



Career counselling university students with learning disabilities

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ABSTRACT

One of the central missions of career counselling in higher education is to promote diversity, making the helping process more accessible and effective for students with special needs. With this goal in mind, some key issues pertaining to the career development needs and challenges of young university students with learning disabilities (LDs) are addressed in this article. The focus in the article is on the major psychological dynamics of the target group, linking LDs to the life-career experiences of these students in light of career maturity and career self-efficacy. Career counselling implications for this group are proposed, considering the role of the career counselling professionals in promoting social justice and supporting those with particular barriers.

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Introduction

It is estimated that about 12% or 3.6 million adults in Canada are affected by some form of a learning disability (LD) (Canadian Council on Learning, 2007; Learning Disabilities Association of Canada, 2002). According to the 2012 Canadian Survey on Disability, 14% or 3.8 million individuals aged 15 years or older in Canada reported having a disability (Statistics Canada, 2015). Given this significant figure, it is no surprise that over the past decade, there has been a steady and substantial rise in the number of students with learning disabilities (LDs) attending university, resulting in over 13,000 LD students being currently enrolled in the province of Ontario – the largest province in Canada (Harrison & MacKay, 2006). Between 2013 and 2014, 19% of Ontario college students reported having a physical, intellectual, mental health or learning disability (Colleges Ontario, 2014). With an increasing number of students being diagnosed with LDs, it is important to consider how to facilitate their access to higher education and how to support their success. This trend is likely to continue, with the Rae report on higher education recommending further outreach to students with disabilities and further funding for improved academic and career counselling (McCloy & DeClou, 2013; Rae, 2005). Notwithstanding this trend, university students with LDs may continue to face career-related difficulties as compared to their peers without LDs (Alston et al., 2002; Harrison et al., 2007). A recent Canadian research report indicates that persons with LDs have a greater likelihood of unemployment and underemployment than non-LD persons. Young Canadians aged 15–21 years living with an LD (compared to non-LD peers) are less likely to be working or looking for work (Lindstrom et al., 2013). Young Canadians aged 22–29 years living with an LD (compared to non-LD peers) are less likely to find employment,

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and those who are working earn less than persons without an LD (Learning Disabilities Association of Canada, 2005).

One of the central missions of career counselling in higher education in the twenty-first century from a global perspective is to promote equality, diversity, and social justice. Thus, making career services more accessible, facilitative, and effective for the often underserved, less privileged, and “invisible” groups with special needs so as to promote a more democratic, inclusive, and diversity-sensitive career counselling participation on campus (Couzens et al., 2015; Irving & Malik, 2005; McCloy & DeClou, 2013). This coincides with the need to and challenges in making the existing mainstream career theories and practice relevant to the issues and problems of diverse populations (McMahon & Patton, 2002), advocating transformation and validation of career counselling in the lives of students with special needs, including those with LDs. Yet, the career literature on the topic of disability focuses mainly on persons with physical disabilities while paying little attention to those with learning disabilities (Niles & Harris-Bowlsbey, 2009).

The purpose of this article is to address some key issues pertaining to the particular career development needs and challenges of young university students (i.e. between the age of 18 and 28) with LDs. First, LD-related psychological dynamics, linking them to the life-career experiences of students with LDs are reviewed. Next, attention is drawn to two broad constructs, namely, career maturity (Super, 1974, 1990) and career self-efficacy (Betz, 2004; Lent & Brown, 2008), in explaining and understanding the unique career needs of these students. Finally, implications for career counselling LD students are proposed. While there is a primary focus on Canadian literature, the implications for career counselling are relevant beyond this context.

The terms “LD student(s)”, “student(s) with LDs”, “student(s)”, “client(s)”, and “student client(s)” in this article all refer to young age university students with learning disabilities. Also, the singular expression “LD” and the plural expression “LDs” are used synonymously, and they all mean the psychological difficulty and symptom of learning disability/disabilities in a broad and inclusive sense.

