Skills for the 21ˢᵗ Century: A Meta-Synthesis of Soft-Skills and Achievement

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Abstract

Higher education can be both memorable and a vital pathway to the workforce. However, entering post-secondary life with the cognitive ability to handle the academic rigor is often not enough to succeed and persist in an environment that requires students to also possess soft-skills such as resilience, adaptability, perseverance, self-advocacy, and self-regulation (Adams, 2012; Cunha & Heckman, 2007; Egalite, Mills, & Greene, 2016). Therefore, this meta-synthesis sought to gain a better understanding of soft-skills deficits in adult learners by synthesizing current Canadian studies on the topic. It was found that interventions in higher education that resulted in soft-skills acquisition among learners were commonly geared toward graduate students and tied to social interactions among community agencies, faculty members, and peer groups. Thus, further research is discussed around examining the reciprocal effects of peer-mentoring on the soft-skills development of first-year undergraduate students, as well as the long-term impact this approach might have on student retention, achievement, and success beyond higher education.

Keywords: higher education; soft-skills; non-cognitive skills; student success; student retention; workforce; job-ready; achievement

The idea that students who enter higher education have equipped themselves with the necessary tools to navigate all intricacies of post-secondary life is a misconception in need of addressing (Savitz-Romer & Bouffard, 2014). Students who gain admission into college or university have undoubtedly done so by working hard. However, their ability to remain in school, persist to graduation, and flourish during their time there, is a challenge facing many learners, as well as post-secondary institutions in terms of facilitating such an experience. On average, 20-25% of students in Canadian higher education withdraw from their studies in their first year, while about 60% of those who begin a program complete their credential (Grayson & Grayson, 2003). Student attrition rates drop slightly lower when students who transfer to another program or institution are excluded from the calculation of attrition rates. For that reason, statistical data stemming from a longitudinal study out of Atlantic Canada suggested that a more accurate calculation of post-secondary student attrition to be around 15.1% for university students, and 22.6% for college students after the first year of study (Finnie & Qiu, 2009).

It is important to note that this data is reflective of only institutions within Atlantic Canada and did not take into account students who transfer to institutions outside of the region, only within. Furthermore, the data were limited to learners between the ages of 17-20 years old, thereby excluding attrition data of older learners, a population who are often prone to early departure from their studies (Polinsky, 2003). Even at slightly lower rates, attrition numbers in the Canadian higher education system still remain at significant levels, with equally significant implications. Students who withdraw early from their studies miss out on the type of personal development uniquely gained from the post-secondary experience. These students also forfeit time, money, and the potential for greater employment opportunities often facilitated by a post-secondary education (Drea, 2004; Grayson & Grayson, 2003; Lee, 2017; Stelnicki, Nordstokke, & Saklofske, 2015). From an institutional perspective, student attrition results in a loss of tuition revenues, potential government

funding, and can have an overall negative impact on the local and global economies (Drea, 2004; Grayson & Grayson, 2003; Lee, 2017). What may be contributing to these alarming attrition numbers is an assumption that students who gain admission into college or university are somehow equipped with both the cognitive and non-cognitive skills and abilities required to achieve academic and social successes. Nevertheless, even the most brilliant minds that enter post-secondary life can find hardship in their journey when confronted with an unfamiliar learning environment, a new social structure, unknown school policies, processes, and services, as well as when faced with greater independence (Stelnicki et al., 2015). This is especially true when lacking the necessary skill set to be able to cope with the stressors of school, to effectively work and communicate with others, to seek out relevant information, to problem solve, or to exhibit the necessary motivation to persevere past obstacles. Entering higher education with a deficiency in these skills could be the underlying reason why despite a growth in student retention strategies (Berger, Ramirez, & Lyons, 2012), student attrition rates have remained stagnant in North America for the past three decades (Fisher & Engemann, 2009). Current day retention programs designed to combat student attrition may prove to be less effective if built around the premise that students have both the cognitive and non-cognitive

skills to engage effectively with the social and academic resources designed for their success and retention (Savitz-Romer & Bouffard, 2014).

Entering higher education with the cognitive ability to handle the academic rigor is often not enough to succeed and persist in an environment that requires students to also possess non-cognitive skills such as resilience, optimism, adaptability, conscientiousness, motivation, perseverance, reliability, self-advocacy, and self-regulation (Adams, 2012; Cunha & Heckman, 2007; Egalite et al., 2016). These skills, also commonly referred to in the literature as *soft-skills, 21st century skills, or life skills,* will be used interchangeably throughout this article, and are said to not only impact personal development and academic success; but are also considered to be key factors for career and life advancements (Brunello & Schlotter, 2011; Cunha & Heckman, 2007; Heckman & Kautz, 2012; Padhi, 2014).

