchard, 2015).

Alternatively, Hall (2004) has identified that although employment may lead to participation in the community, it does not necessarily lead to a genuine sense of social



inclusion. When employed individuals with IDD were asked to discuss their experiences, they described being in low-paid, low-skilled, and low status jobs (Hall, 2004). Butcher & Wilton (2008) described similar trends in Ontario for youth transitioning from high school to paid employment. They found that employers were able to maintain an employee from a supported employment program indefinitely without paying minimum wage requirements or transitioning them to a competitive paid position (Butcher & Wilton, 2008).

Many cultures associate employment with social value since the assumption is that working adults are contributing to society, whereas those who are not are a drain and burden. Associated with this belief is the misperception that anyone who wants to work can and that those who are not are doing so by choice. Adults with IDD have historically been perceived as being incapable of working since it has been assumed that they have little to contribute economically (West, Wehman, & Wehman, 2005). This misconception has contributed to the stigma associated with disability, and has subsequently remained a significant barrier to inclusion in employment. For example, early in this century, 34% of adults residing in Southeastern Ontario still reported that persons with IDD should be employed in a sheltered workshop. The supporting evidence indicated that a possible reason for this perception were based upon the lack of realistic media portrayals of persons with IDD in employment and reduced contact with persons with IDD. This evidence suggested that these perceptions will persist without genuine examples of inclusion (Burge et al., 2007). Despite this awareness, there remains conflicting evidence regarding whether persons with IDD employed in a community setting will change public perception. For example, Jahoda et al. (2009) interviewed 49 participants with IDD regarding the changes in their lives during nine months of employment. Participants indicated that they felt that other individuals perceived them differently when they

were employed. As one participant put it succinctly, “This is my chance to shine really... I look forward to going to work every day” (Jahoda et al., 2009, p. 423). On the other hand, Milner and Kelly (2009) interviewed 28 members of a Community Participation project in New Zealand. Their results indicated that while participants also felt it was important to occupy community spaces to challenge social norms; they felt it was important to recognize “privileging location over other indicators of inclusion may represent a potentially oppressive denial of the experiential reality of their lives” (Milner & Kelly, 2009, p. 53).

For individuals with IDD choosing to participate in employment, it may provide them with more financial options and the benefits that go with these options, such as independence. Timmons, Hall, Bose, Wolfe, and Winsor (2011) examined the factors that influence the decision of persons with IDD to become employed. One of the personal preferences reported was the desire to earn money to contribute to the household, to participate in hobbies, and to save for future use. In addition, the amount of money earned was a contributing factor for looking for work with increased independence, and wanting to leave a sheltered work environment. Jahoda et al. (2009) also found income to be a motivator for work. Participants reported that it was their reason for work and that they enjoyed the benefits including increased self-sufficiency and status.

Finally, employment can also provide individuals with IDD the option to develop new skills related to both employment and adaptive functioning skills (Stephens, Collins, & Didders, 2005). Stephens et al. (2005) used information gathered from adults with developmental disabilities that made up a large-scale university research project database in a longitudinal study to evaluate the impact of different employment scenarios (e.g., sheltered workshops, supported employment, unemployment) on the adaptive skills of individuals with challenging behaviour.

They found that employment status influenced adaptive skills, but not challenging behaviour in individuals with IDD. Specifically, the more integrated an individual was in the community employment opportunity, the greater the development in the reported adaptive skills. Su, Lin, Wu, and Chen (2008) also found that skill development was associated with employment opportunities. They compared employed adults with IDD to their unemployed counterparts on measures of cognitive ability and adaptive functioning, with intelligence controlled for. Results indicated that the individuals who were employed performed better than individuals who were unemployed. One of the hypothesized reasons for this difference in ability was that the employed group of participants had more opportunities to rehearse using these skills (Su et al., 2008).

**Employment options for persons with intellectual and developmental disabilities.**

Employment options for persons with IDD can be divided into established and novel opportunities. Established opportunities, including sheltered workshops, supported employment, and competitive employment that have been researched and used by agencies to create employment opportunities for persons with IDD. Novel opportunities include self-employment and social enterprise; and have increasing research and opportunities for use.

*Sheltered Workshops.* The first employment option for persons with IDD is the sheltered workshop. These segregated workplaces are “a facility-based program where adults with intellectual disabilities perform activities that generates some degree of revenue as an alternative to working in the community as part of the general labour market” (CACL, 2011, p. 6). This employment option developed from the medical model that focused on the deficit aspects of disability and the need for safety and protection for the individual with IDD (CACL, 2011). Migliore, Mank, Grossi, and Rogan (2007) identified that these environments are characterized by easy to learn, repetitive tasks, hierarchical structures with staff in positions of control, and

unpaid or below minimum wages. Despite the declining trend for placement in sheltered workshops in the past years, the ratio of individuals with IDD in sheltered workshops to integrated employment remains 3:1 in the United States in 2011 (CACL, 2011).

Research has indicated that individuals in sheltered workshops tend to report poorer outcomes than their peers in integrated employment settings. Banks, Jahoda, Dagnan, Kemp, and Williams (2010) found that individuals supported in a sheltered workshop setting reported poorer outcomes in well-being and a higher incidence of depression. In addition, despite the reported goal of transitioning people from the sheltered workshop to the community, Migliore et al. (2007) examined the discrepancy between policy and practice in the United States regarding sheltered workshops. They found that only one to five percent of individuals with IDD transition to more independent work opportunities indicating that this is not an effective means of training skills that are transferrable to a community setting.

***Supported Employment.*** Supported employment has been adopted by many agencies as an addition to or replacement for sheltered workshops (Butcher & Wilton, 2008). MacGaughy and Mank (2001) defined supported employment as “competitive work in integrated work settings, or employment in integrated work settings in which individuals are working toward competitive work, consistent with the strengths, resources, priorities, concerns, abilities, capabilities, interests, and informed choice of the individuals” (p. 56). Due to the varied environments in which persons with IDD can work, the supports provided can vary from training/pre-employment supports to on-going long-term employment supports (CACL, 2011).

Supported employment developed in the 1980s when persons with IDD became dissatisfied with the employment options provided to them in sheltered workshops, arguing that “enabling environments” were required for competitive employment (MacGaughy & Mank,

2001; Butcher & Wilton, 2008, p. 1079). This employment option developed alongside sheltered workshops rather than replacing them, much to the disappointment of disability advocates.

Migliore et al. (2007) examined whether adults with IDD and their families preferred sheltered workshops or supported employment. They found that 70% of persons with IDD and their families preferred supported employment over sheltered workshops. In addition, a total of 90% of the person-family pairs believed that persons with IDD could work in a community setting with the appropriate supports.

Research has also shown that supported employment has more benefits than sheltered workshops. Stevens and Martin (1999) identified that some of the benefits of employment for persons with IDD included increased opportunity for skill development, better acceptance in the community, and increased autonomy. In addition, people in supported employment programs, regardless of their level of intellectual disability, earned nearly 3.5 times more than their peers in sheltered workshops (CACL, 2011).

***Competitive employment.*** The goal of supported employment is for individuals with IDD ultimately to secure a position within the competitive labour market. The perceived benefits of competitive employment are reduced reliance on external supports, wages on par with those of neurotypical employees, and social acceptance by colleagues (Wehman, Revell, & Brooke, 2003). Historically, very little attention was given to competitive employment for person with IDD, and it was often used synonymously with supported employment (Bishop, 2013).

Siperstein, Heyman, and Stokes (2014) assessed the characteristics associated with competitive employment in 1055 adults with intellectual disabilities. They surveyed caregivers via phone regarding the characteristics that their child exhibited and their child's employment status. The results of this study confirmed that individuals in competitive employment exhibited more

adaptive behaviours, were young, and exhibited particularly low frequency of maladaptive behaviour. Moreover, 72% of the adults with IDD in competitive employment were likely to also be employed before leaving high school. It is possible that, as identified by Holwerda, de Boer, Groothoff, and van der Klink (2015), the perceptions of parents and teachers influence and shape the student's perceptions regarding employment options and motivation to attain employment goals. Despite this research, competitive employment remains a lofty goal, rather than an achievable outcome for individuals with IDD. For example, Siperstein et al. (2014) reported that only 19% of adults with IDD were employed in a competitive setting.

Numerous researchers have proposed why competitive employment remains an elusive goal. Firstly, there is a risk to the individual with IDD that their government benefits (e.g., Ontario Disability Savings Plan [ODSP]) will be reduced or discontinued as income increases (Butcher & Wilton, 2008; CACL, 2013). In addition, Brady and Rosenberg (2002) and Parameter (2011) identified that many employment options open to persons with IDD are limited to what is available based on ability rather than the individual's interests and strengths. In addition, the goals of employment tend to continue to focus on how to make the individual fit into the workplace, rather than creating meaningful accommodations for the person with IDD in the competitive context (Butcher & Wilton, 2008; Parameter, 2011).

***Self-employment.*** Neufeld and Albright (1998) defined self-employment as:

Income-generating work where disabled people, to a significant degree, have a prime decision-making role in the kind of work that is done, how time is allocated, what kinds of investment in time and money should be made and how to allocate revenue generated (p. 6).

This form of employment is gaining more attention and is an attractive option for individuals with IDD. Beyer and Robinson (2009) identified that self-employment provides numerous benefits above and beyond what traditional supported employment offers, including a focus on the individual's strengths and interests, flexibility regarding hours works, and an increased opportunity for decision-making and autonomy. Despite the potential benefits of self-employment, very little research has been conducted on its benefits. McNaughton, Symons, Light, and Parsons (2006) interviewed seven self-employed individuals with cerebral palsy. Qualitative interviews revealed that self-employment offered the opportunity for financial gain, increased work enjoyment (e.g., flexibility of schedule), fulfillment of personal goals (e.g., contributing to society), and social change through challenging preconceived notions of social participation.

***Social enterprise.*** Social enterprises are “business(es) with primarily social objectives whose surpluses are principally reinvested for that purpose in the business or in the community, rather than being driven by the need to maximize profit for shareholders and owners” (DTI, 2002, p.13; as cited in Brouard & Larivet, 2011). One form of social enterprise is the social business, an organization with the combined purpose of creating a desirable product while creating job opportunities for typically socially-disadvantaged groups (e.g., refugees, persons with IDD). Lysaght et al. (2015) examined four social businesses in Ontario and one social business in Alberta (for comparison). The goal of their study was to identify the best practices for operating a social business as an employment opportunity for persons with IDD. One of the critical outcomes identified in their study was the need for social businesses to distance themselves from the perception of being sheltered workshops. While historically sheltered workshops have provided opportunities for persons with IDD to engage in work, they provided

limited public interactions; in contrast, some social businesses have endeavored to build opportunity for community engagement into their operational models in order to reduce the stigma associated with IDD and their social value (Lysaght et al., 2015).

De Ruyscher et al. (2016) propose that social entrepreneurship is an emerging, promising opportunity to address the discrepancies between the needs of the individuals and what agencies are able to provide regarding support. They argue that social entrepreneurship has the potential to “[create] links between organizations and stimulates collaboration and community-building across the boundaries of different sectors” (De Ruyscher et al., 2016). They go on to identify social entrepreneurship as having the potential to create a genuine sense of belonging and social capital in the community for individuals with IDD (De Ruyscher et al. 2016). Furthermore, they claim that social entrepreneurship has the potential to make a positive impact on the lives of persons with IDD at the individual level and in the broader contexts of community and society:

At the micro-system level (i.e., the individual), social value is defined as improving people’s lives in reference to valued personal outcomes such as human functioning and/or quality of life domains. At the mesosystem level (i.e., the organization and community), social value is defined in terms of organization and/or community-building... At the macro-system level (i.e., societal), creating social value is defined in terms of improving society as reflected in indices reflecting socio- economic status, positive health, environmental quality, and subjective well-being (De Ruyscher et al. 2016, p. 9).

## **Quality of Life**

**Historical context.** As mentioned previously, there was a dramatic shift in the perception of disability in the 1960s and 1970s. With the emergence of the focus on the social construction



of disability, and, in particular, an understanding that disability is the discrepancy between individual skill and environment, the supports offered to persons with IDD began to change as well (Bigby, 2012). Deinstitutionalization led to community-based residential and employment supports and the new challenge became how to measure the outcomes of these changes.

Initially, changes in adaptive and challenging behaviour were the primary measure of outcome in deinstitutionalization research. For example, Kim, Larson, and Lakin (2001) conducted a meta-analysis of thirty-five studies that examined the outcomes related to adaptive skills and maladaptive behaviour. They reported that 66% of studies found that deinstitutionalized participants showed an increase in adaptive skills and 62% of studies showed a decrease in challenging behaviour. These encouraging but inconsistent results did not reflect the shift in focus away from a functional or medical understanding of disability towards a more holistic understanding of the nature of disability (Schalock et al., 2002). As a result, a new means of assessing broader outcomes had to be found.

**Conceptualization.** Cummins (2005) suggested that quality of life is composed of four principles: multidimensionality influenced by personal and environmental factors and their interactions; universality; subjective and objective composition; and enhancement from self-determination, resources, sense of purpose, and sense of belonging.

Quality of life has become an increasingly important outcome measure in the fields of health and social services since the 1980s (Brown, Renwick, Nagler, 1996). Several changes in these fields have influenced the importance of quality of life; namely, the development of social welfare and the change in social policy, human rights, and normalization. In addition, there is increasing recognition that persons with IDD are capable of having a good quality of life, despite what seems to the general population to be an undesirable state of being.

Historically, the common perception of disability was that persons were neither in good health nor capable of life satisfaction; therefore, it was assumed that they were incapable of experiencing a good quality of life. This sentiment is captured in a quote from a medical expert in 1982, writing about persons with disabilities:

The disabled patient has a greater problem in achieving a satisfactory quality of life. He has lost or possibly never had, the physical capability for the necessary responses to establish and maintain the relationships, interactions, and participation that healthy people have. (Albrecht & Devlieger, 1999, p. 978)

Fortunately, research has shown that this interpretation is incorrect, and persons with disabilities, including IDD, can have quality of life. Albrecht and Devlieger (1999) explored what they called the “disability paradox,” the ability of people with disabilities to have good quality of life despite living a life deemed by the general population to consist of an “undesirable daily existence” (Albrecht & Devlieger, 1999, p. 977). Using qualitative interviews, they found that 54% of interviewees with a disability reported a good or excellent quality of life. They found that those who reported a good quality of life did not deny the consequences of their disability; rather they had a balance between personal ability and environmental accommodation that sustained opportunities for growth and development. In addition, Felce and Perry (1996) identified that persons with IDD specifically have been able to remain satisfied and optimistic about the future despite despicable circumstances they often find themselves living in, including poverty, victimization, and social isolation.

It is important to note that quality of life is comprised of both objective and subjective evaluations. *Objective evaluations* are the aspects of a person’s life “that can be observed and measured within the public domain through such properties as physical quantities and

frequencies” (Cummins, 2005, p. 700). Felce and Perry (1996) identified that objective evaluations of quality of life could include: health, income, housing quality, friendship network, activity, or social roles. *Subjective evaluation* “exists only within the private consciousness of each individual and is verified only through repeated responses provided by the person concerned” (Cummins, 2005, p. 700). Felce and Perry (1996) identified that a subjective evaluation includes personal satisfaction with opportunities and life conditions. The outcome of having this contrast in evaluations means that any measure of quality of life needs both aspects to provide contrast and to be complete (Cummins, 2005; Felce & Perry, 1996).

Another vital aspect of quality of life is its universality in the sense that it is equally available for all people. Cummins (2005) identified that while there will be individual differences in which components are important, there is a core set of fundamental factors that is common to everyone. Historically, assessments of quality of life focused on the absence of illness or pathology. These measures were narrow in scope and focused on the needs of the individual rather than their perception.

Based on these principles, several models of quality of life have been developed (Cummins, 2005; Renwick & Brown, 1996; Schalock et al., 2002). The Being, Belonging, and Becoming model of quality of life was developed by the Centre of Health Promotion at the University of Toronto. While this model shares many of the features of other conceptualizations of quality of life, it recognizes the opportunities that arise from the interaction between the person and the environment. The Being, Belonging, and Becoming model also accounts for opportunities, constraints, and a combination of both in the lives of individuals with IDD. It deals with these concepts by focusing on the experience of the individual in each domain (Renwick & Brown, 1996). For example, all individuals value having a home to live in; however, what that

home looks like will vary from person to person based on personal preference and culture. In addition to accommodating individual variance in accepted dimensions of quality of life, the Being, Belonging, and Becoming model also identifies the importance of the insight that an individual with IDD has into what is or is not important to them. That is, it recognizes the importance of the individual as a causal agent in attaining and enjoying a good quality of life (Renwick & Brown, 1996).

Within each component, there are subcomponents that best represent the potential possibilities for individuals. These subcomponents were selected based on a review of the literature regarding quality of life of individuals with and without disabilities, the themes that emerged from consultation with prominent researchers, and interviews with a variety of individuals with IDD, their families and service providers (Renwick & Brown, 1996). To evaluate quality of life, the importance and enjoyment of each item are rated by the individual as well as the moderating variables of the individual's perceived control related to each item and potential opportunities for engagement in it.

The first theme, *Being*, refers to “the most basic aspects of who people are as individuals” (Renwick & Brown, 1996, p. 82). These are the personal characteristics of the individual, including physical, psychological, and Spiritual Being. *Physical Being* includes physical health, such as nutrition. *Psychological Being* is comprised of thoughts and emotions. Finally, *Spiritual Being* covers an individual's values and beliefs that inform their behaviour. Although Spiritual Being may include specific religious practices, it encompasses a more general ethos that goes beyond the individual (Renwick & Brown, 1996).