Life-career challenges of students with LDs

LDs and students with LDs

To understand the special career needs and challenges of students with LDs, it is imperative to gain a clear understanding of the nature of LD and its impact on these students’ life and career experiences. The term “learning disabilities” encompasses a multitude of “disorders that affect the acquisition, organization, retention, understanding or use of verbal or nonverbal information” (Learning Disabilities Association of Canada, 2002). The Diagnostic and Statistical Manual of Mental Disorders-5 (American Psychiatric Association, 2013) categorises learning disorders into areas where individuals experience difficulties and they include: reading disorders, mathematics disorders, disorders of written expression, and learning disorder not otherwise specified. LDs are lifelong and are often considered to originate from genetic or neurobiological conditions or acquired through injury, impairing one or more processes related to perceiving, thinking, remembering or learning. This may include language processing, phonological processing, visual spatial processing, processing speed, memory and attention, and executive functions (e.g. planning and decision-making). Since these processes are related to learning, an LD is usually discovered upon unexpected low calibre in academic performance (Weis et al., 2014).

Hence, although the causes and symptoms of an LD might vary from person to person, they are often identified in school when an individual begins to experience underachievement or has to devote an extremely high level of effort to maintain one’s grades (Learning Disabilities Association of Canada, 2002). Understandably, schooling can pose a significant challenge to persons with a LD, decreasing their success in school and leading them to drop out of the education system at a higher rate than those in the general population (Lightner et al., 2012; McCloy & DeClou, 2013; Weis et al., 2014). In addition to academic barriers, LD students also experience difficulties with

various aspects of social and cognitive functioning which may prevent them from executing effective behaviours (Hen & Goroshit, 2014; Martin et al., 2017; Ohler et al., 1995). Additionally, individuals with LDs often have higher rates of mental health problems in comparison to the general population. Learning disabilities have been found to be associated with emotional problems since the first conceptualisation of LD in the early 1900s; in a meta-analysis, Nelson and Harwood (2011) confirmed the link between students with LD and higher anxiety symptomology. Despite the fact that LDs are a life-long neurodevelopmental disorder, the way in which they are expressed may vary over an individual's lifetime, depending on the interaction between the demands of the environment and the individual's strengths, needs, and levels of coping (Learning Disabilities Association of Canada, 2005; Weis et al., 2014). It is also important to acknowledge the strengths that can arise from the adaptive learning behaviours that individuals with LD might develop.

Although higher education environments are beginning to be able to provide assistance to individuals with LDs (Couzens et al., 2015), they are very challenging to identify in the first place thus making them difficult to address. First, LDs are not visible and this invisible or covert reality makes it difficult for others to observe and recognise the existence of the problem in the first place. Second, there are several differences in how LDs might manifest in individuals' daily functioning; individuals who are diagnosed with the same type of LD may experience symptoms in different ways. They may also identify and perceive such symptoms with unique personal experiences and meanings. Therefore, it is difficult to bring forward sets of specific criteria in profiling LD categories. Third, acknowledging LDs is further complicated by a tendency of students with LDs to underplay or avoid addressing that component of their identity (Anctil et al., 2008; Blake & Rust, 2002; Costello, 2000). There could be intricate reasons behind these students' reluctance to address their LD difficulties in a more open and straightforward manner. Some may simply have a low level of self-awareness on the impact of LD in their academic life, while others may be concerned with ramifications derived from possible stigma and bias of the LD labelling in an academic environment (Couzens et al., 2015; Lightner et al., 2012). Some LD students might struggle to live with the LD part in their selfhood, feeling difficult to fully accept the LD phenomenon that is present and accompanies their daily living. Collectively, these factors can often make LD a hidden disability that is more easily overlooked, despite its huge impact on the lives of students with LDs (Harris, 2007; Heiman & Kariv, 2004).