Non-cognitive skills are considered to be relational, involving both personal and interpersonal skills (Carblis, 2008). They are skills associated with "behaviors, attitudes, and strategies" (Egalite et al., 2016, p. 28), which typically display core competencies rooted in emotional intelligence (Carblis, 2008; National Soft Skills Association, 2015). *Emotional intelligence,* a term coined by Salovey and Mayer (1990), centres on having the ability to self-identify and regulate one's own emotions

in addition to interpreting and responding accordingly to the emotions of other people (Chan, Petrisor, & Bhandari, 2014; Martinez, 2010; National Soft Skills Association, 2015). A person with high emotional intelligence is not only self-aware and able to control their own feelings, but is also able to pick up on surrounding social cues and react in an appropriate manner. On the other hand, possessing an apt level of non-cognitive skills allows one to react or conduct one's self in an emotionally intelligent manner. Therefore, in addition to potential educational benefits, non-cognitive skills can be vital for global citizenry, workforce adaptability, and personal development. For example, fostering non-cognitive skills has become a recognized component for developing Canada's knowledge-based economy in an increasingly global labour market. A labour market that requires individuals to occupy skills that will enable them to continually learn and grow in their roles, to think critically, and to communicate effectively in ways that are socially acceptable (Borwein, 2014; Lennon, 2010). According to Stuckey and Munro (2013), lacking suitable skills to meet employer needs, or mismatches in skills where the abilities of staff members are not fully utilized is estimated to cost the province of Ontario "up to $24.3 billion in forgone GDP and $3.7 billion in provincial tax revenues annually" (p. i).

While soft-skills can encompass many different traits, and are therefore difficult to

measure, employers from around the world have shared their concerns about soft-skills deficits among post-secondary graduates attempting to enter the workforce (Chamorro-Premuzic, Arteche, Bremner, Greven, & Furnham, 2010; Kember, Leung & Ma, 2007; Peel Halton Workforce Development Group, 2015). Learners seemingly progress through elementary, secondary, and post-secondary studies without garnering the soft-skills necessary for workforce readiness and career advancements. Nevertheless, the Canadian government has acknowledged the dire need to address the skills gap through a newly released proposal by the Advisory Council on Economic Growth titled, *Building A Highly Skilled and Resilient Canadian Workforce Through The FutureSkills Lab* (2017). The proposal calls for the creation of a non-governmental organization called the Future-Skills Lab to mobilize and work with various stakeholders (some of which would include government bodies, employers, labour unions, educational institutions, researchers, and more) to provide financial support for pilot projects aimed at bridging the skills gap (this includes soft-skills), while also working to disseminate project outcomes to inform best practices (Advisory Council on Economic Growth, 2017). The hope is to build a strong and cohesive strategy aimed at propelling Canadians toward skill competencies required for the 21st century. This calculated effort illustrates that the attainment of non-cognitive skills is by no means a simplistic process.

Literature has pointed to the formation of non-cognitive abilities occurring as early as in utero and throughout the early to adolescent years of life when the areas of the human brain that control emotions are considered to be the most absorptive and malleable (Cunha & Heckman, 2007; Goleman, 2005). A person's genetic make-up, early environmental experiences, and to a large extent, their parental influences, are said to be key factors in the growth of emotional intelligence, and, by extension, non-cognitive skills (Blau & Currie, 2006; Cunha & Heckman, 2007; Goleman, 2005). Although literature has pointed to the development of non-cognitive skills or traits as being less likely to occur in adulthood (Almlund, Duckworth, Heckman, & Kautz, 2011; Cunha & Heckman, 2007), studies also suggest that personality traits have the capacity of being transformed throughout a person's lifecycle (Roberts & Mroczek, 2008; Roberts, Walton, & Viechtbauer, 2006; Specht, Egloff, & Schmukle, 2011). However, little is known about soft-skills interventions at the adult stage of life and its effects on student success, retention, and personal development, especially in the Canadian context of higher education. Thus, the following study sought to investigate, collect, and interpret Canadian literature that intentionally or unintentionally brokered the topic of adult soft-skills and achievement at the post-secondary level

and beyond. Data gathered in this study were used to gain a better understanding of soft-skills deficits in adult learners and the impact fostering these skills might have on personal and societal advancements. One research question guided the framework for this study: *How do soft-skills impact Canadian post-secondary learners?*

Methodology

Instrumentation

A meta-synthesis methodology was employed to take stock of the current body of knowledge available on the topic of soft-skills and education in the Canadian post-secondary context. This method was used to gather current and relevant literature, and also to integrate the findings so that a fuller, more holistic interpretation of the data would surface (Finfgeld, 2003). A collective analysis of data, rather than an analysis based off of singular findings was deemed to be the most effective method for understanding the phenomenon (Finfgeld, 2003).