*Belonging* refers to “the fit between individuals and various environments” (Renwick & Brown, 1996, p. 82). This component recognizes an individual's need to belong to both a

physical place and to social groups. This factor includes Physical Belonging, Social Belonging, and Community Belonging. *Physical Belonging* refers to the connection individuals have to the places in their lives (e.g., home, workplace). *Social Belonging* refers to the bond people have to the networks of people in their life. This includes having meaningful relationships with other people. Finally, *Community Belonging* refers to sharing resources with other individuals in the community (e.g., recreation programs, community events) (Renwick & Brown, 1996).

Lastly, *Becoming* emphasizes “the purposeful activities in which individuals engage in an attempt to realize their goals, aspirations, and hopes” (Renwick & Brown, 1996, p. 83). This is how individuals differentiate themselves from those around them, including Practical Becoming, Leisure Becoming, and Growth Becoming. *Practical Becoming* involves purposeful activities that an individual completes on his or her own behalf (e.g., personal hygiene, household chores). *Leisure Becoming* refers to the recreational activities that a person engages in to promote relaxation. It includes both short- and long-term opportunities, such as dinner with friends and vacations. Finally, *Growth Becoming* includes all activities that build on the person’s skills and knowledge. This can include both formal and informal opportunities, such as classroom learning or adjusting to changes within the environment (e.g., transitioning from the family home to supported independent living) (Renwick & Brown, 1996).

### **Current Research on Employment of Persons with IDD**

Historical research regarding adults with IDD and employment has indicated a variety of outcomes ranging from increased social opportunities and status to, in some instances, experiences of isolation discrimination, and abuse (Hall & McGarrol, 2012; Hole & Stainton, & Tomlinson, 2011). Although research regarding employment opportunities for persons with IDD have looked at specific outcomes, there is very little research connecting it to positive quality of

life. Given the emphasis that government and agency policies and mandates put on both quality of life and increased community involvement, it is important to demonstrate the influence employment has on quality of life.

Among the few studies that have been conducted on quality of life impacts related to employment, Kober and Eagleton (2005) used a standardized quality of life measure to investigate the difference between persons with IDD supported in a sheltered workshop versus supported employment. They found that individuals in supported employment reported more positive outcomes regarding quality of life compared to their counterparts in a sheltered workshop. Specifically, they noted that possible influencing variables on good quality of life included social inclusion and independence with persons in supported employment indicating a greater level of social belonging and more opportunities for empowerment and independence (Kober & Eagleton, 2005). Similarly, Beyer, Brown, Akandi, and Rapley (2010) also examined the impact of employment type on quality of life. In addition to assessing sheltered workshops and supported employment, they compared these persons with IDD to their neurotypical counterparts. Results indicated that persons with IDD in supported employment reported greater quality of life than persons in sheltered workshops. In addition, neurotypical coworkers indicated that they had a greater quality of life than both groups of participants with IDD (Beyer et al., 2010). These results confirm that persons with IDD in supported employment have a greater quality of life than individuals in sheltered workshops; however, there is still a gap between them and their neurotypical coworkers. These results indicate that service providers and employers need to find meaningful ways to create a sense of belonging and social inclusion.

More recent research on quality of life has focused on the subjective perception of the individual rather than the perceptions of caregivers alone. Santilli, Nota, Ginevra, and Soresi

(2014) examined the role that career adaptability and hope played on the life satisfaction of persons with IDD. They used standardized measures to examine the perception of 120 persons with IDD. They found that having the skills needed to participate in the workforce influenced participants' confidence regarding their job prospects and, in turn, their perceived quality of life.

Given the positive relationship between self-determination in employment and desirable outcomes, it is likely that social entrepreneurship would lead to more desirable outcomes and improved quality of life. In recent years, social enterprises have emerged as viable alternatives to traditional employment support models for persons with IDD. Although there is no universally accepted definition of what a social enterprise is, it is generally agreed that common themes emerge, including community impact and business practice intended to generate revenue (Be Centre for Social Enterprise, 2015; Katz, 2014). There has been increasing interest in social enterprise in recent years since this model has been used to increase the employment opportunities for populations that face barriers entering the workforce, including people who are offenders, homeless, and persons with disabilities. Lanctot, Durand, and Corbiere (2012) explored the quality of work life for individuals working in social enterprises. Fourteen adults with a mental health diagnosis (e.g., depression, schizophrenia) were interviewed about their experiences working in a social enterprise. Participants' responses indicated that it led to their having a sense of belonging in the organization, an increased sense of competency, and improved relationships with co-workers and supervisors. They also reported greater satisfaction with work when there was appropriate task difficulty, work conditions, and accommodations made by the organization.

Increasingly, agencies supporting persons with IDD are looking at social enterprises as a viable alternative to the traditionally offered employment programs (e.g., supported or

competitive employment). Harris, Renko, and Caldwell (2013) examined the experiences, opportunities and barriers of social enterprises for persons with IDD using focus groups of adults with IDD and interviews with stakeholders (e.g., service providers). Results of the interviews and focus group indicated that persons with IDD needed training and education regarding business management or other skills that may impact their ability to effectively participate in a business and general business skills (e.g., marketing). Secondly, the results also indicated that finances and income were barriers to persons with IDD participating in social enterprise. This included challenges securing the necessary start-up funding and maintaining social benefits (i.e., Ontario Disability Support Program). They also found that persons with IDD identified needing more education in financial literacy since many do not participate in the management of their own personal funds (Harris et al., 2013). However, despite these challenges, they found that a benefit of participation in social enterprise for persons with IDD was social networking opportunities that allowed individuals to connect with the community. They also found that persons with IDD typically lacked the necessary opportunities to network in their daily life which is a critical aspect of business development during the start-up and development phases of establishing a social enterprise. As Alan, an adult participant of the study put it, “we are not privy to those sorts of social relationships” (Harris et al., 2013, p. 43). Findings from this study emphasize the need for more research regarding the impact of social enterprises on the lives of persons with IDD.

In Canada, there are a limited number of social enterprises operating to support people with IDD (Lysaght et al., 2015). Common Ground Cooperative (CGC) is an example of an agency that supports one type of social enterprise that is cooperatively managed by individuals with IDD. It provides educational, administrative and job coach supports to adults with IDD in a



cooperative business setting. Instead of having the title “employee” and earning a salary or hourly wage, members of the businesses are non-share capital “Partners” who earn a share of the enterprise earnings. New Partners are voted into the businesses after successfully completing a six-month classroom training program, three-month co-op placement, and three-month apprenticeship.

CGC was started in 1998 as a single business, Lemon and Allspice Cookery, by a young woman with IDD in Toronto, Ontario. In 2000, it was incorporated as a cooperative and job coaches were hired using a government grant to accommodate the growing number of people who were interested in this unique employment opportunity. Since this time, it has developed into five social enterprises; the Cookery, three Coffee Sheds, and a toy cleaning business called CleanABLE (Lemon & Lemon, 2003; Lemon, 2011).

Individuals with IDD who are interested in joining the Common Ground Cooperative supported enterprises must complete the Foundations training program, including a three-month co-op placement at one or more the businesses. This government funded training program teaches the basic employment skills necessary to be successful as a Partner. The first six months of Foundations focuses on classroom learning and emphasizes developing participants’ numeric literacy, customer service, and workplace interpersonal skills. Upon successful completion of the classroom portion of the Foundations program, participants complete a three-month co-op at one or more of the businesses. At the end of a successful co-op placement, students of the Foundations program may be voted in by current Partners to complete a three-month apprenticeship. Successful completion of the apprenticeship can also lead to being voted into the business by existing Partners. This is one example of how business decisions are made primarily by the Partners of the businesses rather than by the job coaches supporting them. Lemon and

Lemon (2003) identified that Partners “are beginning to redefine their workplace world for themselves and to make it their own” (p. 424).

The present study built on previous research conducted with CGC regarding the impact of its work on business Partners. CGC and its associated enterprises have a demonstrated positive impact on both Partners and their network, including family and staff. Readhead (2012) interviewed six Partners to identify outcomes related to meaningful work and inclusion within CGC. Outcomes reported by the Partners included opportunities to learn skills relevant to work, a sense of autonomy from being self-employed, and a genuine sense of social inclusion that comes from belonging to a group.

Bishop (2013) examined the perceptions and opinions of CGC staff regarding the impact of the business on the Partners. Staff interviews indicated that the social enterprises provide an open-minded workplace that promotes strengths, accommodates limitations, and supports learning and independence in business management. In addition, staff interviews regarding their stress and burnout indicated that supporting the Partners in social enterprises poses unique challenges for them, particularly regarding the multiple roles of running a business while providing support to the Partners. However, despite the stress of this unusual combination of roles, the staff also identified that they feel passionate about their jobs and about their inclusion in directing the agency.

In a recent work outlining the perspectives of CGC held by enterprise Partners and other stakeholders (e.g., Board of Directors, Ontario Ministry of Community and Social Services, parents, staff and customers) (Owen, Readhead, et al., 2015), information gathered from interviews and surveys indicated that despite the limited financial gains made by Partners and their continued reliance on ODSP, CGC made an impact on Partners’ sense of being valued

social contributors, having increased social opportunities, and the prestige of being business owners.

In another recent work, Owen, Li and colleagues (2015) used social return on investment (SROI) analysis to determine proxy values for the quality of life impacts on CGC enterprise Partners and their families. This analysis was based on qualitative analysis of one-to-one interviews and a focus group with Partners that focused on their descriptions of the impact of their participation in CGC training and in the enterprises. These impacts reflected changes in quality of life dimensions related to well-being (e.g., employment, health, and happiness), independence (e.g., skill development and making life choices), and social participation (e.g., friendship). While these interviews provided a rich narrative regarding the impacts of CGC, a key finding was the need to find more precise ways to measure the actual degree of change in specific aspects of the job skill development and quality of life changes described in the interviews and focus group.

The goal of the current research was to continue to examine the nature and impact of CGC from the perspective of participants in the Foundations program and their caregivers (i.e., family members). The focus of the present study was to examine changes in job skill and quality of life for participants in the Foundations training program and for those in the apprenticeship phase using established measures of employment skills and quality of life that were designed for persons with IDD.

### **Researcher Position Statement**

As someone who has worked in the developmental services sector in Ontario in variety of roles for over fifteen years, I have witnessed the impact of both validating and invalidating environments on people with IDD. I have witnessed the discrimination, isolation, and abuse that

persons with IDD face. This has led me to believe that persons with IDD are amongst the most neglected and undervalued citizens in Canada. Persons with IDD face barriers to full participation in society daily including being denied access to social roles such as parent or romantic partner. Employee or business owner is but one more title they have been denied.

I identify with social-ecological researchers and advocates, who believe that disability is the result of poor accommodations within the environment of persons with IDD. I believe that employment and the other social roles are achievable goals for persons with IDD who choose them. The answers do not come from “fixing” the individual, but from creating environments that promote respect and dignity through accommodations that meet individual needs and desires, rather than prescribed remedies based on paternalistic views of what is “good for the individual.”

In addition, I identify with conflict theorists, who believe that power and resources are distributed within society based on the social value a person is afforded. Given persons with IDD are amongst the least valued citizens, it is unsurprising that public resources are invested in programs that aim to fit persons with IDD into the current structures of society rather than creating new ones that accommodate their needs and strengths.

Finally, I uphold a pragmatic approach to research – one that focuses on how research can be accessible and used by the community. A barrier that remains is finding a way to overcome the challenges faced by agencies in implementing “evidence-based practice” to address real-world problems.

As a scientist, I endeavored to enter this research project with genuine curiosity and to leave personal biases behind. As a clinician, I maintained a compassionate stance and used my skills to provide an interview experience that assisted participants to tell a genuine version of

their story. As an advocate, I tried to respect the participant's right to tell their story and to be heard.

## **Methods**

### **Purpose of the Study**

The purpose of the current study was to build on previous research conducted with Common Ground Co-operative (CGC). Previous contributions include research examining the perspectives of Partners and staff (Bishop, 2013; Readhead, 2012); a case study describing CGC and its impact (Owen, Readhead, et al., 2015); and an evaluation using the social return on investment model (Owen, Li, et al., 2015). The current study evaluated the impact of the Foundations training program on trainees' and apprentices' job skill development and quality of life. The following research questions were addressed:

1. What is the impact of the Foundations training program and apprenticeship on the job skill development for students as they progress through the classroom training, apprenticeship and initial months of partnership?
2. What is the impact of the Foundations training program and apprenticeship on the quality of life for students as they progress through the classroom training, apprenticeship, and initial months of partnership?

### **Research Design**

A utilization-focused evaluation was selected to evaluate the impact of the Foundations program and the apprenticeship on participants. Patton (1997) differentiates utilization-focused evaluation from program evaluation, as the "evaluation done for and with specific, intended primary users for specific, intended use;" in contrast, program evaluation is "the systemic collection of information about activities, characteristics, and outcomes of a program to make

judgements about the program, improve program effectiveness and/or inform decisions about future programming” (p. 23). While there is overlap between the goals and processes for both forms of evaluation, the focus of utilization-focused evaluation is the utility for and by the intended user. With this in mind, research questions and instrumentation were selected based on consultation with the agency and with consideration of whether the measures would be useful for ongoing agency use beyond the scope of this research. Before finalizing the research questions and instrumentation, a letter with a description of the instrumentation was sent to the Executive Director and board of directors to review and approve. The benefit of this approach is the pragmatic nature of the research being done. That is, “judging the quality of a study by its intended purpose, available resources, procedures followed and results obtained, all within a particular context for a specific audience” (Patton, 2002, pp. 71 – 72). This approach offers the flexibility of being oriented to what is observed in the real world and will be of benefit to the users rather than being driven solely by a theoretical framework. For this study, the primary intended users of the results are the agency administration that supports the Partners to run their businesses and is responsible to stakeholders to provide evidence of the effectiveness of the training program.

### **Participants**

All participants who entered the Foundations training program at CGC in May 2015 and September 2015 were invited to participate in this study. Five students from the September 2015 Foundations training program and two new Partners from the previous Foundations Training program (starting in May 2015) volunteered to participate in this study. One participant dropped out of the Foundations Training Program; therefore, their data were removed from the data set. The gender divide of the final participant pool was five males and one female; and the age range

of the participants was twenty-four to thirty-nine years. One individual had partial visual impairment that was considered when presenting written materials (e.g., consent forms, visual scale). To maintain confidentiality, each participant was assigned a number as a unique identifier.

Table 1 presents information regarding the program start dates and data collection dates of the Foundations Program students and the CGC apprentices. Cohort 1 consisted of students who started the Foundations Training program in September 2015. To facilitate the staff representative of CGC becoming familiar with the students (e.g., knowledge of course material, job skills), the initial interview was conducted in November 2015 (six weeks after the start of the program). These participants were subsequently interviewed in March 2016 after they had completed the classroom portion of the training and were starting their co-op placement at one of the CGC supported enterprises; and in July 2016, one week after being voted into an enterprise as an apprentice. One individual in Cohort 1 dropped out of the Foundations program between March 2016 and July 2016; therefore, this individual's data were removed from the data set and were not included in the subsequent analysis (including qualitative analysis of the interview narrative).

Cohort 2 consisted of individuals who had been voted into partnership in one of the CGC supported enterprises. These individuals started the Foundations Training Program in May 2015. Due to the low enrollment and the skill of this cohort, their classroom portion was reduced by three months and they were interviewed when they were initially voted in as Partners and after being Partners for 3 months, rather than at the beginning of their apprenticeship and upon being voted in as Partners. They were interviewed at the beginning of their partnership in March 2016 and again in July 2016, three months into the partnership.

*Table 1: Participant Progression and Time Frame for Data Collection*

	Cohort 1	Cohort 2
Foundations Training Program Start	September 2015	n/a
Initial Interview – Student	November 2015	n/a
Foundations Co-Op Placement Start	March 2016	n/a
Second Interview – Co-op Student	March 2016	n/a
Apprenticeship Start	July 2016	n/a
Apprenticeship Interview	July 2016	n/a
Partnership Start	n/a	March 2016
Partnership Interview	n/a	March 2016
Partnership - 3 months	n/a	July 2016
Partnership 3-month Interview	n/a	July 2016

Consent was obtained from all participants in both cohorts to allow a CGC staff member to be part of the research project and to share information about their work and quality of life with the researcher. Despite five out of six participants consenting for the researcher to speak with a parent/caregiver, no family members volunteered to participate in this study.

Consent was received from a CGC staff representative to provide feedback on the utility of the measures for ongoing agency use; however, it was not possible for this individual to be involved in this process. Feedback was provided to the researcher by another CGC professional but without research use consent so this will not be reported.

### **Instrumentation**

Several measures were used repeatedly throughout the study. Three scales were used, including the Quality of Life for People with Intellectual/Developmental Disabilities – Short Version Instrument Package (revised edition; Renwick & Myerscough, 2012), the Job Observation and Behavior Scale (JOBS; Rosenberg & Brady, 2000), and the Job Observation and Behavior Scale: Opportunities for Self-Determination (JOBS: OSD; Brady, Rosenberg, &



Frain, 2006). In addition to these scales, eight semi-structured interview questions were also included.

**Quality of Life for People with Intellectual/Developmental Disabilities Short Version Instrument Package (Revised Edition).** The Quality of Life for People with Intellectual/Developmental Disabilities (IDD) Instrument Package was initially developed to assess the quality of life for people with developmental disabilities and to evaluate the impacts of government programs and services (Renwick & Myerscough, 2012). The goal of this measure is to capture individuals' experiences within common domains as a measure of quality of life. It was selected for this study since it used both a rating scale and a semi-structured interview format that provided the opportunity to collect further information from participants regarding their experience in each quality of life domain. Furthermore, it appeared to be a cost-effective measure that was easily obtainable by the agency upon completion of the study.

The Quality of Life for People with IDD Instrument Package was developed to capture satisfaction and the importance of three domains of life: being, belonging, and becoming. Within each domain there are three subdomains related to each overarching theme (Renwick, Brown, & Raphael, 2000). As noted earlier, the first domain, *Being*, measures "who one is" and contains three subdomains: Physical Being (e.g., physical health), Psychological Being (e.g., feelings), and Spiritual Being (e.g., personal values). The second domain, *Belonging*, measures the person's fit within the environments they occupy. It also includes three subdomains: Physical Belonging (e.g., connection with home or workplace), Social Belonging (e.g., sense of acceptance from friends and family), and Community Belonging (e.g., access to resources available to community members). The final domain, *Becoming*, measures the activities an individual participates in to achieve personal goals. The subdomains contained within this

domain include: Practical Becoming (e.g., purposeful activities the person participates in), Leisure Becoming (e.g., activities that promote stress reduction), and Growth Becoming (e.g., activities that improve knowledge and skills) (Raphael et al., 1999; Renwick, Brown, & Raphael, 2000; Renwick & Myerscough, 2012). The score for each domain is determined by how important and how satisfied the participant is with the items related to each subdomain. Participants are asked to rate the importance and their satisfaction on a five-point Likert-type scale ranging from 1 (not at all) to 5 (a lot). A visual representation of each point on the Likert-type scale is included with the package to assist the participant to understand the degrees in which their score can vary. This visual was provided as a prompt to all participants for the entirety of all interviews.

In addition to evaluating quality of life, the questionnaire also examines elements of personal control. For each of the subdomains, questions were asked related to their decision-making and their opportunity to engage in the activities described. Renwick & Myerscough (2012) defined decision-making as “the extent in which a person has the chance to make his or her own decisions” and opportunities as “the range of opportunities from which a person makes these choices and decisions” (p. 8). The measure of personal control is not used in calculating the final quality of life score; however, it provides context for it. For example, for someone who has a low quality of life score but a high personal control score there are different implications and outcomes than there are for someone who has a high quality of life score but a low personal control score (Renwick & Myerscough, 2012).

The Quality of Life for People with IDD instrument package includes three questionnaires: a participant interview, an Other Person Questionnaire, and an Assessor Questionnaire. The rationale for collecting quality of life data from three separate parties is to

ensure that important contextual information is also gathered, considered and accurately interpreted (Raphael et al., 1999). The participant questionnaire is designed to be administered as an interview with the individual. The individual is asked to use a five-point Likert-type scale to rate the degree to which an aspect of quality of life is important to them and the degree to which they are satisfied with this part of their life. Each question is followed up with prompt questions designed to elicit more information from the participants. The questions are divided into the three domains (i.e., Being, Belonging, Becoming) and the nine subdomains.

The participant interview also includes a measure of the individual's perception of the amount of control and opportunity they have in major life issues (e.g., where they live) and daily routines (e.g., what they eat). Participants are asked to rate who decides on a three-point scale (3 – the person decides alone; 2 – the person decides with someone else; and 1 – someone else decides). They also rate the types of opportunities they have to make decisions (i.e., 3 – many choices; 2 – a few choices; 1 – no choices). The information from these questions is used to provide a context for the quality of life scores (Renwick & Myerscough, 2012).

The Other Person Questionnaire asks an individual who knows the individual to rate the importance and satisfaction of the same items on a five-point Likert scale. This is based on their perception of the importance of each item to the individual and their perception of the individual's satisfaction with the same items (i.e., as opposed to how they think the individual would respond). Similar to the participant interview, questions are divided into domains and subdomains.

The Assessor Questionnaire is completed by the person interviewing the individual (in the case of this research study, the researcher). It is a descriptive account of the person's quality of life and is intended to provide a comparison to the scores provided by the other two

participants. Upon completing the interview with the individual, the assessor completes this questionnaire about the context of the interview (e.g., informal conversations, observations, discussion with other people) to address the 3 domains and 9 subdomains listed above. Assessors rate the answer to each question as “yes,” “somewhat,” or “no.” Space to provide a description of observations is also provided. Ratings for the Assessor Questionnaire are based upon the minimal standards one expects to observe when someone has a good quality of life (Raphael et al., 1999).

***Reliability and validity.*** The Quality of Life for People with IDD Short Version Instrument Package has been shown to be quite reliable, as reflected in research using Cronbach’s alpha to calculate the internal consistency for each subdomain, domain, and the total score (Raphael et al., 1999). Results of this research indicate that the short versions of the participant and other person questionnaires have good internal consistency (alpha = .84 on the participant interview, alpha = .88 on the other person questionnaire and alpha = .63 on the assessor questionnaire; Raphael et al., 1999). These results suggest that the overall scores could be used to compare groups of individuals, situations or settings (Raphael et al., 1999). However, Raphael et al. (1999) caution that individual item scores, rather than three item aggregate scores, should be used for Psychological Being (alpha = .23), Spiritual Being (alpha = .42), and Social Belonging (alpha = .42) for the participant interview, and the Psychological Being (alpha = .26) subdomain on the other person questionnaire. It appears that the concepts within these subdomains are measuring slightly different ideas. For the purpose of this study, all the scores were calculated according to the manual; however, the interview responses were examined to substantiate the stated quantitative scores for all subdomains and domains. For the abovementioned items in the present study the scores were calculated, despite the poor internal

consistency mentioned to provide aggregate scores that contributed to group scores; however, the individual responses to the interviews for each item were examined further to determine the impact. With regards to the Assessor questionnaire, the overall and domain scores met acceptable ( $\alpha > .60$ ) standards of reliability. The scores on the Physical Being and Belonging scores suggested that the individual item scores rather than the aggregate subdomain scores be used (Raphael et al., 1999).

When examining the validity of the Quality of Life for People with IDD Instrument Package, it is important to note that it was developed with the needs and interests of stakeholders (e.g., Government representatives) being considered during development. For the development of the short-version of the questionnaire, two Ministry of Community and Social Services representatives, seven persons with IDD, and twenty-eight community assessors were consulted in addition to scrutiny by academics to ensure that the measure had adequate content validity (Raphael et al., 1999).

In addition to good content validity, Brown, Raphael, and Renwick (1997) demonstrated good construct validity in an Ontario provincial study of quality of life. They found that the full version of the Quality of Life for People with IDD Instrument Package could differentiate quality of life of people in large institutions as compared to individuals residing outside of institutions. They found that the individuals residing in the institutions had a lower quality of life (from the perspectives of the individual, another familiar person, and the assessor) than their peers residing in the community. They also demonstrated that there was clear difference in quality of life for individuals who could complete activities of daily living independently and those who could not (Brown et al., 1997).

Finally, since the short-version of the instrument package was used in this study, it is important to consider criterion validity. The correlations between the full and short versions were very high for all domain scores indicating that the scores on the short version can be used as confidently as those on the full version of the instrument package (Raphael et al., 1999).

***Scoring the Quality of Life for People with IDD Short Version Instrument Package (Revised Edition)***. During the interview, each participant was asked to rate the importance of and their satisfaction related to twenty-seven items (apart from psychological and spiritual wellbeing – which asked participants and the other person to rate the extent to which the individual exhibits the attributes asked about). Ratings were made on a five-point Likert-type scale, ranging from 1 (not at all) to 5 (a lot). These questions were then followed up with semi-structured interview questions designed to elicit discussion from participants about the aspects of their lives that related to the domain. For example, after being asked about the importance of the food they eat, participants were asked questions about the foods that they ate and nutrition.

Participants were also asked questions related to the personal control they had in major life decisions and personal routines. Based on their responses, a score was assigned (see above for ratings) that best captured their current amount of personal control.

At the beginning of each interview period, the staff representative of CGC was given the Other Person Questionnaire to complete. The staff member was asked to rate the individual on the same domains using a five-point Likert-type scale, ranging from 1 (not at all) to 5 (a lot).

Upon completing the interview, the researcher scored the participant and other person questionnaire by entering the participant's scores into the summary scoring sheet provided as part of the package. Based on the importance and satisfaction scores, a Quality of Life score was assigned based on a table provided in the manual for the Quality of Life for People with IDD

Instrument Package (Renwick & Myerscough, 2012). Any questions answered with “don’t know” or “n/a” were replaced with a mean composite score from the area. Domain scores were calculated by adding the total of the Quality of Life scores, then dividing by the number of valid questions (i.e., without a composite score). The overall quality of life score was calculated by averaging the three domain scores. The domain scores and overall quality of life scores were then interpreted using the table provided in the manual. The interpretation of the domain and overall quality of life scores can be seen in Table 2. The personal control scores (control and opportunity) were also entered separately into the summary score sheet. Control and opportunity scores were calculated by separately adding up the scores. These scores were used to provide context for the quality of life scores from the participant and other person questionnaires. Finally, the assessor questionnaire was scored by adding the values for each domain. It was also used to provide context for the Being, Belonging, and Becoming domains.

*Table 2. Interpretation of Numeric Quality of Life Scores (Renwick & Myerscough, 2012).*

Range of Scores	Interpretation
6.0 – 10.00	Excellent quality of life; ideal range
3.0 – 5.99	A ‘good quality of life with no major concerns
-1.0 – 2.99	Adequate quality of life but some areas of improvement
-1.1 - -5.99	Problematic and needs improvement
-6.0 - -10.00	Very problematic. In need of assistance or intervention

The short version of Quality of Life for People with IDD Instrument Package was selected, rather than the long version, largely for pragmatic reasons related to administration time. This was especially important in the context of this study that also included two other measures. This decision is further justified by Renwick and Myerscough (2012), who recommend using the short version for research and program evaluation. Selection of items for the short version was made based on statistical analysis of the items from the long version that

generally contributed the most to the measure of quality of life. Government representatives, persons with IDD who had participated in previous research with the tool, and community assessors were asked to rank items on the long version to determine which items should be considered for the short version of the instrument package. The reduction in items was taken from the participant interview and the other person questionnaire, while the measurement of personal control and the assessor questionnaire remained the same as the long version (Raphael, Brown, & Renwick, 1999).

**Job Observation and Behavior Scale (JOBS).** The Job Observation and Behavior Scale (JOBS) is an employment performance tool for employment professionals, such as job coaches, who are involved in the evaluation, training and placement of individuals with special employment needs (e.g., adults with developmental disabilities) (Rosenberg & Brady, 2000). It allows professionals to evaluate the quality of the worker's performance, in addition to assessing the needs for appropriate supports, while comparing the performance quality to that of individuals who are not receiving supports in the same role. This scale enables the assessor to make both quantitative and qualitative judgments regarding the participant's employment skills.

The JOBS was developed to assess performance on three subscales: Work-required Daily Living Activities, Work-required Behaviour, and Work-required Job Duties (Rosenberg & Brady, 2000). Work-required Daily Living Activities do not directly affect the skills needed to perform a job task successfully; however, they do impact the social fit of the individual in the work setting (e.g., personal hygiene). Work-required Behaviours are the interpersonal and social skills required to participate fully in job settings. Brady and Rosenberg (2002) note that these skills are required to interact successfully with people they will meet as part of job (e.g., manager, customers). Finally, Work-required Job Duties refer to the individual's ability to follow



through on non-specific aspects of how well someone can complete the tasks related to their job (e.g., quality and quantity). The thirty items included in the three subscales are intended to represent the behaviour required to maintain an entry-level job. Evaluators are asked to rate the behavior of the participant based on observations made within the workplace on a 5-point Likert-type scale ranging from 1 (not acceptable for competitive employment) to 5 (superior).

In addition to evaluating the Quality of Performance, the scale also rates the Type of Support the participant receives during the day on a 5-point Likert-type scale ranging from 1 (continuous supervision) to 5 (no unique supervision or support needed). In addition, the scale considers whether special accommodations (e.g., pictorial instruction or modified equipment) are required (Rosenberg & Brady, 2000).

The JOBS measure also enables assessors to compare the scores of participants to scores drawn from three groups. The standardization population was composed of 225 employees consisting of high school students, adults in supported living, and employees not receiving any employment support. The same data that were used for the first administration in the reliability and validity studies were also used for the standardization (Rosenberg & Brady, 2000). The mean scores, standard deviations and ranges are available for each subscale, the Quality of Performance and Type of Support, and the overall score (see Rosenberg & Brady, 2000, p. 13).

***Reliability and validity.*** The JOBS has been evaluated in educational, vocational, rehabilitation, and job settings with three categories of employees: high school students in special education programs, adults with special employment needs, and employees who did not receive any support. These participants represented a range of entry-level positions, such as hotel and restaurant, retail, and custodial. When Rosenberg and Brady (2000) tested the JOBS, the test-retest results for Quality of Performance and Type of Support were analyzed separately.

Results indicated a high level of agreement between raters' initial assessment and assessment two weeks later. The test-retest reliability for Quality of Performance were 71% for high school students, 88% for adults in entry-level positions, and 84% for adults in supported and sheltered employment; with an overall estimate of 81%. For the Type of Support, the test-retest reliability was 93% for high school students, 97% for adults in entry-level positions, and 86% for the adults in supported employment; with an overall estimate of 92%.

Inter-rater reliability was calculated by comparing the Quality of Performance and the Type of Support ratings provided by two independent evaluators. The results were calculated separately for Quality of Performance and Type of Support. Results indicated a high level of agreement between the assessors' ratings. The inter-rater reliability for Quality of Performance was 74% for high school students, 91% for adults in entry-level positions, and 85% for adults in supported and sheltered employment, with an overall estimate of 83%. For the Type of Support, the inter-rater reliability was 82% for high-school students to 93% for adults in entry level positions, and 84% for adults in supported and sheltered employment, with an overall estimate of 86%.

The content validity of the JOBS was established by comparing the scale items to prior research in the field of supported employment. Inclusion criteria for item selection were a) their desirability in potential employees looking to obtain and maintain employment, and b) the item appeared in the literature (between years 1961 to 1998) more than 10 times, across a minimum of ten years, and in the work of at least five independent investigators (Rosenberg & Brady, 2000).

Finally, the concurrent validity was established by comparing evaluators' ratings of employees' workplace behaviour using the JOBS scale and using a non-standardized measure already in practice on site. If no measure was already in practice, the evaluators were asked to

use criteria they traditionally use to evaluate employability. Results of the concurrent validity analysis indicated a high level of agreement between the evaluators' current evaluation practice and the scores assigned on the JOBS. The correlation ranged from 78% for high school students to 81% for adults in entry level positions, with an overall estimate of 80%.

***Scoring the JOBS Recording Form.*** The staff representative of CGC was asked to rate the quality of the participants' performance and the Type of Support required on a 5-point Likert-type scale. For the quality of job performance scales, the range was 1 for "not acceptable for competitive employment" to 5 for "superior." The range of the Type of Support scale was 1 for "continuous supervision from the job coach or supervisor" to 5 for "no unique supervision or support needed beyond that provided to other workers." If there was an accommodation made for the task (e.g., modified equipment, visual instructions), it was noted beside the answer to the question with an "X." When the measure was returned, the researcher first added the scores for each question to calculate six subscale totals (three for Quality of Performance and three for Type of Support). The subscale totals were then transferred to two composite scoring tables (one for Quality of Performance and one for Type of Support) that summarized the subscale totals. The subscale totals within each composite scoring table were then added together to get a composite score for Quality of Performance and Type of Support. These scores can be used to compare changes in job skills within an individual and compared to a norm-referenced population.

**Job Observation and Behavior Scale: Opportunities for Self-Determination (JOBS: OSD).** The Job Observation and Behavior Scale: Opportunities for Self-Determination (JOBS: OSD) is an employment performance tool that evaluates the workplace performance of individuals with special employment needs by allowing the individual to self-evaluate their own

performance (Brady, Rosenberg & Frain, 2006). Combined with Job Observation and Behavior Scale (JOBS), these two assessments constitute a comprehensive system of employment skill and development.

Similar to the JOBS, the JOBS: OSD has three subscales: Work-required Daily Living activities (DLA), Work-required Behavior (BEH), and Work-required Job Duties (JD) (Brady, et al., 2006). The thirty items included in these subscales correspond to the items found in the JOBS. Two modifications were made to the scale to accommodate the self-assessment. Firstly, there was a change to the questions to reflect a change from a familiar responder to the actual individual themselves (e.g., “Do you...?” vs. “Does Person X...?”). Secondly, clarifying prompts (e.g., examples) were added to each question to ensure that the responder understood what was being asked of them. The wording for these questions and prompts was developed in conjunction with a panel of experts who provided feedback regarding item clarity. Revisions to items were made based on the feedback, provided they maintained the integrity of each item (Brady et al., 2006). Responders are asked to rate how well they perform tasks on a 3-point Likert-type scale ranging from 1 (no, not really) to 3 (yes).

In addition to evaluating how well the participant believes he or she did on a task, the scale also rates the individual’s perception of the Type of Support they need to perform the task successfully. Participants are asked to reply to questions that gradually increase the amount of support identified in the question. For example, the participant is asked “Can you do it by yourself?” Based on the answer, they will be asked “Can you do you it with some help?” or “Do you need a lot of help?” (Brady et al., 2006).

The JOBS: OSD also allows assessors to compare the scores of participants against a standardized group of scores. The standardization population was composed of 102 employees

consisting of high school students, adults in supported living, and employees not receiving any employment support. The same data that were used for the first administration in the reliability and validity assessments were also used for the standardization (Brady et al., 2006). The mean scores, standard deviations and ranges are available for each subscale, the Quality of Performance and Type of Support, and the overall score (see Brady et al., 2006, pp. 30 - 31).