Research Procedure

Research was conducted over the span of four months through which data were gathered by scouring journal databases, online search engines (Google Scholar, general Internet searches), and through article reference lists to locate any current studies on the topic. The databases searched included ERIC (EBS-

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CO), ProQuest: CBCA Complete – including its subsets Canadian Business & Current Affairs (CBCA), and ProQuest: CBCA Complete: Social Sciences. Advanced searches were performed using search filters and a variety of keywords, keyword combinations, and Boolean operators. Keywords searched included: *life skills*, *soft-skills*, *non-cognitive skills*, *21st century skills*, *higher education*, *post-secondary*, *college*, *university*, *student success*, *workforce*, *job-ready*, *emotional intelligence*, *social intelligence*, and *achievement*.

Selection criterion. Selection criteria further narrowed search results to include only peer-reviewed journal articles that were of Canadian content and published within the past seven years. Therefore, only publications from January 1, 2010 and onward were identified. In total, results rendered 756 articles, which were reviewed for appropriate relevancy to the study topic at hand through a three-tiered screening process.

Screening process. During the initial screening 681 articles were eliminated based on the title of the article, article duplication, a scan of the abstract, clear evidence that the article was not of Canadian content, or that the article was not considered a research study. In total, 75 articles proceeded through secondary screening. In the second screening, abstracts for all 75 articles were reread and articles scanned for content.

Any articles that mentioned any derivative of non-cognitive skills, adult learning, development, and/or schooling, remained and proceeded to the third and final screening process. It was determined at this stage that criteria needed to be updated to include only articles published within the last five years in order to ensure the research content remained current and relevant. In the final screening, all articles were read in their entirety. Articles not meeting the aforementioned screening criteria were eliminated, while the remaining became apart of this study. Additional articles were vetted throughout the screening processes as a result of article reference list checks. In total, 12 articles became a part of this meta-synthesis of literature (Figure 1).

Data Analysis

All articles included in this study were summarized, coded for themes and analyzed to determine the scope, similarities, differences, and shared findings (Creswell, 2012). Coding and the categorization of themes were done as a manual process. Each article was read in full at least three times. After the first reading a general sense of the articles, the key findings, and the main points surrounding soft-skills and learners were captured. Noted at this stage were general notions of soft-skills, the types of soft-skills interventions used, the reason for these interventions, the effected learner population or participant group studied, and the varied ef-

fects of soft-skills. Articles were again reviewed and a variety of words and phrases were extracted and coded using alphanumeric notations. The alphanumeric codes consisted of a number to note similar words or phrases combined with letters. The first three letters of the first author's surname were used to note which article the word or phrase came from. The coded words and phrases were ultimately segmented into broad categories that included *method or methodology*, *participant type*, *soft-skills impact*, and *other*. The *other* category included any words or phrases that fell outside of the core categories, but appeared to be significant to the article. Categories were sub-divided into themes by analyzing the frequency of reoccurring concepts among the articles.

After a third reading of the articles, short summaries of key findings for each article were written to help locate, connect, and highlight the emergent patterns, similarities and differences among the articles. Any additional connections found in the data were grouped together with notations made for reoccurring themes. Notations were also made for any variances found among the studies and interpretations of the data were reported as part of this meta-synthesis (Creswell, 2012).

Results and Discussion

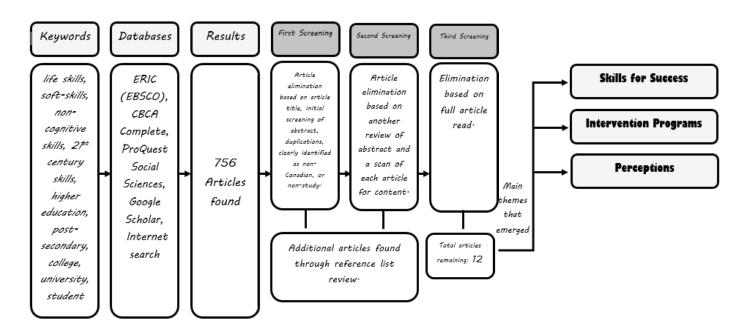The articles reviewed in this meta-synthesis covered a broad range of topics related