***Reliability and validity.*** The JOBS: OSD was evaluated by administering the scales twice within a two-week interval between assessments. The test-retest results for Quality of Performance and Type of Support were analyzed separately. Results indicated a high level of agreement between raters' initial assessment and assessment two weeks later. The test-retest reliability for Quality of Performance was found to be 83% and 91% for Type of Support.

The content validity of the JOBS: OSD was derived from the same research used for the JOBS and research regarding self-determination in employment. Inclusion criteria for items selection were based on a) their ability to help people obtain and maintain employment and promote self-determination, b) their appearance in the literature (between years 1961 to 1998) more than 10 times, across a minimum of ten years, and in the works of at least five independent investigators (Brady et al., 2006; Rosenberg & Brady, 2000).

Finally, the concurrent validity was established by comparing scores on the JOBS: OSD to the participant's opinion about how much support they needed and to the Trainee's Work Experience Rating Scale of the Brigance Diagnostic Employability Inventory (Curriculum Associates, 1995; as cited in Brady et al., 2006). Results of this analysis indicated a high level of agreement between the JOBS: OSD and the selected comparisons.

***Scoring the JOBS:OSD Recording Form.*** Each participant was asked to rate the quality of their performance and the Type of Support needed on a 3-point Likert-type scale. The range

for Quality of Performance is 1 for “no, not really” to 3 for “yes;” and the range for Type of Support is one for “needs a lot of help” to three for “can do it by myself”. Upon completing the interview, the researcher first added the scores for each question to calculate six subscale totals (three for Quality of Performance and three for Type of Support). The subscale totals were then transferred to two composite scoring tables (one for Quality of Performance and one for Type of Support) that summarized the subscale totals. The subscale totals within each composite scoring table were then added together to get a composite score for Quality of Performance and Type of Support. These scores can be used to compare changes in job skills within an individual and compared to a norm-referenced population.

**Foundations/Apprenticeship Impact Interview.** The Foundations/Apprenticeship Impact Interview can be found in Appendix A and was used in a previous study conducted with Common Ground Cooperative (CGC) (see Owen, Readhead, et al., 2015; Readhead, 2012). The purpose of this semi-structured interview was to gather CGC-specific information regarding the impact that participation in the Foundations program, apprenticeship, and businesses made in the participants’ lives.

## **Procedure**

**Recruitment and consent process.** An initial meeting was held between the researchers and the Executive Director to review the instrumentation and the intended timeline for evaluation. The researcher provided a copy of each measure, described the process of administration, and the rationale for selection. Upon agreement from the Executive Director, a meeting was held with the staff representative of CGC to review the instrumentation (i.e., estimated time for completion) and intended timeline for data collection. The staff member was asked to participate as the “other person” and signed a consent form to participate in the study.

The agency Executive Director initiated recruitment by giving participants the letter of invitation and explained to participants the partnership between Brock University and Common Ground Cooperative. The Letter of Invitation described the purpose of the study, what was being asked of participants, and how to arrange an initial consent and first interview meeting with the researcher. Participants were able to indicate their interest either by returning the letter of invitation to the Executive Director or the Foundations Program Coordinator with their contact information on it or by telling them of their interest. The designated staff representative of CGC contacted the researcher to arrange meetings with trainees. For each data collection period, several meeting dates and times were organized based on participant availability, and participants were able to select which time they wanted to meet.

At the beginning of the initial meeting, participants met with the researcher with either the Executive Director or a staff representative of CGC present to complete introductions, review the purpose of the study, and describe the timeline and process of the interviews (e.g., the instrumentation being used). Consent to participate in the study and to allow a staff representative of CGC who had agreed to complete the measures to share information with the researcher was collected at this time. The Executive Director or the designated staff representative of CGC was present to confirm that the participant understood the consent process and to ensure that the participant had the support of a familiar person should they choose it. The participant was given the opportunity to ask questions about the study and to talk with the researcher. Participants who were agreeable to participating in the study signed a consent form. The consent form was read to participants and included questions to assess the participants' understanding of what it meant to participate in the study, and what the consent process meant (e.g., right to voluntary participation, right to discontinuation participation in the study without

penalty). The participants signed two consent forms: one indicating their consent to participate in the study and a second form allowing a staff representative of CGC to complete the other person measures.

At the end of the last interview, participants were asked whether the researcher could contact a caregiver (e.g., parents, support staff) to ask questions about the impact of the Foundations training program on their job skills development and quality of life. Five of seven participants consented to the researcher contacting a caregiver. The participants were able to choose who the researcher could contact. The designated staff representative of CGC contacted caregivers of consenting participants to invite them to participate in the study. There were no caregiver volunteers for this portion of the study.

**Participant interviews.** All interviews were conducted by the researcher in a private interview room at the CGC office during business hours. Furthermore, participants were given a five dollar Tim Horton's gift card at the start of each interview as a thank you for their time and participation, regardless of whether the interview was finished. Previously obtained informed consent was also reviewed at the start of each session, and the researcher reviewed with the participants what they would say to the researcher if they did not want to answer a question (e.g., "that's private").

For each interview session, participants were asked if they wanted either the designated staff representative of CGC or Executive Director present for each meeting to provide feedback to the researcher if needed. For the first set of interview sessions (November 2015), all five participants requested having the designated staff representative of CGC or Executive Director present. In the second set of interviews, five of seven participants requested that the staff representative of CGC or Executive Director be present for the interview. By the last set of



interviews, one participant requested the staff representative of CGC or Executive Director to be present. Interview sessions lasted two to two and a half hours. Participants were given the opportunity to take as many breaks as they needed.

Six of seven participants consented to having their interview sessions audiotaped. The audiotape was started at the beginning of each interview, paused for breaks, and stopped at the end of the interview. Participants were informed when the audiotape was started and stopped. One participant did not consent to having the interview sessions taped. For these interviews, the researcher took notes while asking questions. The audiotaped interviews were transcribed by a research assistant and the researcher. The notes taken for the one participant were typed in interview format to match the audiotaped sessions and noted as not being audiotaped.

The timeframe for interviews can be seen in Table 1. Each interview period was selected to coincide with the first four to six weeks when the participant started a new phase of the program (e.g., Foundations training, apprenticeship, or partnership). The same instrumentation was used for every period with both the participants and the staff representative of CGC.

For the participant interviews, the measures were always administered in the same order for every interview: Quality of Life for People with Intellectual/Developmental Disabilities – Participant Questionnaire, the Job Observation and Behavior Scale: Opportunities for Self-Determination, and the semi-structured interview questions.

### **Data Analysis**

**Thematic analysis.** Thematic analysis is “a form of pattern recognition within the data, where emerging themes become the categories for analysis” (Fereday & Muir-Cochrane, 2006, p. 4). The benefit of this approach to data analysis is the flexibility that is afforded to the researcher; that is, by not being associated with a particular theoretical orientation (e.g.,

grounded theory), the researcher can use this approach with a variety of theoretical approaches (Braun & Clarke, 2006). Furthermore, thematic analysis is well-suited for research conducted in a social-ecological framework, since it can explore the socio-cultural contexts and structural conditions that influence the individual responses (Braun & Clarke, 2014) Thematic analysis was conducted within each interview period for each cohort to determine individual differences, and between interview periods to determine the development of themes as the participants progressed through the Foundations training program or started as a Partner in one of the businesses.

Descriptive analysis of the interviews focused on the answers provided by each participant for the interview component of the participant interview in the quality of life package and the responses to the Foundations/Apprenticeship Impact Interview. Information was organized using NVivo 11 and the themes for each participant were handwritten onto a chart on 11 X 17 paper to facilitate examination of themes within participants across time. Inductive analysis was also conducted to explore the patterns of responding that were not the results of direct questioning; that is, “the underlying ideas, assumptions, and conceptualizations – and ideologies – that are theorized as shaping or informing the semantic content of the data” (Braun & Clarke, 2006, p. 90).

**Transcription and preliminary analysis.** The researcher and a research assistant transcribed the data for each interview period. All transcripts were reviewed by the researcher for accuracy and familiarity. The first read-through was to review the content to improve familiarity. At this time, answers addressing the rating of each subdomain were removed (e.g., score on Likert-type scale) and any information referring to identifying information was changed (e.g., reference to CGC location, family information) to be more general when possible (e.g., family member name changed to family role). During the second read-through, the researcher made

note of ideas and bolded information that appeared to possibly indicate an emerging theme (e.g., technical language being used or changes in the description of duties). Notes regarding the possible inductive themes and general indicators were made in a notebook for the researcher to go back and explore further. For example, self-awareness was noted as a possible theme and statements indicating this theme were noted.

**Generating a code plan.** Based on the observations made during the read-through, a plan for coding both deductively and inductively was developed. Given that the questions on the quality of life measure were organized according to domain and subdomain, these themes were maintained. No interview accompanied the JOBS package; therefore, the researcher matched questions from the Quality of Life package interview and the Foundations/Apprenticeship Impact Interview to the items in each subscale of the JOBS package (Appendix B). Codes for inductive themes were also generated based on the themes observed in the data during this review. These codes included: self-awareness, self-advocacy, interactions with social-ecological systems, and limitations of work. Self-awareness, self-advocacy, and interactions with the social-ecological systems were collapsed into one theme, namely self-determination, to reflect the model proposed by Walker et al. (2010).

**Coding.** The interview transcriptions were entered into separate NVivo 11 projects (QSR International, 2015) according to interview period. Within each interview period, parent nodes were created for each of the quality of life domains (i.e., Being, Belonging and Becoming), the Personal Control questions and Foundations/Apprenticeship interview questions.

Within each parent node, child nodes were created for each of the subdomains within the quality of life domains. For example, within the Being parent node, Physical Being, Psychological Being, and Spiritual Being child nodes were created. For the personal control

questions and the Foundations/Apprenticeship Impact Interviews, the child nodes were divided according to the question being asked. For example, in the personal control parent node, child nodes were created for major life decisions and daily routines; and the Foundations/Apprenticeship Impact Interview parent node contained a child node for each question.

### **Deductive analysis.**

*Quality of life.* To facilitate effective examination of trends in the large amount of data for each participant across interview periods, and within each cohort across interview periods, analysis charts were created for each participant on an 11x17 page of blank paper (see Appendix C). Results were reviewed in NVivo and trends, interesting word selection (i.e., insightful or misused words), and changes in language use were noted for each individual by subdomain (vertical axis) and interview period (horizontal axis). This format enabled the researcher to put multiple participants' data side by side for comparison within and across the two cohorts.

*Job Skills.* Each previously matched question from the Quality of Life package and the Foundations/Apprenticeship Impact Interview was reviewed and responses were coded according to JOBS measure subscales. Subscales were selected over individual items to increase the amount of evidence available to evaluate the changes within and between participants.

### **Inductive Analysis.**

New parent nodes were created in NVivo 11 for themes that were observed in the data by the researcher as being common across participants and/or as significant changes across interview periods. For example, statements regarding the financial cost of working were made repeatedly by participants, even though this was not probed for. These statements were coded under "Limitations of Work."

### **Final Review.**

A final review of the data and coding was made to double check that all the patterns were identified, and all relevant information was accurately coded in the correct parent node and child node (Fereday & Muir-Cochrane, 2006).

### **Results**

Several measures were taken to protect the confidentiality of the participants. These measures included: using gender neutral language (e.g., “they”) when reporting data, limiting the descriptions related to individual outcomes, and reporting the medians and ranges instead of individual patterns of reporting for each individual. In addition, given that there were only two individuals in Cohort 2, a median was reported; however, a range was not.

The results of this study are comprised of the median group scores for each of the two Cohorts on the measures administered (i.e., Quality of Life Packages, The JOBS/JOBS:OSD package), and the narratives provided by participants in response to the interview questions on the Quality of Life package and the Foundations/Apprenticeship Impact Interview. For both the Quality of Life Package and JOBS/ JOBS: OSD package, the scores were aggregated and compared across evaluation periods, and between the Individual and the Other Person instruments for each cohort. The information provided in the Quality of Life interview and the Impact Interview narrative data were coded for both deductive and inductive themes. Deductive analysis focused on changes in several measured areas of quality of life, and changes in job skills over time. Inductive analysis of the narratives of Cohort 1 and 2 indicated participants’ perceptions of changes in skills associated with self-determination, increased awareness of systems of influence, and self-awareness. Finally, the scores from the measures and the interview

answers were compared to determine the congruency between the scores for each domain and the reported experience at that time.

### **Quantitative Measures**

The Quality of Life Instrument Package requires participants and another person to rate the importance of and satisfaction with aspects of the participant's life using a five-point Likert-type scale. The combination of these scores yields three domain score (i.e., Being, Belonging, Becoming) and an overall score for both the participant and for the other person informant. The JOBS Instrument Package requires participants and another person to use a 3-point Likert-type scale to rate the Quality of Performance and Type of Support needed by the participant. For the participant measure and for the other person informant measure, the Quality of Performance and the Type of Support needed are calculated and yield a score for each subscale and for an overall rating for each measure.

#### **Quality of Life Instrument Package Scores**

The Quality of Life measures include both quantitative scores on the Likert-type scale described above, and qualitative responses to interview questions. The latter will be discussed in the qualitative measures section below. The median scores and ranges of scores for the Quality of Life Package for Cohort 1 is presented in Table 1 and for Cohort 2 in Table 2. With regards to Cohort 1, the median of the aggregated individual scores was in the "good" quality of life range in the first (*Median* = 5.32; range 3.67 – 7.93) and third interview periods (*Median* = 4.97; range 1.95 – 7.15) and in the "ideal" quality of life range in the second interview period (*Median* = 6.13; range 2.15 – 6.85). In contrast, the median of the overall individual scores for Cohort 2 was in the "good" quality of life range in the first interview period (*Median* = 3.94) and in the "adequate" quality of life range in the second interview (*Median* = 2.38). Individual scores did

show problem areas for some individuals. For example, the range of Becoming scores indicates that at least one individual in Cohort 2 rated the importance of and satisfaction with the items making up this domain as problematic and in need of improvement.

The staff representative of CGC who completed the Other Person interview in each data collection period reported an inverse change in quality of life scores across evaluation periods for Cohort 1 (i.e., numeric decrease in reported quality of life scores, compared to the participants' median total score increasing to the ideal range in the second interview period); however, the scores all remained in the “good” range. For Cohort 2, the staff representative of CGC reported a numeric decrease in quality of life; however, this did not result in a change in the category from “good” quality of life. It is interesting to note that there was a difference between the staff representative of CGC’s median ratings for Cohort 1 and Cohort 2. For Cohort 1, the participants’ median ratings were consistently numerically higher than the staff representative of CGC’s ratings; but the range differed only in the second interview. In Cohort 2, the participants’ aggregated median ratings were consistently numerically lower than the staff representative of CGC’s ratings and there was a range difference in the second interview (participants’ median in the “adequate” range and staff representative of CGC in the “good” range).

*Table 3. Median and Range of Scores for the Three Parts of the Quality of Life Instrument Package for Cohort 1.*

Cohort 1	Time	Quality of Life Domains							
		Being		Belonging		Becoming		Total Score	
		Median	Range	Median	Range	Median	Range	Median	Range
Participant Self-rating	Time 1	5.00	4.00 - 7.78	4.78	3.22 - 6.89	5.89	3.44 - 10.00	5.32	3.67 - 7.93
	Time 2	5.00	1.00 - 7.00	7.50	1.67 - 8.67	5.84	1.44 - 7.33	6.13	2.15 - 6.85
	Time 3	4.72	3.22 - 7.22	5.78	1.29 - 10.00	3.89	1.22 - 7.78	4.97	1.95 - 8.63
Other Person Questionnaire	Time 1	4.89	3.00 - 5.88	3.23	0.44 - 5.78	4.35	3.83 - 6.88	4.16	2.89 - 5.70
	Time 2	4.17	1.22 - 5.33	2.70	1.22 - 7.11	3.87	3.33 - 4.89	3.62	2.44 - 5.19
	Time 3	2.89	-0.56 - 6.33"	2.14	-3.44 - 4.44	4.94	-3.00 - 8.00	4.03	-2.33 - 4.85
Assessor's Checklist	Time 1	15.50	15.00 - 19.00	18.00	16.00 - 20.00	15.00	14.00 - 16.00		
	Time 2	18.00	13.00 - 19.00	21.00	16.00 - 23.00	16.00	14.00 - 18.00		
	Time 3	15.50	10.00 - 18.00	18.00	16.00 - 22.00	17.00	16.00 - 18.00		

With regards to the Assessor Checklist that was completed by the researcher, the manual indicates that scores below six should be seen as problematic and the individual's circumstances in need of improvement, since this scale measures "the degree to which the basic elements of a good life are in place" (Renwick & Myerscough, 2012, p. 32). For both Cohorts, the median scores ranged between 14.00 and 21.00 across all interview periods. This indicated that as a group, participants appeared to have a good quality of life without any observable notable concerns identified by the researcher. When individual assessor scores were examined, the scores indicated that participants exhibited a greater range in observed quality of life, ranging from adequate to ideal. This suggested that although some individuals reported a good quality of life, the observable indicators were not present. For example, one individual reported good personal hygiene; however, at the interview they were wearing dirty clothes and appeared unkempt.