Figure 1. The screening process. This figure illustrates the screening process employed to retrieve data for the meta-synthesis.

to soft-skills with only one that held any specificity toward the perceived relational aspects of soft-skills and achievement among undergraduate learners (Stelnicki et al., 2015). However, all articles included in this meta-synthesis contributed to a rich understanding of emotional intelligence and soft-skills as being pivotal elements in a variety of contexts and environments. The data gathered and included in this meta-synthesis told a story of how emotional intelligence and soft-skills interconnected in multiple ways in everyday life. This held true whether through school, professional, social, or personal aspects of life.

Skills for Success

Possessing the appropriate skills for academic and professional success was determined to be the underlying driver for many of the studies reviewed. In two studies of medical residents, the importance of possessing emotional intelligence, and, by extension, an ability to work and communicate well with others, was seen as an invaluable social trait needed to foster healthy doctor-patient relationships in a profession that continues to cross medical disciplines and grow in complexity (Chan et al., 2014; McLeod & Sonnenberg, 2016). Chan et al. (2014) used the Mayer-Salovey-Caruso Emotional Intelligence Test to measure the emotional intelligence of 39 orthopedic surgery residents. Their findings indicated that only four of the 39 medical residents who participated in the study displayed what was deemed to be a competent level of emotional intelligence. As a result, it was posited by Chan et al. (2014) that educational interventions needed to be considered in order to garner non-cognitive competencies among medical residents; specifi-cally, "communication, teamwork and professionalism" (p. 92).

Further building on the idea of educational intervention for medical residents to foster non-cognitive skills was the McLeod and Sonnenberg (2016) study. Similar to Chan et al. (2014), a cross-sectional survey was used to measure levels of emotional intelligence. However, in the McLeod and Sonnenberg (2016) study, the results of 35 Canadian pediatric residents were sought. The findings highlighted that varied levels of emotional intelligence existed among study participants, which led McLeod and Sonnenberg (2016) to suggest that individual variability in emotional intelligence be accounted for when designing intervention programs.

Intervention Programs

There were four studies found which discussed an inter-

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vention program through the use of a workshop or a course designed for either the explicit purpose of teaching soft-skills, or for which non-cognitive attributes were acquired as a by-product. From these studies it was determined that an individual's variability in emotional intelligence was often not the focus of the intervention. Nevertheless, studies conducted by Levkoe, Brail, and Daniere (2014), as well as Lund and Lee (2015) who purposefully integrated self-reflection in their pedagogy, were deemed to have come the closest to accounting for individual differences.

Courses. Levkoe et al. (2014) used a case study methodology to review a Service-Learning course for university graduate students called Planning for Change: Community Development in Practice. S*ervice-learning* is a pedagogical approach which seeks to merge "what appear to be separate realms of theory and practice by providing the opportunity to connect academic work and community development work" (Levkoe et al., 2014, p. 69). Over a period of eight months, the Planning for Change service-learning course examined by Levkoe et al. (2014), had students engage in a variety of activities that included: seminars with their faculty members and peers, reflections, self-evaluations, and outreach to community organizations for placement opportunities. Results showed learner outcomes to include a variety of non-cognitive attributes such as: improved communication, interpersonal,

teamwork, and self-regulation skills (Levkoe et al., 2014). Levkoe et al. (2014) concluded that these critical employability skills were developed by participants as a result of the professional interactions they made in their community placements; a result of experiential learning.

Lund and Lee (2015) also used the service-learning approach to report findings from ten pre-service teachers who went through a program aimed at fostering a deeper understanding of diversity in the classroom in order to achieve cultural humility. Lund and Lee (2015) described cultural humility as a lifelong process that is reflective in nature and which aims to build greater understanding and empathy. The study could be considered quite important to the research of soft-skills deficits in post-secondary learners, as it aimed to address a fundamental trait of emotional intelligence by seeking to look beyond one's self in order to understand others. Study participants experienced placements in communities where they were able to engage with children and youth from predominantly immigrant-families. Although some participants of the study identified with marginalized groups, the pre and post interviews conducted with the pre-service teacher-participants over a span of 10 weeks, highlighted that many still held assumptions, misconceptions, and limited understandings about other cultures (Lund & Lee, 2015).

The Lund and Lee (2015) study aimed to counter the

deficit-model thinking; a view that approaches the values of non-dominate groups as somehow lacking (Maitra, 2015). Combating the deficit-model way of thinking was attempted through lessons learned from classroom readings, experiences in the community with children from diverse groups, and through reflective assignments. The reflective exercises and self-evaluations in both the Levkoe et al. (2014) and Lund and Lee (2015) studies seemed to have personalized the learning for study participants by accounting for their unique life experiences, which in turn, seemingly came the closest to accounting for different levels of emotional intelligence and soft-skills. These two studies also took a collaborative approach by creating a course that sought community partnerships. This type of shared approach between the community and the academic domains speaks to Porter and Phelps (2014) assertions that *integrative learning* allows for a more holistic method of skills development. It creates opportunities for learners to "make connections across time and between domains of knowledge, skills, and contexts" (Porter & Phelps, 2014, p. 58). This was said to expand both skill competencies among learners and career possibilities upon graduation (Porter & Phelps, 2014).

Porter and Phelps (2014) did not test or implement a skill development intervention; instead they suggested modifications to the ways in which skills are attained by students

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at the post-secondary level by examining the success of two graduate students who integrated industry and academic scholarship in their individual journeys toward attaining a PhD. The purpose was to address the growing number of PhD graduates seeking employment outside of academia, whether by choice or not (Porter & Phelps, 2014). Porter and Phelps (2014) argued that transferable skills learned from connecting professional experiences with academic work, better-equipped PhD graduates for the ever-evolving multi-disciplinary workforce of the 21ˢᵗ century. They recommended a formation of institutional partnerships with various industries to provide alternate forms of student mentorship outside of faculty members; the rationale being that this would translate into support for students considering pathways outside of academia (Porter & Phelps, 2014).

The aspects of community partnerships in the *integrated learning* model discussed by Porter and Phelps (2014) provided some comparability to the two *service-learning* model examples discussed in the Levkoe et al. (2014) and the Lund and Lee (2015) studies. Therefore, it is important to acknowledge the concerns noted in these two service-learning examples. Levkoe et al. (2014) and Lund and Lee (2015) recognized service-learning courses as being a huge undertaking to implement due to the required resources. This included dedicated faculty time outside of the classroom to coordinate part-

nerships and initiatives, as well as institutional buy-in for sustainability. However, an alternative found to be used among institutions was workshops. Workshops were found to often be shorter in duration, self-contained within the institution, and capable of rendering skills development. Two examples of workshop interventions are discussed below.

Workshops. The first workshop example examined the attitudes of 24 graduate students at a large-sized Canadian university. The participants in the study enrolled in one of two 20-hour Teaching Assistant workshops that were designed to equip future teachers with the appropriate communication skills for a global workforce (Dimitrov, Dawson, Olsen, & Meadows, 2014). Both workshops, namely, the *Teaching Assistant Training Program* (TATP) and the *Teaching in the Canadian Classroom* program (TCC), were infused with an intercultural teaching component. The TATP included "a two-hour video case study on teaching in the intercultural classroom" (Dimitrov et al., 2014, p. 92), while the TCC included the same video case study, but also examined "cultural differences in communication styles, feedback styles, and expectations for teacher and student behavior throughout the workshop" (Dimitrov, et al., 2014, p. 92). The researchers conducted qualitative interviews of the graduate students to understand the impact of teacher development programs that integrate intercultural communication

strategies. Although some of the questions raised in the interviews allowed for study participants to reflect on the workshop content, the questions did not appear to account for the same depth of reflection as cited in the Levkoe et al. (2014) and Lund and Lee (2015) studies.

However, results showed that graduate students who participated in the workshops were still able to gain a greater sense of awareness of their own cultural identities and assumptions. By extension, participants were able to recognize and appreciate the way in which various learners in the classrooms they taught participated in class, approached feedback, or sought help. Participants of the Dimitrov et al. (2014) study cited becoming more aware of non-verbal communications and were better equipped at brokering an appropriate use of high-context communication in the classroom, or when more detail was required to ensure a shared understanding among students with low-context communication. The skills learned were considered transferable beyond the teaching realm, resulted in a belief of greater intercultural respect, and benefited the overall interpersonal and facilitation skills of participants (Dimitrov et al., 2014).