*Table 4. Median and Range of Scores for the Three Parts of the Quality of Life Instrument Package for Cohort 2.*

Cohort 2	Time	Quality of Life Domains			Total Score Median
		Being Median	Belonging Median	Becoming Median	
Participant Self-rating	Time 1	3.67	4.50	3.34	3.94
	Time 2	3.28	2.67	1.17	2.38
Other Person Questionnaire	Time 1	4.56	6.06	5.45	5.35
	Time 2	4.45	5.22	5.06	4.91
Assessor's Checklist	Time 1	19.50	17.50	14.00	
	Time 2	20.00	18.50	14.00	

Ratings on the Personal Control measure indicated that the participants across both Cohorts tended to rate themselves as being more able to influence the decisions and make choices that affect their lives than what was reflected in the scores provided by the staff



representative of CGC, who perceived that the individuals often received help from someone else or had someone make the decision for them.

### Job Observation and Behaviour Scale Package Scores

The JOBS package Quality of Performance median transformed standard scores and score ranges for the two Cohorts are presented in Table 2. Median transformed standard scores and ranges for the Types of Support needed in the JOBS package are presented in Table 3. The median scores for the individual ratings were compared to the JOBS:OSD normative score for adults with IDD in competitive, supported, and sheltered employment; and the staff representative of CGC's rating was compared to the JOBS normative score for adults with IDD in sheltered and supported employment.

*Table 5. Transformed Standard Scores for Quality of Performance in the JOBS Package for the self-rating and Staff Representative of CGC for Cohort 1 and Cohort 2.*

Cohort 1	Time	Quality of Performance							
		Daily Living Activities		Behaviour		Job Duties		Total	
		Median	Range	Median	Range	Median	Range	Median	Range
JOBS:OSD	1	86.54	69.23 - 100.00	96.88	93.75 - 100.00	83.34	61.11 - 94.44	85.83	78.33 - 95.00
	2	78.85	50 - 100.00	93.75	75 - 100.00	88.89	72.22 - 100.00	87.59	63.33 - 96.67
	3	96.16	88.46 - 100.00	90.63	81.25 - 100.00	91.67	72.22 - 100.00	88.34	85.00 - 96.67
JOBS	1	81.73	61.54 - 90.38	79.69	65.65 - 87.50	84.72	58.33 - 86.11	79.17	78.33 - 95.00
	2	76.93	69.23 - 84.62	81.25	68.75 - 84.38	80.56	66.67 - 88.89	79.17	73.33 - 85.83
	3	71.16	26.92 - 88.46	70.32	37.50 - 93.65	75.00	19.44 - 88.89	72.09	27.50 - 92.50
<b>Cohort 2</b>									
JOBS:OSD	1	61.54	-	78.13	-	61.11	-	75.00	-
	2	73.08	-	87.50	-	66.67	-	65.83	-
JOBS	1	85.58	-	79.69	-	77.78	-	81.67	-
	2	89.43	-	81.25	-	84.72	-	85.84	-

For Cohort 1, participants reported they were able to successfully complete all tasks without problems and with no assistance from the CGC staff, indicating a high Quality of Performance in the first interview period (*Median* = 85.83; range 78.33 – 95.00) and a relatively high level independence (*Median* = 79.17; range 68.33 – 90.00). Participants reported a numeric

increase in Quality of Performance in the second interview period (*Median* = 87.50; range 63.33 – 96.67) and third interview period (*Median* = 88.34; range 85.00 – 96.67). Participant scores for the Type of Support needed also increased from the first interview period (*Median* = 79.17; range 68.33 – 90.00) to the second interview period (*Median* = 88.33; range 81.67 – 90.00) and remained steady during the third interview period (*Median* = 88.34; range 85.00 – 95.00).

The staff representative of CGC reported little change in the Quality of Performance for the first interview period for Cohort 1 (*Median* = 79.17; range 78.33 – 95.00) and the second interview period (*Median* = 79.17; range 73.33 – 85.83), with a slight decrease in the numeric score for Quality of Performance during the third interview period (*Median* = 72.09; range 27.50 – 92.50). Regarding the Type of Support required, the staff representative of CGC scores indicated a gradual increase in the numeric score, indicating independence from the first interview period (*Median* = 51.25; range 31.67 – 81.67) to the last interview period (*Median* = 72.09; range 40.83 – 90.00).

*Table 6. Transformed Standard Scores for the Type of Support in JOBS Package Scores for the self-rating and the Staff Representative of CGC for Cohort 1 and Cohort 2.*

Cohort 1	Time	Type of Support							
		Daily Living Activities		Behaviour		Job Duties		Total	
		Median	Range	Median	Range	Median	Range	Median	Range
JOBS:OSD	1	80.77	57.69 - 100.00	75.00	53.13 - 100.00	66.67	44.44 - 100.00	79.17	68.33 - 90.00
	2	82.70	73.08 - 96.15	96.88	87.50 - 100.00	83.33	77.78 - 100	88.33	81.67 - 90.00
	3	92.31	84.62 - 96.15	87.50	81.25 - 93.75	88.89	77.78 - 94.44	88.34	85.00 - 95.00
JOBS	1	50.96	28.85 - 80.77	51.57	21.88 - 87.50	51.39	44.44 - 77.78	51.25	31.67 - 81.67
	2	59.62	36.54 - 88.46	70.32	56.25 - 96.88	63.89	47.22 - 88.89	63.75	45.00 - 90.83
	3	76.93	25.00 - 92.31	71.88	50.00 - 84.38	69.45	47.22 - 91.67	72.09	40.83 - 90.00
Cohort 2									
JOBS:OSD	1	73.08	-	81.25	-	69.45	-	74.17	-
	2	65.39	-	71.88	-	61.12	-	65.84	-
JOBS	1	91.35	-	78.13	-	83.34	-	85.42	-
	2	87.50	-	75.00	-	83.34	-	82.92	-

During the initial interview period, both the Cohort 1 participants and the staff representative of CGC reported a high Quality of Performance; however, the participants reported requiring less support (higher independence) to achieve this quality than the staff

representative of CGC reported that they needed. This trend was consistent across interview periods; however, the staff representative of CGC did indicate a small numeric decrease in Quality of Performance, but reported a numeric increase in independence in the third interview period.

Compared to the provided normative scores, the individual skill scores for Cohort 1 were above the mean of the normative sample. In terms of Type of Support required, participants' scores showed that they needed less support than the normative sample; however, the staff representative of CGC's scores indicated that the participants needed more support than the normative sample.

For Cohort 2, participants reported a decrease in Quality of Performance from their first interview period (*Median* = 75.00) to their second interview period (*Median* = 65.83). Individuals in Cohort 2 also reported a decrease in the level of independence to achieve this Quality of Performance. In comparison, the staff representative of CGC reported an increase in Quality of Performance from the first interview period (*Median* = 81.67) to the second interview period (*Median* = 85.84). With regards to the Type of Support, the staff representative of CGC reported a slight decrease in the amount of independence required to achieve the Quality of Performance. Interestingly, participants in Cohort 2 scored themselves as having lower skills and needing more support than what the staff representative of CGC reported.

Compared to the provided normative scores, the individual Quality of Performance scores for Cohort 2 remained below the normative means. Furthermore, the individuals in Cohort 2 for both interviews and the provided normative population rated themselves as needing the same Type of Support. The staff representative of CGC's median rating of Cohort 2 Quality of Performance and Type of Support needed was higher for both interview periods than the

participants rated for themselves. Furthermore, the staff representative of CGC's ratings for Quality of Performance and Type of Support exceeded the normative sample means for individuals with IDD in competitive settings.

### **Qualitative Measures**

Deductive analysis and inductive analysis of the Quality of Life Instrument Package and the Foundations/Apprenticeship Impact Interview are reviewed in this section. The Quality of Life Instrument Package includes interview questions intended to elicit conversation with the participant regarding dimensions related to the item in question. The JOBS Instrument Package did not include an interview component; therefore, questions related to the subscales were coded to develop a narrative understanding of the change in participants' job skills. Each interview was assigned a code according to the participant, cohort, and time. Participants 1 to 5 (with 4 removed due to leaving the Foundations program before the end) were in Cohort 1; and participants 6 and 7 were in Cohort 2. For example, transcripts for participant 1 in time 3 was coded as "P1C1T3" to clearly indicate the participant number, cohort, and interview period.

#### **Deductive analysis of the Quality of Life Interview data.**

As discussed in the instrumentation section of the methodology, the quality of life questionnaire is divided into three domains and nine subdomains. A list of the domains, subdomains, and examples of the items found in each can be found in Appendix D. As previously mentioned, each item in the subdomain included a series of questions that facilitated conversation with the participant about topics related to that item. For example, under Physical Belonging, participants were asked to describe the neighborhood they lived in and whether they felt at home there. Attention was paid to whether the participants shared different information,

whether there was changes in the focus of their answers, and/or whether there was a change in the amount of description provided in their answers.

***Being Domain.*** The Being Domain included questions about Physical Being (e.g., health), Psychological Being (e.g., self-control), and Spiritual Being (e.g., knowing right from wrong).

*Physical Being.* Individuals from both cohorts were asked questions regarding general health, diet, and self-care. Five participants from both cohorts identified themselves during every interview as being healthy. One individual identified that there was a decrease in their Physical Being and inability to get appropriate assistance. Interestingly, despite this reported change, the individual reported a positive change quantitatively in this domain.

Two participants in Cohort 1 identified in every interview that being at CGC contributed to their overall sense of health. For example, when one participant was asked in the first interview period when they feel the best, they responded, “Well I feel the best almost, uh, every working day” (P1C1T1). Interestingly in the third interview period, the same individual was able to identify a possible reason why CGC was contributing to a positive change in their health:

Um, I take the [bus] from my house and I take the [bus] and I get off at [street]. I’m usually the only one getting off at [street]; and then I walked from... I walked from [street] and this is a far, far way to walk. Yeah, I walk all the way from [street] to the working place. (P1C1T3)

*Psychological Being.* In this subdomain individuals were asked questions related to self-control, self-concept, and anxiety. All of the individuals in Cohort 1 exhibited a positive change over time in how they expressed their emotions, particularly regarding the development of strategies that addressed the emotions appropriately. For example, when asked about how to

cope with anger or frustration, one of the participants indicated in the first interview that they would “shout and ignore them. I pretend they’re not there, right” (P5C1T1); in the last interview, in contrast, they indicated that if someone was upsetting or angering them, they would talk to the person and say, “What are you doing? What you are doing hurts my feelings” (P5C1T3).

Similarly, the other participants in Cohort 1 also indicated in the first interview period they would ignore or aggress towards the individual angering them; and later indicated in the third interview period that they would address with the individual that they were upsetting them. The participants in Cohort 2 did not exhibit variance in their responses over time. That is, they described the same strategies in both interview periods.

Responses regarding self-concept were very constrained for participants in Cohort 1 and Cohort 2 (i.e., participants responded “I don’t know”). It is possible that participants did not understand what was meant by “distinct person.” They often asked for clarification regarding what this meant and the researcher provided the prompt “unique person.”

Finally, when asked about the impact of stress, all participants in Cohort 1 denied that stress impacted their lives. Similar patterns of responding were observed in Cohort 2, except for one participant whom identified that they were worried when they started CGC, but no longer felt that way.

*Spiritual Being.* With regard to Spiritual Being, participants were asked questions regarding what is considered to be right and wrong, the meaning of life and how they celebrate special occasions. Individuals in both Cohort 1 and Cohort 2 reported the least amount of change in the Spiritual Being subdomain, regardless of whether the participant identified a positive or negative change in importance and satisfaction in the quantitative scores. Three of the participants from both cohorts responded to the interview questions about the meaning of life

using one-word responses or “I don’t know” consistently across all interview periods. Two participants also refused to disclose their personal beliefs when asked questions regarding the meaning of life (e.g., Do you think about why you are here?), identifying that it was private. One participant identified a religious understanding of the meaning of life, but their response was limited to one sentence.

When asked about right and wrong actions, the participants from both cohorts responded to questions by focusing on the legalistic aspects (i.e., drug use, stabbings), rather than general moral or ethical aspects. In addition, their discussion focused on the consequences of “wrong” behaviour. For example, when asked why it was important to follow the rules, two participants identified “without rules then there’s chaos!” (P1C1T1) and “because if you don’t [follow the rules], it will cause a war” (P3C1T2).

Finally, only two participants from both cohorts identified holidays and celebrations as being important. Descriptions of what was done to celebrate holidays in their home environments was constrained and required prompting from the researcher to elicit details (e.g., “Do you see your family?” “Do you have a special meal?” “Is this a holiday in which you exchange gifts?”). Two participants indicated during the third interview period that they were excited about their graduation from the Foundations training program. They discussed who they were going to invite and when asked what they were doing in their spare time, one participant indicated that they were going to write a speech:

Participant: Well, now I have this homework to work on a speech right now... to say a speech at graduation.

Researcher: Awesome!

Participant: Yeah. Because I want to thank the people, just like I did at the [coffee shed], I want to do the same for Common Ground. (P1C1T3)

***Belonging Domain.*** The belonging domain included questions about Physical Belonging (e.g., space for privacy), Social Belonging (e.g., family), and community (e.g., access to work).

*Physical Belonging.* Participants were asked about their residence, space for privacy, and their neighbourhood. All of the participants reported that they had space for privacy and the people within their home environments respected their right to privacy (e.g., knocked before entering). Except for one participant, all participants in both cohorts expressed little change in the descriptions of their residences across interview periods. Given the short interval between interview periods it is not surprising that there were no changes in this subdomain. The focus of this question is on physical aspects of the residence (e.g., number of rooms, types of rooms) and unless the individual moves, these responses are unlikely to change. Finally, five of six participants reported being happy with their neighbourhoods. Four of the six individuals reported living in ethnic communities within the city that appeared to provided support and inclusion to the individual and their families. One participant expressed concerns about their neighbourhood, particularly the high incidence of crime.

*Social Belonging.* In terms of their social context, participants were asked about having a spouse, and about their relationship with their families and friends. The greatest change in the Belonging Domain for both cohorts was observed in Social Belonging. The participants in both cohorts described wanting to increase their social opportunities in general and saw CGC as an opportunity to form new friendships. When asked about friendships at Time 1, many participants described relationships that were confined to one location (e.g., church or gym), or with a paid



support person. Furthermore, half of the participants in Cohort 1 described CGC Partners as friends, regardless of familiarity at time 1. Many participants in both cohorts also described developing relationships with the current Partners at their co-op placement in time 2 and time 3. For example, four participants in Cohort 1 and one participant in Cohort 2 indicated that they were interested in having friends at CGC; however, they had not pursued a friendship outside of the workplace. One participant identified that transportation was one of the barriers to having a friendship outside of CGC: “Here’s another thing, [person is] saying [he/she] likes to [have a friendship], but [he/she] says I live too far away sometimes” (P1C1T3).

None of the participants were married. All participants from both cohorts reported that they would like to have a romantic partner and eventually get married. Two participants stated that it was hard to work and have a partner at the same time. The following exchange illustrates this sentiment:

Researcher: So, in the future do you think you might meet someone special?

Participant: I might – it gets interesting you know. But I am getting older.

Researcher: So, it’s something that interests you but you’re just not pursuing right now?

Participant: Something like that – like I became a worker, I had a job, and I spent my time being single a lot. So necessarily I didn’t get the same opportunities as somebody else might get. (P2C1T2)

Five participants from both cohorts consistently reported across interview periods identified their family as being important to them, regardless of whether there was tension in the family. As one participant stated, “I’m happy with them. I love them for who they are as person,

human being, but I don't like their attitude, they put me down" (P5C1T2). The other participants indicated that they had limited or no contact with their family members.

*Community Belonging.* Participants were asked about their access to education or training, their access to work, and their access to community places, such as restaurants or parks. Except for one person, all the participants in Cohort 1 were only attending the Foundations training program during the day and were not receiving any other government-funded supports during the day. Both participants in Cohort 2 had other types of supports during the day. It is possible that the number of hours required to be at the Foundations program and to participate in the businesses affects the types of supports the individuals receive. All of the participants from Cohort 1 indicated that before starting at CGC they had participated in other education (i.e., all participants had attended a post-secondary college program) and training (i.e., all participants had participated in a co-op placement during high school). They indicated that there were numerous barriers to participating in competitive employment, including feeling undervalued by the employer, working in jobs they didn't like, and not getting paid. For example, one participant described the excitement of getting a first pay cheque: "My first pay cheque ever! I didn't get a pay cheque ever. At [retail store], I didn't get a pay cheque ever. They're crooks, they gave me nothing; so, I stopped working there" (P3C1T3). Cohort 2 echoed the first cohort's sentiments regarding the challenges associated with getting competitive employment and not being given a fair wage. One participant mentioned having increased self-reliance being at CGC: "I like that I can pay for stuff on my own and not have to ask my parents for money. I can go to the movies and not have to ask my parents for money" (P7C2T1).

***Becoming Domain.*** The Becoming Domain included questions about Practical Becoming (e.g., daily activities), Leisure Becoming (e.g., hobbies), and Growth Becoming (e.g., adjusting to change).

*Practical Becoming.* Participants were asked whether they had daily meaningful activities, whether they participated in household work, and whether they cared for others (e.g., pets). When asked what they would be doing if they were not working at CGC, all participants from both cohorts consistently reported during every interview period that they would be bored, at home, and doing nothing. Furthermore, as participants progressed through the program, they appeared to become more confident about their right to work and more aware of how not having meaningful activities, specifically work (because it was prompted), would take a toll on their self-esteem. For example, in the first interview period, when asked what they would be doing if they did not have access to work, Participant 3 identified that potential employers were not receptive to their attempts to get employment:

Participant: It [was] hard...one time I did my resume and I give my resume ...um... clothing store ... I did the clothing store at the mall...the ... [mall]...

Researcher: Yeah.

Participant: And [he/she] didn't call me... It was sad. (P3C1T1)

Conversely, when asked the same question in interview period 3, they stated, "I'd be mad like hell. I'd be like 'give me that job right now!' I'd be mad, mad as hell. I would say 'stupid me, stupid me, I don't have a job.' I'm easy going, I'm supposed to have a job" (P3C1T3).