Online workshop. The second workshop example was the only study that addressed soft-skills deficits among online post-secondary learners. The study focused on professional skills development, with the

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acknowledgment that this largely encompassed a variety of soft-skills. The study, conducted by Gauvreau, Hurst, Cleveland-Innes and Hawranik (2016) focused on graduate students who were pursuing their studies using an asynchronous online format. These learners were said to lack opportunities to hone their professional skills since Teaching Assistant positions, public speaking, and other face-to-face interactions were not normally accessible to the online learner (Gauvreau et al., 2016). The study implemented three synchronous online workshops, each designed with a purposeful goal. The first workshop promoted peer collaboration and a variety of exercises to foster "an understanding of the role critical thinking plays in both academic and workplace writing" (Gauvreau et al., 2016, p. 94). The second focused on goal-setting and particular traits seen as necessary for workplace successes such as interpersonal and networking skills, while the third workshop explored coping strategies for personal success (Gauvreau et al., 2016). Although 61 graduate students partook in the study, only ten participated in the study's focus group that resulted in two emergent themes. Firstly, it was found that synchronous workshops fostered social connections, a communal sense of belonging, camaraderie among the students, and a feeling of less isolation (Gauvreau et al., 2016). Secondly, it was found that not only did participants benefit from the development

of soft and professional skills, but there was also a realization amongst the participants as to the importance of these skills beyond the academic setting (Gauvreau et al., 2016). Social interactions, in this case online workshops where participants could engage with faculty members and peers in a synchronous fashion, were the necessary components for skill development. Furthermore, social interaction, whether with the community, with faculty members, or fellow peers, was found to be an essential ingredient in all four interventions mentioned. Yet, it is important to note that all four interventions found in the search of literature targeted graduate students, some of whom were enrolled in a teacher education field of study or sought the opportunity to be a teaching assistant. Therefore, the learning outcomes as well as the perceptions from the participants in all four interventions, although positive, might be resultant from their similarities as graduate students, or in the type of program they had chosen to pursue. Table 1 takes stock of these key similarities and differences among the four interventions.

Nevertheless, Porter and Phelps (2014) argued against using workshops or courses for professional development or to teach generic skills, citing that there is scarcity in the available research on actual measured gains of such interventions. Porter and Phelps (2014) pointed out that most interventions are only evaluated based on the perceptions of the participants

engaged in the intervention. This arguably could produce an initial false-positive in success since it is measured on an initial feeling that is exclusive of any long-term effects that interventions might have on personal development, success, or actual skills retained. Likewise, it does not account for the effects on those who interact with a person who perceives that they have gained non-cognitive skills from a course or workshop. Although participants in the Dimitrov et al. (2014) study perceived a greater awareness of how their students negotiated their classroom environment, it would be interesting to know whether the students held similar beliefs about their skills gain as those held by their instructors. Equally as fascinating would be an understanding of the ripple effects of such interventions, such as, whether reciprocity of non-cognitive skills development occurs.

Therefore, although the next study falls outside of the post-secondary sector, it has been included as it further examines soft-skills interventions. Moreover, it speaks to soft-skills education at the adult level and provides insight into possible issues with the curricula of interventions and the manner in which they are developed and executed. It also provides a perspective from outside the realm of higher education, as it is not tied to any internal post-secondary curriculum, but rather is considered as a separate soft-skills training specifically for the purpose of future employability.

Table 1

Skill Development Interventions

Name of Study	Targeted Graduate Students	Teacher Education Program / TA Development Program	Used Critical Reflection	Course	Workshop
Dimitrov, N., Dawson, D. L., Olsen, K. C., & Meadows, K. N. (2014). Developing the intercultural competence of graduate students. *Canadian Journal of Higher Education, 44*(3), 86-103.	✓	✓			✓
Gauvreau, S., Hurst, D., Cleveland-Innes, M., & Hawranik, P. (2016). Online professional skills workshops: Perspectives from distance education graduate students. *International Review of Research in Open and Distributed Learning, 17*(5), 91-108.	✓				✓
Levkoe, C. Z., Brail, S., & Daniere, A. (2014). Engaged pedagogy and transformative learning in graduate education: A service-learning case study. *Canadian Journal of Higher Education, 44*(3), 68-85.	✓		✓	✓	
Lund, D. E., & Lee, L. (2015). Fostering cultural humility among pre-service teachers: Connecting with children and youth of immigrant families through service-learning. *Canadian Journal of Education, 38*(2), 1-30.	✓	✓	✓	✓	
Totals	4	2	2	2	2

Workshop Perceptions

Similar to the Lund and Lee (2015) study that sought to combat deficit-model thinking, the deficit-model thinking was also broached in the Maitra (2015) study. Maitra (2015) suggested that "soft-skill training programs in Canada" are often used as a means to conform racialized immigrants by devalu-ing skills carried over from their originating country (p. 65). The learners in these programs are assumed to possess "education, values, and cultures" that are considered to be lesser than the dominant "Canadian standard" (Maitra, 2015, p. 65). The study examined the experiences of 25 South Asian immigrant women who attended soft-skills training workshops in hopes of increasing their chances of employment in the Canadian workforce (Maitra, 2015). All of the women inter-viewed in the study were said to be highly educated, many with substantive professional experi-ences; however, they sought soft-skills training as their non-Cana-dian experiences and education were not easily recognized in the Canadian workforce (Maitra, 2015; Reitz, Curtis, & Elrick,

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2014). Although participants perceived some aspects of gain from the soft-skills workshops, Maitra (2015) highlighted characteristics of the soft-skills training that spoke to a goal of conformity or that could be considered demeaning in nature. For example, Maitra (2015) noted examples of participants who were advised by their soft-skills instructors to "changed their names on the résumé to appear more Canadian" (p. 71), or to lose their accents. Some participants were instructed to brush their teeth or chew gum before a job interview as their instructors deemed this as acting with professionalism (Maitra, 2015). One participant commented on the comical nature of being instructed to chew gum before a job interview and further noted that such directive lacked necessity. These examples further highlighted the rationale asserted by Lund and Lee (2015) concerning the need to develop cultural humility.

Understanding others and recognizing one's own misconceptions of culture have been shown to be vital to learning experiences, as well as in one's ability to decipher between appropriate and inappropriate course content. This is especially true for instructors of soft-skills content, as content relates both directly and indirectly to their emotional intelligence; being self-aware, understanding their learners and responding in an appropriate manner. Maitra (2015) called for a more inclusive pedagogy in soft-skills training that fosters critical reflection and comprehensive discussions among stakeholders. This fortifies studies (Levkoe et al., 2014; Lund & Lee, 2015), which integrated critical reflection as a component of soft-skills curriculum. Alongside the Maitra (2015) study, there were two other studies that discussed immigrant soft-skills acquisition for the purpose of employment in the Canadian workforce.

Employer Perceptions

Skill utilization. Looking beyond soft-skills training and understanding how employers perceive soft-skills preparation among immigrant workers was important to address. This is especially true since analysis of census data from the 1996, 2001, and 2006 periods have shown individuals immigrating to Canada to be increasingly educated, yet their skills increasing underutilized in the Canadian workforce (Reitz et al., 2014). In fact, Reitz et al. (2014) found immigrants in the 2006 cohort to be between two and a half and three-times more likely to possess a university degree than the Canadian-born population. According to Reitz et al. (2014), immigrants are paid less than their Canadian-born counterparts even when they occupy "similar qualifications, are at similar ages, live in the same cities, have similar language knowledge, have similar racial backgrounds, and even work in the same occupational levels" (p. 17). Reitz et al. (2014) discussed social characteristics in their study, including racial and cultural differences as contributors to obstacles faced by immigrants seeking equity within the Canadian workforce (Reitz et al., 2014). An example was given of a Human Rights case in 1997 with Health Canada that showed the qualifications of ethnic minorities to be undervalued (Reitz et al., 2014). It was revealed that workplace promotions amongst this group were being stifled due to an unfounded notion that these workers possessed the technical skills, but were perceived to lack the soft-skills needed to communicate effectively or to make managerial-type decisions (Reitz et al., 2014).

Elrick (2015) further discussed employer perceptions in a study that examined the hiring practices of Information and Communication Technology (ICT) companies in the Greater Toronto Area of Ontario, Canada, and the effects on immigrant skill utilization. A case study methodology was employed through which 20 firms were profiled by gathering data from interviews with staff members responsible for the hiring within the company. Half of the companies interviewed said that if a candidate lacked soft-skills it would not be critical to their decision to hire, while four of the companies interviewed cited "analytical thinking and abstract problem solving" (Elrick, 2015, p. 809) as being essential skills needed for current and future work adaptability and employability. Key from Elrick's (2015) study was the mention of *habitus*, described as the product of a person's

unique traits, knowledge, and social environment. Whereas one's credentials and previous work experience does not necessarily equate to a successful hiring process, but holding a desirable personality trait that resonates with the employer could warrant greater odds of employment success (Elrick, 2015). Elrick (2015) found companies that rely on a cultural fit in their hiring practices had "the lowest ratio of immigrant employees (0-20%)" (p. 810). In the same vein, 25% of the companies interviewed in the study defined 'cultural fit' to mean mutual habitus (Elrick, 2015). This was hypothesized to put immigrants at a disadvantage since habitus is noted as being largely shared with others within the same geographical proximity (Elrick, 2015). Nevertheless, the study found that hiring practices generally differed from firm-to-firm, with some firms looking for candidates who graduated from particular institutions, and others who were more focused on finding candidates who tested well in varied technical and soft-skills, such as the ability to critically solve problems (Elrick, 2015). Since this study focused on one sector of the workforce, conclusions could not be drawn as to the hiring practices of different industries that may or may not value soft-skills more.