All participants from both cohorts indicated that they were required to complete chores around their home. Based on their responses, it appears that as participants proceeded through the Foundations Training Program and partnership, there were changes in their interest and

ability to participate in chores at home. Many participants mentioned that they liked being able to help around the house and it gave them a sense of purpose. For example, one participant in Cohort 2 initially identified their mother as the primary person responsible for chores, stating: “My Mum does the cooking cleaning, and laundry. My Mum always cooks. We often eat leftovers” (P7C2T1). In the second interview period, they added that chores were distributed across household members when asked the same question: “I cook once in a while, but usually my Mum does it. Sometimes I help my Mum clean. We do laundry together. Everyone does chores in my house. I’m responsible for cleaning my bedroom, recycling, and sweeping” (P7C2T2). When chores were discussed in each interview period, there was little change in the types of chores the participants were doing; and most participants were responsible for cleaning their rooms, doing laundry, and tidying up after themselves (e.g., putting dishes away).

Finally, participants were asked about whether they were responsible for caregiving, namely, caring for other people and pets. None of the participants indicated that they were responsible for caregiving for other people. They also did not suggest this as something they were interested in.

*Leisure Becoming.* Participants were asked if they participated in social activities, hobbies and casual activities. Five out of six participants from both cohorts described involvement in hobbies, sports, or casual activities. When discussing the opportunities that participants were able to participate in, it appears that outside of watching TV, few have activities to do around the house (e.g., board games, reading); they did not provide any insight regarding why they had few options (e.g., lack of financial resources to purchase items to take home versus lack of interest in doing activities at home), though one participant did identify

financial resources as a barrier when they were asked how satisfied they were with their opportunities for a hobby:

I'm not that satisfied because if I did I want to have a hobby, I find it's too expensive – way too expensive to actually have a hobby. Like if I wanted to collect something, I'd find it way too expensive to do that. Or if I wanted to do something I really like, I couldn't do it. (P6C2T2)

Furthermore, four of five participants expressed an interest in participating in activities arranged by CGC after they began their co-op placement or were voted into the partnership. One participant in Cohort 1 did not describe any social opportunities at CGC with the Partners at time 1 or time 2; however, in the third interview period they stated:

Yeah, if they have... because um I'm learning from one of my Partners that if I become a Partner that umm... they have a lot of field trips, like Yorkdale mall, they have movie theatres they go to... they go to specific parks, like they have the CNE they go to sometimes... We can go to Canada's Wonderland, but that's an expensive park (P1C1T3).

Similar to hobbies at home, participants expressed an interest in participating in leisure activities with the Partners at CGC; however, they also identified cost as a barrier.

*Growth Becoming.* Participants were asked how they learned new things, how they solved problems with other people, and how they adjusted to changes. One of the largest changes observed was the description associated with the tasks that students in Cohort 1 were learning in Foundations Training Program. As seen in Figure 1, in the first interview period, the individual identified the role that they were learning. However, as they progressed through the Foundations Training Program, the level of description and precision provided increased.

*Table 7. Changes in Participant 2's responses about what they were learning at CGC (P2C1T1 – 3)*

Time 1	Time 2	Time 3
“[I’m] learning how to be a baker. Um... I’m learning about food” (P2C1T1)	Well, this bakery is going to make me learn to work with the butter cream type of coloured squeezable – for at least the Easter egg shortbreads you know” (P2C2T2)	“I like to feel my work... I like how the flour meets everything and goes together. It’s pretty fascinating. You add the vanilla [extract], and the sugar, and the flour, and brown sugar, and eggs... You take the stuff and put it in the blenders or mixing bowls. I use a lot dishes. I like to get the resources and set them down in containers, look at it, and slowly put it all together” (P2C2T3)

Participants in Cohort 2 also described continued learning as new Partners in the businesses. Furthermore, it appears that learning continues after being voted into the business, but the type of learning changes to refinement of skills learned previously. For example, one participant from Cohort 2 initially stated, “I usually learn from other people, like by reading or being in a class” (P7C2T1). When they were interviewed again after being a partner for three months, the same participant said, “I am learning about money like how to round money up or down. I am also learning about assertiveness. I have learned a lot at the Foundations program, like about Partners having personal space” (P7C2T2).

#### **Deductive analysis of job skills data from the JOBS and the interview.**

The JOBS package did not include an interview component; therefore, the researcher reviewed the interview questions from the Quality of Life Instrument Package and the Foundations Training Program/Apprenticeship Impact Interview. From these two measures, the interviewer matched the questions from these instruments to similar questions within the

domains of the three JOBS subscales (i.e., Work-required Daily Living, Work-required Behaviour, and Work-required Job Duties). The matched items from the Quality of Life Instrumentation package and the Foundations Training Program/Apprenticeship Impact Interview and the JOBS package appear in Appendix B. Information from the interview data did indicate that participants identified changes in their roles as they graduated through the different phases of the Foundations Training Program and Partnership. These changes were observed in the language chosen to describe their duties; simply listing the skills being learned was characteristic of participants' contributions at Time 1, while rich descriptions of the learned skills using technical language were more common in later data collection periods. While the scores on the JOBS:OSD indicated some ceiling effects in the participants' responding to quantitative questions regarding their quality of job performance and the Type of Support needed, the qualitative narrative in the interviews suggested changes in job skills.

All of the participants from both cohorts expressed that they had learned these skills previously at high school or in a vocational program at college; therefore, they entered the program with a foundational understanding of employment-related skills and knowledge. For example, one participant stated, "They were all different subjects in core vocational. So, subject number 1 was English, umm, math, number 2. Umm... What else? Like Gym and I guess... English, math, gym... and I guess that's it. And life skills" (P1C1T3).

***Work-required daily living activities.*** The JOBS package first subscale is Work-Required Daily Living Activities. The focus of the items on this scale are skills that do not impact the individual's ability to complete specific work duties; rather, they refer to skills that impact the person's ability to fit into the work place (e.g., hygiene). The JOBS package items that were matched to Quality of Life Instrumentation Package interview questions were: hygiene, travel,

using money, and math. Participants did not mention changes in hygiene as they proceeded through the Foundations Training Program or as new Partner initiates; however, they did discuss changes in travel, and the use of money and math.

All participants from both cohorts indicated that they were required to use public transportation to travel to work. They did not mention whether they were able to use public transportation before they began the Foundations Training Program or if this was a newly acquired skill. Two participants described changes between the beginning of the program and the last interview regarding their using public transit more outside of work.

Secondly, participants described changes in the skills they had learned related to math and money management, such as making change, using the cash register and understanding how their pay was determined based on the number of hours worked. While participants identified that they were learning these skills, there was little change in their ability to describe what these skills entailed throughout the interview periods. One exception was a participant describing the difference between being a Partner and a paid employee in terms of their earnings in the third interview period: “We share profits, the money. It’s not hourly wages. We share, the Partners share the business” (P5C1T3). Four of six participants also reported that they needed to use the money earned to continue working. For example, two participants in Cohort 1 identified a bus pass as necessary to continue working: “That’s what my job coach tells me, ‘you will always need a Metropass, because look at you now, you are showing initiative and your Partners love you, I love you.’ So, in order for me to work, I need a Metropass” (P1C1T3).

***Work-required behaviour.*** The JOBS package second subscale is Work-Required Behaviour. This subscale has questions related to actions needed to participate effectively in the work environment (e.g., interpersonal skills). The items in the JOBS package that were identified



as having matching items in the Quality of Life Instrument Package and interview were: stress tolerance, work interactions, social interactions, changes in routine, and responding to criticism. With the exception to stress tolerance, participants identified changes in these items for both cohorts.

The first job skill change that Partners described was work interactions. Three individuals in both Cohorts identified the importance of getting along with other Partners when asked about changes in their job skills. For example, when asked about what they learned as a Foundations student and as an apprentice, one participant in Cohort 2 said that, “[It is] important to be helping and working on a team. I’ve learned there’s no arguing, sharing responsibilities, and doing my part” (P7C2T1). The same participant also identified problem-solving as being important when working in the businesses: “I also sometimes argue with my coworkers when they don’t follow the job rules or are rushing... When this happens, I try to talk it out or take some space” (P7C2T2).

Participants in Cohort 1 also described learning the difference between a work interaction and a social interaction. This included learning about the differences between types of relationships (e.g., friendship, Partner, and romantic partner) as they became more experienced through the Foundations program. Three participants from Cohort 1 identified everyone (e.g., other students, Partners, CGC staff) as “friends” in the first and second interview periods; however, in the third interview, they started to differentiate between different roles. For example, when describing a relationship with another student who had more work experience, they stated, “I look up to [individual], [individual is] wonderful. [Individual is] my mentor.” (P5C1T3). It is interesting to note that the individual referred to in this quote had also identified this relationship the same way and described how they provided advice for their peers.

But like, I'm a therapist actually because I sit there and I have to put up with their problems, like "So, what have you got for me so far?" You know? And they give me this spiel and this blah, blah, blah blah, and nyanaya, I have to listen. So like, okay, this is what I should do. You don't necessarily agree with it but that's just the way it is, you know. And they have a choice to accept it or neglect it. (P2C1T3)

While this participant did not relish their role as a mentor, they did recognize that they occupied this role and it came with responsibilities.

Furthermore, one participant described discriminating between romantic partners and coworkers as a challenge.

I have a[n individual] at my workplace, that I'm trying to get with [them] because [they] told me one time when [they] and I were taking the bus together... But, how should I say this. I just like [them] a lot, but I don't know about how to go about talking to [them] and helping myself to talk to [them]. My Mum gave me "if you want to talk to [them], just ask [them] to...". (P1C1T3)

It appears that participants from both Cohorts identified CGC as an opportunity to develop social relationships; and therefore, they had high hopes for the development of relationships within these environments.

Participants also described changes to their ability to cope with changes in their routines. When participants enter the Foundations program, they attend classroom sessions daily Monday to Friday. However, when they enter the co-op placement, they begin to work in the CGC related enterprises at different times and days. Three participants in Cohort 1 described their schedules and how they were changing their personal lives to accommodate working. For example, one participant stated, "Tuesday I'm off and Monday

I'm off. It's an easy week. <laughter>. My last week will be 2 – 5 and get to sleep in until when my shift starts and I get to go to bed late because I start late that day. And Wednesday 8 – 12, 4 hours" (P3C1T3). No participants in Cohort 2 discussed their schedule.

Finally, as they progressed through Foundations training, Cohort 1 participants increasingly identified Partners as individuals to learn from and as a valuable source of feedback regarding performance, particularly once they entered the co-op placement. For example, one participant identified that they were writing a speech to thank the Partners.

The day that I got nominated to be the apprentice, every Partner came and, um, the following Sunday, I started by saying to them, thanking them for letting me be an apprentice because I'll show them that I am a hard, hard-working person and I won't let them down. And, the feedback from one of the Partners is that [they] was watching me cleaning the coffee urn and [they] wanted to do it, but I took the initiative, and I cleaned out the coffee urn. (P1C1T3).

***Work-required Job duties.*** The JOBS package final subscale is Work-required Job Duties. This subscale measures skills related to motivation to work, quality of performance compared to other individuals, and quantity of work compared to other individuals.

Both Cohort 1 and Cohort 2 expressed excitement about being voted into the businesses. As stated previously, two participants identified their CGC graduation as an important celebration. Furthermore, one participant expressed that they wanted to demonstrate to the Partners how much they wanted the job:

I'm forgetting, one time I did this. I noticed that the water was running out at [coffee shed] and this was the first time my Mum was ridiculous – I bought the

water from my supermarket close to my house. I carried the whole case – this is how much I want the [coffee shed] job. I carried the whole case of water from my house to there. Some in my bag, some in the black supermarket bags. (P1C1T3)

Other aspects of job duties, such as quantity and quality, were harder to capture in the interview data. One individual in Cohort 1 identified in the third interview period that there had been a positive change in their skill:

It's important because I don't want to be stuck with relatively the same jobs. I used to cut strawberries and mangos, do dishes and go home. That's not how I do things now. So, there's more substance for the more things you learn. (P2C1T3)

**Inductive analysis of the Quality of Life Instrument Package and the interview data.**

As the Quality of Life Instrument Package Participant Questionnaire interview data and the Foundations Training Program/Apprenticeship Interview data were coded and analyzed, three themes were observed in the responses provided that were not directly asked about. These three inductive themes were changes in skills associated with self-determination, awareness of systems of influence, self-awareness and limitations of work. Upon secondary analysis, the researcher concluded that self-determination and awareness of systems of influence could be collapsed to self-determination as identified by Walker et al. (2010); and self-awareness and limitations of work could be collapsed into awareness of the limitations of work.

***Self-determination.*** As identified in the literature review section, Walker et al. (2010) describe three components of self-determination, namely, causal agency, proxy agency, and opportunities to act. As participants proceeded through the Foundations Training program, the apprenticeship, and early stages of the Partnership, it became apparent that they were starting to develop the skills identified as necessary for self-determination.

Causal agency is the individual's ability to develop and follow through on actions in their own interest, including problem-solving, self-monitoring, and goal-setting. Participants in both Cohort 1 and Cohort 2 started to describe examples or changes that demonstrated they were exhibiting causal agency as they proceeded through the program. Participants in both cohorts described changes in their ability to cope with changes in their lives and problem-solving. For example, one participant described themselves by stating, "I'm more confident. Like I'm willing to speak my mind" (P7C2T2). Another participant said, "I am willing to stand up for myself when people say things I don't like or tease me or when they have their own opinion and they don't like my opinion" (P6C2T2). Comparably, when these same individuals were asked about their ability to cope with changes in the first interview period, the same individuals reported, "I try to think of what I can do" (P7C2T1) or "No, I'm not sure that there is" (P6C2T1), respectively.

Furthermore, participants from both cohorts also reported that they felt more able to work with other individuals to exert change (proxy agency). As they proceeded through the program, participants expressed more interest in defining how other people supported them. For example, as one participant noted:

I used to have this problem with refilling my medication. One time I went to my, how should I say it, I went to the pharmacy over by my doctor and the owner was in charge of refilling my medication, he was begging me to go see my doctor. I don't know, like, I don't know if it's the money he wants or I don't know so, my Mum and I together, we went together to solve this problem; and the doctor was asking me all these questions, yeah, because I guess he wants to know why, why I want to see him. Yeah, so I was telling my doctor, the only reason why I want to see him is because of

refilling my medication. This is not the first time, it's the second time it happened because the first time I told the doctor this and the doctor called downstairs pharmacy and he explained to the downstairs pharmacy about my medications. And now I don't need to see the doctor again until September. (P1C1T3)

While some participants were actively engaging in proxy agency, other participants were developing the skills necessary to participate in proxy agency. For example, one participant indicated in the third interview period that they wanted assistance communicating with their sister about not wanting to participate in an activity any more.

Participant: My sister was putting pressure on me... oh go here, oh go there... And I don't want to go, but she keeps saying "you gotta go, you gotta go."

Researcher: So, she makes you go to stuff you don't want to do? I'm sorry to hear that.

Participant: I want to avoid her.

Researcher: So, what do you do when this happens? When you want to avoid her?

Participant: I'm going to call the police. (P5C1T3)

While this participant has expressed interest in finding assistance to communicate their displeasure for the activity, assistance is needed to identify viable co-advocates to express their desires.

In addition to individuals working with proxy agents, one individual indicated that they wanted to act as a proxy agent for others:

Participant 2: Some people are just living above water.

Researcher: And you want to help these people – is that your long-term goal?

Participant 2: Yeah, because someone has to take care of them.

Researcher: I agree – for sure.

Participant 2: I'm realizing now – we all need each other.

Researcher: Definitely... and it feels nice sometimes to help other people (P2C1T2)

While this participant described wanting to act as a proxy agent for individuals living in poverty, they did not describe how they were going to follow through on this idea.

The final aspect of self-determination is environmental opportunities to act. Participants in both cohorts described CGC as a safe place to learn new skills when compared to their experiences in other environments, including school and other work places. One participant indicated that they didn't like high school because "when I needed help, they didn't help" (P5C1T3). This participant also described feeling invalidated when they were trying enter the job market: "When I give my resume, they don't call me, I don't get hired. When they say they will call me, they don't call me back" (P5C1T3). It appears that while CGC provides opportunities for individuals to act in a self-determined manner, these opportunities are limited in the community.

For some individuals, there was a change in the number of systems that they interact with. Many participants in time 1 indicated that the systems they interacted with were limited to school, work, and home. The changes in the context in which participants were engaging in different interactions varied based on opportunities and personal history. While some individuals in the third interview period identified wanting to increase the number of interactions within the microsystem (e.g., coworkers and friends in addition to family), other participants expressed a desire to interact with and influence other systems such as the exosystem. For example, one participant described the change in their influence as moving to the "top of the food chain" (P3C1T3); while others described a general change in their interest regarding what is happening in their community:

When I wake up in the morning, I turn on CP24 or Channel 7 on regular television. Because they know more about what I know. They don't show it, I'm just going and getting to know. Like what I just told you about the police and the guy, um, drugs, and right now they are talking about sleep, like sleeping is good. And, sleep... and getting, or not getting a tattoo on your body because. It's pretty interesting because some people email the news, saying why would you want to damage your body with a tattoo or not having one. Or having one is better than not having one. (P1C1T3)

This interest in turn may have an impact on their perceptions of what is happening in the world. For example, when this individual was asked during the third interview period about what is right and wrong, they identified having a tattoo as wrong; whereas in the first two interview periods they identified drugs, smoking, and drinking alcohol as being wrong.