Learner Perceptions

In the context of understanding soft-skills and success among post-secondary learners, it was deemed important to address studies that approached the topic from the learner's perspective. One study was found which sought direct feedback from students about the attributes they felt made them successful or not, while another addressed possible sources that could influence attitudinal changes among learners.

In a study of undergraduate students between the years 2009 and 2011, students were asked to provide five words (or short phrases) that described themselves in attaining their goals, and five words that described what would prevent them from accomplishing their goals (Stelnicki, et al., 2015). It was found that students considered attributes such as "determination, focus, and drive," as well as being a hard-worker to be among the most cited words perceived as factors for success (Stelnicki et al., 2015, p. 222). Associated with lack of success included highly cited words such as stress, procrastination, and distractions (Stelnicki et al., 2015).

Nevertheless, Christofides, Hoy, Milla and Stengos (2015) concluded that these types of student attitudes could positively (or negatively) be influenced. Christofides et al. (2015) examined the effect of parental expectations and peer groups on student grades and aspirations (this included aspirations to attend and complete university). Regression analysis was used to analyze data from The Youth in Transition Survey – Cohort A, a longitudinal survey that captured the responses of learners aged 15-23 (Christofides et al., 2015). Christofides et al. (2015) contended that having strong aspirations during high school toward a post-secondary education not only acts as a motivator in achieving higher grades, but conversely, achieving higher grades can affect one's aspirations. They further strengthened the link between parental expectations and their child's decision to attend university, noting that the effect differed between male and female students and changed through the ages. For example, it was found that after graduating high school, females continued to be affected by their parents; however, some were shown to have peer effects at the age of 23. Yet, since the ages of the Christofides et al. (2015) study were limited to a maximum age of 23, understanding the possibility of attitudinal shifts in older students (through peers) is an area in need of further exploration.

It is important to acknowledge the limitations of this study as articles included in this meta-synthesis were bounded by a Canadian-only context, and ranged only from years 2014 to 2016. This meant that historical studies on the topic were not captured in this research. Nonetheless, this meta-synthesis of literature has highlighted the scarcity of current studies that address adult soft-skills acquisition, particularly among Canadian undergraduate learners.

Conclusions

Higher education can be seen as a place where students' shape their critical-thinking

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skills, as well as their ability to reason and collaborate with others; however, entering into an arena in which these skills are foundational for success could also be viewed as a barrier to persistence if not already developed. Studies spoke to the importance and variability of emotional intelligence among individuals, with one suggesting that educational interventions consider these differences. Although interventions that incorporated reflective components were found to have come the closest to accounting for individual differences, the assessment of these interventions were largely based on participant feedback, and not on actual soft-skill measurements or on the perceptions of others who have interacted directly with participants who perceived a gain in skills. Furthermore, all interventions found as a result of this meta-synthesis targeted graduate students, which is notably a population most likely to have already proven some degree of post-secondary success by making it through their undergraduate pursuits. Importance should also be placed on addressing the undergraduate population, specifically those transitioning into post-secondary life, since they have already been shown to be at the highest risk for early departure from their studies (Finnie & Qiu, 2009; Grayson & Grayson, 2003).

A reoccurring theme in the discussion of skills development was social interaction, whether between community agencies, faculty members, or peers. Yet,

while studies like Gauvreau et al. (2016) found social interactions with faculty members and peers (even though online) to be effective in fostering skills development, it is not specifically known if development was a result of faculty influence, peer-to-peer interactions, a combination of the two, or otherwise. While Christofide et al. (2015) brought to light the influence that peer groups have on aspiration, still missing are the pieces that address the reciprocal effects of peer-mentoring approaches on soft-skills development for first-year undergraduate students, and the impact these mentoring approaches might have on student retention, achievement, and success beyond higher education. Therefore, it is suggested that this be addressed through further research aimed at understanding soft-skills development (with peer-mentoring as its foci) at the early stages of one's undergraduate journey. Understanding the impact of such approaches could prove positive in leveraging existing institutional resources, and critical to ensuring that Canada's knowledge-based economy is developing the necessary skill-set to thrive in the 21st century's increasingly global labour market.

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