***Limitations of Work.*** While many participants discussed the positive impact of work, several participants identified that work was having an impact in their lives that they saw as negative. They identified that participating in work led to tiredness, changes in the way they had to spend financial resources, and opportunities for engagement in other activities.

The most common limitation of work identified was tiredness. Several participants in the second and third interview periods indicated that they were feeling more tired. For example, when one person was asked what they liked least about the job, they indicated that they didn't get a lot of time off. For example, one participant stated "I wanted to go somewhere – I was too tired so I just wanted to stay home instead of going out. I don't know – I wanted to go somewhere but it takes a lot of energy to do it" (P2C1T2). Another individual described needing to take a nap when they get home on days that they worked: "I take a nap after I'm done work to relax after a long day" (P3C1T3).



Participants also expressed frustration that they had to budget for items to work. Several individuals noted that having the correct items necessary to be prepared to work (e.g., hygiene supplies, bus pass) costs money. For example, one individual stated, “Like, I made sacrifice for a metro pass knowing the money that I had... that drove me insane this morning. I was kind of late but I bought one and came here after” (P2C1T1). It appears that some individuals may be weighing the cost of working versus receiving government benefits. For example, when one participant was asked about the importance of work, they stated, “No [it’s not important], I’m getting money from the government, so why should I work?” (P5C1T2).

### **Discussion**

Despite the development of the UNCRD, specifically the right to employment, persons with IDD continue to face barriers to participating in employment. This is evidenced by an estimate of only 25% of persons with IDD being gainfully employed (CAACL, 2011). One way to conceptualize these barriers to employment is the social-ecological model, a central feature of which is the interaction between the individual and the many dimensions of the environment in which they exist. In this model, proposed solutions focus on “enhancing the capacity of the person and changing the expectations or characteristics of the environment or context” (Walker et al., 2010, p. 9). Self-determination, the ability to make informed decisions and to have an impact on change within the world, is one possible factor in understanding how the individual interacts with other systems (Vatland et al., 2011; Walker et al., 2010). Furthermore, self-determination has been linked to improvements in both employment skills and quality of life for individuals with IDD (Lachapelle et al., 2005; Schalock, 1996; Wehmeyer and Schwartz, 1998). As identified by De Ruyscher et al. (2016), social enterprises provide an opportunity to meet individual employment needs, while improving the quality of life for persons with IDD through

recognizing individual strengths, while also stimulating collaboration with other sectors of the community. This has the potential to build supportive connections in the community for persons with IDD.

The present study was designed to examine the changes in the job skills and quality of life for six participants in two cohorts of Common Ground Co-operative's Foundation Training Program students. The participants in Cohort 1 were interviewed at the beginning of the Foundations Training Program, at the beginning of their co-op placement, and upon being voted into the businesses as Apprentices. The participants in Cohort 2 were interviewed upon being voted into the businesses as Partners and three months following being voted in. Two research questions were addressed in this study:

1. What is the impact of the Foundations training program and apprenticeship on the job skill development for students as they progress through the classroom training, apprenticeship and initial months of partnership?
2. What is the impact of the Foundations training program and apprenticeship on the quality of life for students as they progress through the classroom training, apprenticeship, and initial months of partnership?

### **Improvements in Quality of Life**

The quantitative scores in the Quality of Life measures showed very limited change in the quality of life categories, although the numeric scores changed as seen in ranges over time; however, the qualitative analysis of the interviews revealed descriptions of change in the lives of individuals.

Scores on the Quality of Life Instrumentation Package for both the participant and the other person informant were aggregated and the median scores were analyzed across interview

periods to examine the changes in quality of life. For Cohort 1, participants' scores indicated a change in the quality of life range during the second interview period, whereas the staff representative of CGC reported scores within the "good" range consistently across the interview periods. Participants in Cohort 2 reported "good" quality of life in the first interview period and "adequate" quality of life in the second interview, whereas the staff representative of CGC reported scores in the "good" quality of life range for both interview periods.

When the range of domain scores and overall scores was examined for both the participant and the staff representative of CGC scores, results indicated a wide array of quality of life indications for individuals, ranging from "problematic and in need of improvement" to "ideal indicating an excellent quality of life" for participants in both cohorts across interview periods. The challenges with interpreting the individual quantitative scores as medians are discussed below in the limitations section.

The changes in the range of domain scores and overall median scores for both the participant and the staff representative of CGC measures across interview periods highlight the importance of quality of life as a reference for what is desirable not only according to the individual, but also according to the environmental provisions; it is not an end within itself (Schalock et al., 2002). As identified by Schalock et al. (2002) and Brown et al. (1997), quality of life is a holistic evaluation and therefore sensitive to changes in multiple realms of life. Furthermore, the differences between the ranges of scores for the participants and the CGC staff indicate the importance of including both subjective and objective perspectives when measuring quality of life.

Information provided during the Quality of Life Instrument Package participant interviews revealed more detail regarding the changes in quality of life than the numeric scores.

While the participants described changes in all domains (i.e., Being, Belonging, Becoming), these changes were not reflected in the numeric scores. Overall, the described changes indicated a positive trend in the changes in their life quality. Furthermore, information provided during the interviews revealed that participants' responses were often influenced by events that were not related to CGC or to the Foundation Training Program (e.g., conflict with family members, interpersonal conflict with romantic partners), highlighting the impact that multiple environments can have on the scores.

While it is possible that CGC had a positive impact on the quality of life for participants in both cohorts, causation cannot be determined, although the results are consistent with previous findings related to the impact of employment (e.g., Kober & Eagleton, 2005; Burge et al., 2007). What is not clear is the direction of influence. Participants described a dynamic relationship between working at CGC and other aspects of their lives. It is equally possible that what was happening at work may have been influencing other domains (e.g., increased leisure opportunities), as much as these domains could be influencing employment (e.g., chronic illness may influence the number of hours worked).

It is also possible that employment may have a negative impact on some domains of quality of life. Participants did discuss several "costs" associated with working, such as distribution of resources (i.e., money), tiredness, and reduced opportunities for recreation. While several researchers have identified exclusion, discrimination, and isolation as potential "costs" to individuals with IDD in the workforce, further research may identify other hidden drawbacks to employment (Butcher & Wilton, 2008; Hall, 2005). As Hall (2005) noted, employment tends to be identified as one of the objective measures of community inclusion, and subsequently quality of life; this privileges participation in employment and diminishes the value of other

contributions. This leaves little room for understanding the reasons why individuals may choose to participate in employment or choose other forms of contribution or meaningful activity.

It is also interesting to note that Cohort 1 and Cohort 2 were not discernably different in many of the domains of quality of life, and the responses provided by Cohort 2 resembled the Foundations Training Program students more than the responses made by Partners in previous studies. In previous research completed with Common Ground Co-operative, Partners had identified greater gains in proxies associated with quality of life, such as more participation in social outings independently with other Partners and increased application of skills learned at CGC at home (e.g., cooking) (Owen, Readhead, et al., 2015; Readhead, 2012). While participants from both cohorts in this study were exhibiting similar trends towards a similar experience (i.e., talking about social activities with Partners), neither group reported participation. Given that participants in Cohort 2 were elected as Partners in the business, more research is needed into what the pivotal point in the Partnership is regarding changes in quality of life that resemble the outcomes described in previous research.

### **Improvements in Job Skills**

Scores on the JOBS Instrumentation Package for the participant and for the other person informant measures (JOBS:OSD) were aggregated and the median scores were analyzed across interview periods to examine the changes in job skills. For Cohort 1, participants reported improvements in their Quality of Performance across interview periods, whereas the staff representative of CGC reported stable scores for the first two interview periods with a numeric decline in the third interview period. With regards to the Type of Support needed, both the participants and the CGC staff informant indicated a change in the Type of Support required indicating an increase in independence across interview periods; however, the scores provided by

the participants were higher than those of the designated staff representative of CGC.

Participants in Cohort 2 reported a decline in Quality of Performance from the first interview period to the second interview, whereas the staff representative of CGC reported an increase in Quality of Performance from the first to second period. The participants in Cohort 2 indicated a negative trend in Type of Support scores, indicating a decrease in independence, whereas the staff representative of CGC reported an increasing trend in Type of Support scores, indicating an increase in independence. Interestingly, the staff representative of CGC provided higher scores than the participants in Cohort 2.

Again, when the range of scores for the Quality of Performance and Type of Support were examined for both the participants and the staff representative of CGC, results indicated a wide array of Quality of Performance and Type of Support needed for individuals. The challenges with interpreting the individual quantitative scores as medians are discussed below in the limitations section.

Brady et al. (2010) compared teacher and student ratings of Quality of Performance and Type of Support needed on the JOBS and JOBS:OSD to evaluate whether the perceptions were similar. They found that students consistently rated their Quality of Performance higher than the teacher, and rated their support needs lower than the teacher. Cohort 1 exhibited a similar trend in data, rating their Quality of Performance higher than the CGC staff; and their support need lower than the staff representative of CGC. Interestingly, the participants in Cohort 2 did not exhibit this trend. One possible explanation is related to self-determination. Wehmeyer and Schalock (2001) identified four dimensions of self-determination, one of which is self-realization, which is personal insight regarding one's own strengths and weaknesses and acting accordingly. It is possible that the participants with more experience in the businesses were

exhibiting more self-realization than the participants in Cohort 1; however, more research into the role of self-realization and responding to measures of performance needs to be conducted.

Although the JOBS instrument package did not have an interview component, the items within each subscale were matched to questions in the Quality of Life Interview and the Impact Interview. Similar to the results in the Quality of Life Instrumentation Package, results from the narrative interview revealed changes in the Cohort 1 participants' job skills across interview periods. Generally, participants from both cohorts did not report changes to job skills when asked (i.e., What have you learned from being in the Foundations Training Program?); however, changes in job skills were indicated in the elaboration of their descriptions of job tasks, such as how to use the cash register and how to follow recipes.

It is also interesting to note that all participants identified that they had participated in a co-op placement or post-secondary vocational program after high school. While it is possible that a ceiling effect was observed due to participant bias, it is also possible that individuals who are referred to CGC have established employment skills prior to starting the Foundations Training Program. As discussed in the limitations section, a true pre-program baseline was not established due to design constraints; therefore, it is difficult to establish whether participants entered the program with an elevated score on Quality of Performance and Type of Support.

### **Self-Determination**

Although no measure was administered to assess changes in self-determination, inductive analysis of the interview data indicated that participants described changes in their self-determination skills and social capital through the interview periods. Walker et al. (2010) described three components of self-determination: causal agency, proxy agency, and opportunities to act. Participants from both cohorts described changes to their ability to develop

and follow through on actions in their own interest and to work with other individuals to exert change. They also described environmental conditions that promoted opportunities to further develop and rehearse these skills, such as interactions with customers in the coffee sheds, and with the Partners at work. When these components of self-determination were examined in relation to social-ecological contexts, some participants described attempts to influence change in the exosystem by advocating to the government on behalf of underprivileged groups or, in the mesosystem, through participation in the co-operative process with Partners. These same participants in previous interview periods focused their discussion on members of the microsystem (e.g., family members, other Foundations Training participants) and the interactions with the members of this system. Other participants described widening their scope of influence from one or two members of the microsystem (e.g., immediate and extended family, teachers) to three or more members (i.e., the addition of friends, Partners, acquaintances). All participants described an increase in their awareness of the members of other systems, even if that was limited to the customers from the businesses.

### **Limitations**

Two types of limitations regarding the conduct of this study were identified, namely, limitations within the procedure and limitations regarding the measures used. Future research should consider strategies for overcoming these limitations.

**Procedure.** The first type of limitation was regarding the procedure – how the study was conducted. Given the pragmatic nature of this study, a balance between what was feasible and what is necessary for good research had to be found.

The first limitation in this study was the use of staff who were familiar with the participants. A staff representative of CGC was the other person informant for both the Quality



of Life Instrumentation Package and the JOBS package. The staff representative of CGC was aware of who they were rating and was not blind to the intentions of the research or the measures. The staff representative of CGC was also involved in other forms of performance evaluation as part of their regular job at CGC in addition to completing measures regarding the participants' job skill development and quality of life for the purpose of this study. This concern was addressed by not providing the individual scores or any information gathered for research purposes in a way that could identify individual participants. Furthermore, to facilitate the designated staff representative of CGC getting to know the participants and accurately evaluating their skills by observing their behaviour in the classroom the initial interview period was not started until three weeks after the start of the program. This resulted in preventing the design from being a true pre-program baseline design. Future research should consider the use of researcher-collected probe data regarding the participants' job skills to reduce the risk of dual roles for any CGC staff member who may be a rater and to facilitate a true baseline design.

Secondly, given the time for evaluation, a cohort-sequential design was selected to accommodate interviewing two cohorts regarding their experiences at CGC. While this design allowed for information to be collected about the participants' experience from the Foundations Training program to early Partnership, comparisons between the cohorts' experience could not be made since there were no controls for time effects. In addition, the repeated measures design may have influenced the participants' responses at each interview period. No control was provided to determine whether the increased description provided to the researcher was due to changes as the result of the program or whether it was due to the participants being more familiar with (and therefore comfortable speaking to) the researcher.

The third limitation related to procedure was the small sample size. Due to the small sample size, extra consideration had to be given to protection of participants' confidentiality. Some data were omitted from the results that may have provided different or new conclusions; however, due to the small sample size and the risk that such data would reveal the identity of the participant, the researcher chose protection of confidentiality over using the results. Furthermore, limited information could be gathered from the aggregated scores on the measures, especially for Cohort 2, which had only two participants. Generalization from these small samples is not appropriate. Future research focused on describing the participation of a few participants in detail or a larger study that could involve the use of statistical analysis for scores may provide more insight into the changes across interview periods.

In addition, future research should consider the length of the period being studied. If future research is using these measures, consideration should be given to the interval between interview periods. As mentioned below under instrumentation, these measures did not have the sensitivity to detect changes between participants or interview periods. Furthermore, as previously noted, further information is needed regarding the pivotal point between the results described in previous studies (e.g., Owen, Li, et al., 2015; Owen, Readhead, et al., 2015)) and the results of the current study. That is, how long after being voted in as a Partner do Partners start to exhibit a notable change in quality of life indicators?

The use of a mixed method design proved to be beneficial in examining the changes to quality of life and job skills. The narratives from the Participant Interview of the Quality of Life and the Foundations/Apprenticeship Impact Interview provided more indications of change given the ceiling effects observed in the numeric scores. That being said, the use of a mixed methods design meant privileging the information received from one type of source over another (i.e.,

qualitative over quantitative or vice versa). Having to select one form of data analysis over the other meant that a bias was introduced into the other. In this study, the quantitative scores on the measures were calculated first. Although the inductive analysis was guided by what was present in the interview data set, the researcher started with increased awareness about what had been found in the quantitative data, which may have influenced analysis of the interview data.

Finally, when the study was initially designed, caregivers were invited to participate in the study. Consent was collected from five of the six participants to speak with their caregivers (e.g., family members, friends); however, none of the caregivers chose to participate in an interview. Previous research conducted with CGC included interviews with stakeholders, including family members. Family members would have been able to provide collateral information regarding baseline job skills and changes in job skills, in addition to changes in quality of life observed in the home environment.

**Instrumentation.** The second area of limitation within this study had to do with the measures selected. The results from previous research completed with CGC were based on interview data provided retrospectively. It was decided that the use of standard measures could provide a means of comparing changes for participants over time. The measures were broad and relevant to any employment environment. Based on a literature review of standard measures for quality of life and job skill development with persons who have IDD, and based on agency feedback regarding what they would use following the completion of the study, the Quality of Life Instrumentation Package and the JOBS package were selected. As demonstrated by the scores on both measures for both of the cohorts, these measures lacked the specificity (i.e., Does the instrument have enough precision?) and/or sensitivity (i.e., Does the instrument account for enough variance?) to detect changes over the short time intervals used in this study.

With regards to the Quality of Life Instrumentation Package, the specificity was good; however, the sensitivity was not good enough to detect small changes over the desired period of time. By looking at the ranges of scores in Table 1, it is clear the participants' scores changed numerically over time; however, changes in the quality of life categories were only reported for Cohort 1 in the second interview period and Cohort 2 in the second interview period. Given the range and changes in the aggregated median scores across interview periods and for individuals, it would have been helpful to have orders of magnitude for the numeric scores (i.e., What makes a score of six in the ideal range, but not five?). The qualitative narrative that accompanied the scores was necessary to provide an interpretation of the scores. That being said, it is important to recognize that some individuals may have limited language to describe their experiences, especially if they are new. Therefore, some of the answers provided in response to questions were anecdotes or examples, and the researcher had to extrapolate from these examples to determine what they meant. This increased the risk of interpretation errors.

The second limitation of the Quality of Life Instrumentation Package was the lack of interview for the Other Person informant. The narrative interview provided excellent context for the scores on the participant interview, and in some cases provided evidence of change when the scores did not. The Other Person Questionnaire lacked a similar interview; therefore, did not provide the same opportunity for contextualization for the Other Person Questionnaire. This information may have been helpful to interpret the differences observed in participants' and other person informant's scores. It also would have ensured that both the participant and the other person informant were using the same context for evaluating each domain of quality of life.

With regards to the JOBS package, neither the specificity nor the sensitivity were good enough to detect change within the short assessment period. The JOBS measured general skills

associated with employment (e.g., hygiene) and did not consider environment-specific skills (e.g., operating a cash register); furthermore, it asked participants to rate their skills on a 3-point Likert-type scale, which provides limited variance in responding. These variables may have contributed to the observed ceiling effect in participants' scores and provided limited ability to measure skills related to operating a business similar to the enterprises supported by CGC. In addition, when the items from each subscale were matched to questions from the Quality of Life Instrument Package or the Impact Interview, and the narrative that best demonstrated the item was examined, changes in job skills were observed. Future research should focus on using task analysis, that is, discerning the detailed steps required to complete a specific job, as a measure of participant development in specific skills related to being a CGC Partner, either in addition to the JOBS package or in lieu of it.

The second limitation of the JOBS package was the normative data provided for the JOBS:OSD instrument. The normative data were divided into large diverse categories, namely, "adults in competitive, supported, and sheltered employment" and "secondary students in work experience and support employment." The experience of the students in the Foundations Training Program and the new Partners differs from integrated competitive employment in that the co-operative resembles an option typically reserved for the neurotypical population; therefore, neither category of normative data was an ideal fit for comparison.

The final limitation of the instrumentation was the length of time required for administration of all the measures. Due to time constraints, all the measures were administered in one sitting, resulting in all the interviews lasting at least two hours. This resulted in participants exhibiting signs of fatigue as the time passed (e.g., asking for more breaks, shorter answers being provided to the questions being asked). Future research should focus on an administration

strategy that reduces the likelihood of fatigue (e.g., administering one instrument package at a time for all participants).

### **Future Directions**

To date, all the research conducted with CGC, including the current study, has consulted with the administrative side of the business regarding research questions and selected measures. Given the nature of the co-operative and the right to participate in the creation of research, future research conducted with CGC should focus on working with the Partners. This includes involving Partners as consultants for future research, and by using participatory action research that could be driven by questions that the Partners wish to explore. With regards to the current research, it is ultimately the Partners who will vote new Partners into their businesses and therefore it is important to understand their assessment of potential Partners' abilities. Furthermore, persons with IDD should be included in the discussion regarding quality of life. As pointed out by Hall (2004), while the inclusion movement promotes increased community understanding and support for persons with IDD to have access to opportunities the same as others, such as having a job, persons with IDD continue to face structural barriers, discrimination and abuse. For these reasons, it is important to recognize the importance of the lived experience of the individuals who will be completing the measures.

With regards to the selected measures, only the Quality of Life package had an interview component that provided qualitative data to accompany and provide context for the numeric ratings. For the JOBS package, responses from the interview component of the Quality of Life Package and the Foundations Program Student/Apprenticeship Interview were matched to the subscale items to provide qualitative context. Given that there was little change in the participants' numeric ratings of quality of life and job skill, the qualitative data were required to

demonstrate change in the participants' responding. Occasionally, there was a discrepancy between the participants' numeric score and their reported account (e.g., they rated their quality of life high; but described problems); and the participants' rating and the CGC staffs' rating (e.g., the participant rated the quality of performance higher than the CGC staff). Given the abstract nature of numeric scores (i.e., what is the difference between a score of one versus two), the qualitative information provided the necessary context to ensure that there was a shared understanding and to demonstrate change. Given these limitations, the blend of qualitative and quantitative measures should be the standard for evaluation or research with persons with IDD to optimize shared understanding and context.

Furthermore, employment has been privileged in the research conducted on quality of life and self-determination (i.e., the role that employment plays in improving quality of life outcomes or improving self-determination skills). This has endorsed employment as the dominant narrative in persons finding meaningful activity (Hall, 2004, 2005, 2010). As demonstrated by Brown, Raphael, and Renwick (1997) and the limitations of employment identified by the participants in this study, employment alone is not related to higher scores in quality of life. That is, quality of life is a holistic evaluation and therefore is likely to be influenced by multiple sources, such as home life, outside of being employed. As suggested by Hall (2010), other forms of contribution have been identified (e.g., artistry and volunteerism); and it is important to examine the role of these contributions (e.g., artistry, volunteerism) on quality of life to provide a contrast with employment.

Finally, similar to the Simpican et al. (2015) recommendation, further research is needed regarding how persons with IDD interact with the different contextual spheres in the social-ecological model. Current research results from the inductive analysis of participants' interviews

indicated that participants are interested in and capable of advocacy in multiple spheres outside of the microsystem (i.e., family, school, work). In addition, Walker et al. (2011) identified the importance of developing self-determination skills that will assist persons with IDD to be able to effectively exert more control in wider social-ecological spheres of influence. As argued by Leake (2014), individuals with IDD also need the opportunity to develop social capital with members of different social-ecological spheres. As mentioned previously, participants reported changes in the third interview period indicating that they were starting to develop an interest in and the skills necessary to exert change in wider spheres of social-ecological influence. They also identified that being a Partner at CGC had improved their bonds with members of their immediate social network, in turn increasing their social capital. Furthermore, research regarding the role of proxy agents (e.g., family members, staff) needs to be examined in terms of social-ecological context. As both Leake (2014) and Walker et al. (2011) note, these proxy agents appear to play a significant role in how and whether individuals are included in their community. It is possible that opportunities for inclusion are contingent upon the number of people in their social network and the spheres of influence these individuals are occupying.

### **Conclusions**

Two cohorts of participants representing Foundations Training Program students/apprentices and early stage enterprise Partners described changes to their quality of life and job skills. Participants reported changes in three domains of quality of life: Being, Belonging, and Becoming. Although considerable attention was paid to the positive impacts of employment and changes to quality of life, participants did describe limitations of work. Consistent with Hall's (2010) observations that work is idealized as a goal of social inclusion,



participants indicated that there were costs to working, such as limits on free time, tiredness, and the need for resources to participate (e.g., bus pass).

Participants also described changes in their job skills, indicating changes not through listing the development of their job skill repertoire, but through elaboration of their descriptions of job duties, and of changes to the relationship between themselves and the current Partners in the CGC enterprises.

Finally, participants also described the acquisition of skills related to self-determination. When changes were examined in the context of a social-ecological model, participants appear to be attempting to widen their spheres of influence either through increasing the number of connections within the microsystem or by expressing interest in influencing changes at an exosystem level. It also appeared that participants were developing the social networks necessary to be effective in self-determination (Leake, 2014).

This research is consistent with previous research conducted with CGC indicating that the agency and the social enterprises it supports have the potential to improve people's lives, in addition to improving their job skills (Owen, Li, et al., 2015; Owen, Readhead, et al., 2015; Readhead, 2012). For example, similar to Readhead (2012), participants described looking forward to being at CGC due to the social bonds formed with other Partners. Furthermore, this research built on the previous research that found an impact on quality of life and job skills from the perspective of the staff, families and Partners by using standard measures to determine the magnitude of change (Bishop, 2013; Owen, Li, et al., 2015; Owen, Readhead, et al., 2015). Results indicated that standard measures that produce a score demonstrated numerous limitations in sensitivity and specificity for evaluating quality of life and job skill development over a

shorter period of time (i.e., 9 months). More sensitive and specific measures, such as task analysis or interviews, may be better for detecting changes.

Future research should focus on the perspective of individuals with IDD, namely, the Partners at CGC, either as consultants for future research with the businesses or as co-researchers in participatory action research investigating topics of their choosing. Furthermore, given the identified limitations of work, such as reduced time for recreation, future research should also focus on the quality of life impacts for persons with IDD when they engage in other meaningful contributions to society. Finally, given the importance of self-determination and social capital in both employment and quality of life, future research should explore the development and impact of self-determination in the various contexts as identified by the social-ecological framework.

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## Appendix A: Foundations/Apprenticeship Impact Interview Questions

Questions from this list will be selected for use as appropriate to each evaluation period (please see Planned Timeline in the narrative above).

Name:

Age:

When did you start the foundations program/apprenticeship?

1. What difference has CGC made in your life?
2. What did you do during the day before you came to CGC?
3. What was your life like before you came to CGC? What has changed in your life since you came to CGC? (sample prompts: work skills, changes at home, changes with friends, changes in your health [hospital/doctor visits])
4. What do you think you would be doing now if you were not part of CGC?
5. What have you learned from your training in the Foundations Program? When did you start the Foundations program? When did you finish the Foundations Program? What is the most important thing you learned? What are other important things you learned? What else do you wish you had learned?
6. What is different about you since you started being part of CGC? (sample prompts: What would we notice different about you if we met you before CGC compared to how you are now?)
7. What skills have you learned as a student in the Foundations program/apprenticeship? (sample prompts: work skills, social skills, skills at home)
- 8.. What is your personal work goal? What do you want to be doing in two years?

Appendix B: Matching JOBS Package Subscales to Quality of Life and Participant Interview Questions

JOBS/JOBS:OSD	Quality of Life Package (QOL)/Participant Interview (PI)
<p>Work-required Daily Living Activities</p> <p>Hygiene Travel</p> <p>Using Money</p> <p>Math</p>	<p>QOL - Physical Being (question 3) QOL – Physical Belonging (question 3) QOL – Community Belonging (question 3) PI – Question 3 PI – Question 5</p> <p>QOL - Personal Control (Major Life Issues, question 3) QOL – Growth Becoming (question 1) PI – Question 3 PI – Question 5</p> <p>Growth Becoming (question 1) PI – Question 3 PI – Question 7</p>
<p>Work-required Behaviour</p> <p>Stress Tolerance</p> <p>Work Interactions</p> <p>Social Interactions</p> <p>Changes in Routine</p> <p>Responding to Criticism</p>	<p>QOL – Psychological Being (questions 1, 3) QOL - Growth Becoming (question 3) PI – Question 6 PI – Question 7</p> <p>QOL - Growth Becoming (question 2) QOL – Social Belonging (question 1) PI – Question 3 PI – Question 5 PI – Question 7</p> <p>QOL – Growth Becoming (question 2) QOL – Leisure Becoming (question 1,2) PI – Question 3 PI – Question 6 PI – Question 7</p> <p>QOL - Growth Becoming (question 3) QOL - Personal Control (Daily Routines Scale)</p> <p>QOL – Psychological Being (question 1) QOL Growth Becoming (question 2,3)</p>
<p>Job Duties</p> <p>Quality of Work</p>	<p>QOL – Community Belonging (question 2) QOL – Practical Becoming (questions 1, 2) QOL – Growth Becoming (question 1) PI – Question 5</p>

Quantity of Work

PI – Question 6

PI – Question 7

QOL – Community Belonging (question 2)

QOL – Practical Becoming (questions 1,2)

QOL –Growth Becoming (question 1)

PI – Question 5

PI – Question 6

PI – Question 7

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Appendix C: Deductive Analysis Chart

	T1 - Self	T2 - Self	T3 - Self	Key Differences
<b>P1</b>	<b>QUANTITATIVE (Z)</b> Total 78 (33aw), 73 (33ob) Q1: 80, 77, BEH: 43, 75 SD: 411	Total 82.5 (34U), 75 (81.7) Q1: 84, BEH: 60, SD: 85, 33 Q1: 80, BEH: 60, SD: 85, 33 Psychological: 20	Total 85 (34U), 70 (85.0) Q1: 88, 46, BEH: 45, 75, SD: 78, 82 Q1: 84, BEH: 45, 75, SD: 78, 82 Psychological: 20	- increasing social skills - generally abstract
<b>Being Scores</b>	Physical: 50 Psychological: 15 Spiritual: 5	Physical: 50 Psychological: 20 Spiritual: 10	Physical: 50 Psychological: 20 Spiritual: 15	- increasing social skills - increasing social skills
<b>Physical</b>	- diagnosed with low vision - worked in construction - studied library to cut costs	- not my fault, I'm not - use a keyboard - massive of limitations by being blind	- no working to get to work - necessary in medication - good habits + more descriptive - speech concerns	- the tendency in T3 than T1 will bring to us more descriptive to the and provide a big relevance
<b>Psychological</b>	- admitted to need support - wear anxiety - decreased self as caring and good listener - challenge: self advocacy - communication: show feelings (constructive) - self-awareness - intuitive	- diagnosed with mild autism - input not what it looks like - repeated phrases to them - identified self as "friendly, helpful, approach, friendly" to everyone - communication: learning the language - awareness: age of partners	- respect of him or because to conflict in judging their own - <b>composure of self</b> - need to work hard - ship + romantic partner - awareness in learning - "I'm the best, I'm slow"	- diagnosed with autism - changes in social skills - changes in percept - more awareness to personal differences to personal
<b>Spiritual</b>	- intuitive perceived - values and intentions - focus on best of others - life: aware of his struggles	- aware: sense of morality by not smoking - no "what-ifs" - no "what-ifs" - <b>more advice in better ways</b>	- moral right/wrong - legal right/wrong - rules + strong energy - CIC production - CIC: big important	- diagnosed with autism - expanding social skills - expanding social skills
<b>Belonging Scores</b>	Physical: 20 Social: 12 Community: 30 Total: 62	Physical: 50 Social: 8 Community: 30 Total: 88	Physical: 50 Social: 14 Community: 20 Total: 84	- social skills in low - social skills in low
<b>Physical</b>	- dependent to gutters - little neighborhood and quiet - green on buses	- more communication, description - diagnosed autism in middle school - more communication in middle school - more communication in middle school	- diagnosis of neighborhood - changes in social skills - <b>changes in social skills</b> - more communication in middle school	- diagnosed with autism - changes in social skills - changes in social skills
<b>Social</b>	- private therapist in being a partner - aware of manner of family - aware of manner of family - aware of manner of family - aware of manner of family	- diagnosed autism in middle school - diagnosed autism in middle school - diagnosed autism in middle school - diagnosed autism in middle school	- diagnosed with autism - diagnosed with autism - diagnosed with autism - diagnosed with autism	- diagnosed with autism - diagnosed with autism - diagnosed with autism - diagnosed with autism

## Appendix D: Structure Summary Table of the Instrumentation Used

## Quality of Life Instrumentation Package domains, subdomains and items

Domain	Subdomain	Items
Being	Physical	Wellbeing, diet, hygiene and body care
	Psychological	Self-control, self-concept, freedom from anxiety
	Spiritual	Right from wrong, meaning of life, celebrations
Belonging	Physical	Residence, privacy, neighbourhood
	Social	Special partner, family, friends
	Community	Meaningful work, community places, education
Becoming	Practical	Vocational or educational opportunities, chores, caregiving
	Leisure	Socializing, recreational activities, hobbies
	Growth	Learning opportunities, independence skills, changes in life

## JOBS Instrumentation Package subscales and sample item

Subscale	Sample Items
Work-required daily living activities	Attendance, travel, math, reading, money use
Work-required behaviour	Stress tolerance, honesty, work endurance
Job Duties	Quality of work, employee motivation, speed of learning

## Appendix E: Research Ethics Approval



Brock University

Research Ethics Office Tel: 905-688-5550 ext. 3035 Email: reb@brocku.ca

Social Science Research Ethics Board

Certificate of Ethics Clearance for Human Participant Research

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DATE: PRINCIPAL INVESTIGATOR: FILE: TYPE:

October 16, 2015 OWEN, Frances - Child & Youth Studies 10-151 - OWEN Masters Thesis/Project STUDENT: Lisa Whittingham

TITLE:

SUPERVISOR: Frances Owen Case Study of A Business Operated by Persons with Intellectual Disabilities

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ETHICS CLEARANCE GRANTED

Type of Clearance: MODIFICATION Expiry Date: 4/29/2016

The Brock University Social Sciences Research Ethics Board has reviewed the above named research proposal and considers the procedures, as described by the applicant, to conform to the University's ethical standards and the Tri-Council Policy Statement.

Modification: Addition of standardized employment skills and quality of life measures

The Tri-Council Policy Statement requires that ongoing research be monitored by, at a minimum, an annual report. Should your project extend beyond the expiry date, you are required to submit a Renewal form before 4/29/2016. Continued clearance is contingent on timely submission of reports.


To comply with the Tri-Council Policy Statement, you must also submit a final report

upon completion of your project. All report forms can be found on the Research Ethics web page at <http://www.brocku.ca/research/policies-and-forms/research-forms>.

In addition, throughout your research, you must report promptly to the REB:

- . a) Changes increasing the risk to the participant(s) and/or affecting significantly the conduct of the study;
- . b) All adverse and/or unanticipated experiences or events that may have real or potential unfavourable implications for participants;
- . c) New information that may adversely affect the safety of the participants or the conduct of the study;
- . d) Any changes in your source of funding or new funding to a previously unfunded project.

We wish you success with your research. Approved:

  
\_\_\_\_\_ Kimberly Maich, Chair Social  
Sciences Research Ethics Board

Note: Brock University is accountable for the research carried out in its own jurisdiction or under its auspices and may refuse certain research even though the REB has found it ethically acceptable.

If research participants are in the care of a health facility, at a school, or other institution or community organization, it is the responsibility of the Principal Investigator to ensure that the ethical guidelines and clearance of those facilities or institutions are obtained and filed with the REB prior to the initiation of research at that site.

## Appendix F: Permission to Use the Name of Common Ground Co-operative



3A BANIGAN DRIVE • TORONTO • ON • M4H 1G3  
T. 416-421-7117 F. 416-421-7116  
info@commongroundco-op.ca • www.commongroundco-op.ca

July 4, 2017

Re: Lisa Whittingham – Thesis

To Whom It May Concern:

This letter provides Lisa Whittingham with permission to use any of the following names or references in her Thesis and any publication resulting from her Thesis in the future.

“Common Ground Co-operative, Inc.”, “Common Ground Co-operative”, “Common Ground” or “CGC”.

Please contact me at 416-421-7117 Ext. 201 if required.

Thank you,

A handwritten signature in black ink, appearing to read "J Hope", with a long, sweeping horizontal line extending to the right.

Jennifer Hope  
Executive Director  
Common Ground Co-operative, Inc.  
E. jenny@commongroundco-op.ca  
www.commongroundco-op.ca

**Empowering adults with developmental disabilities to lead meaningful, fulfilling lives**

Charitable Registration No. 884016411RR0001