LD-induced difficulties hinder the pivotal prerequisite capacities that are often basic and necessary for a successful academic life and its related life aspects (such as social life and interpersonal communication) in a university context. This leads to negative impact on an LD student's capability to succeed and excel in various aspects of his/her student life. Because these same capacities are also essential for the effective preparation of the school-to-work transition, LD students may be substantially disadvantaged in possessing the competencies to plan, choose, and implement an optimal career path that is critical for their personal and vocational wellbeing in entering the world of work after postsecondary education (Gerber, 2011). Being disadvantaged in their career progression, individuals of all ages with LDs face greater unemployment and underemployment, as well as hold lower occupational status and lower paying jobs than their peers (Gerber, 2011; Learning Disabilities Association of Canada, 2005; Lindstrom et al., 2013; Murray, 2003). While university graduates with LDs have improved career success, they still have lower employment rates and lower salaries than their peers (Ochs & Roessler, 2001; Sears et al., 2014). In further exploring the career development of students with LDs, two major developmental areas have been identified where they lag behind their peers: career maturity (Ohler et al., 1995) and career self-efficacy (Harris, 2007; Luzzo et al., 1999; Sears et al., 2014).

Career maturity and students with LDs

In the United States, research on career maturity concerning LD students identified lower levels of career maturity among university students with LDs than their non-LD peers (Ochs & Roessler, 2001; Ohler et al., 1995). Higher levels of career maturity or readiness in young adults have been

shown to positively impact vocational identity and career-related attitudes, thus resulting in more successful transition from school to work or further education (Dipeolu et al., 2012; Hitchings et al., 2001). Within Super's (1974, 1990) life-span, life-space career theory, career maturity can be understood as a developmental process through which individuals form a sense of self in the world of careers. According to Super, career maturity involves career planning, career exploration, world-of-work knowledge and skills, career decision-making skills, and vocational self-concept, all of which can apply to LD students' experiences.

Work-world knowledge

Following Super (1974, 1990), career maturity plays a pivotal role shaping one's distinct vocational identity, and it is based on the attainment of a good understanding of the world of work and the careers of others with whom to compare and contrast oneself. There are a number of components in the environment of students with LDs that may impact their ability to explore the world of work. One is the impact of academic remediation. As students with LDs frequently invest extra time and effort in their academic endeavours, they are often less able to participate in other activities (Hitchings et al., 2001). One study in the United States (Hitchings & Retish, 2000) found that more than 90% of students with learning disabilities were not actively engaged in the career development process. This is true before these students even arrive at university. High school students with LDs had fewer career-related learning experiences, such as volunteering, work, and extracurricular experiences than their peers (Ochs & Roessler, 2004).

As much of the process of exploring the world of work involves understanding other people in specific careers, students with LDs may have substantially lower access to first-hand experience to observe, contemplate, and learn how people live their work lives in the real world. Even with the limited opportunities of career exploration activities, a lack of social skills may reduce LD students' effective communication with others, generating little or no positive impact on developing their knowledge of the work world that is of critical significance to their career maturity (Hen & Goroshit, 2014; Lindstrom et al., 2013). This is to say that by interacting less effectively with others, it becomes more challenging for students with LDs to identify with and differentiate themselves from others in specific possible careers. In the meantime, students with LDs may struggle with gathering and digesting the work-world information from various sources. They may have a much more difficult time to process the work-world information even if such information is available and provided to them. Consequently, their career maturity can be lagging behind their same-age peers with respect to knowledge of the world of work (Lindstrom et al., 2013).

Vocational self-concept

Parallel to their difficulties in exploring the world of work, the greatest challenge for university students with LDs is to gain an understanding of their own personal constructs, such as the values, skills, abilities, aptitudes, and interests that constitute their self-concept system in which vocational self-concept is a vital part (Olney & Kim, 2001; Super, 1990; Zeleke, 2004). One area in which the self-concept of students with LDs may differ from the general student population is that they have to understand how their learning disability affects their career choices. Yet, research indicates that these students often have very little or no awareness of the impact their disabilities may have on their strengths and weaknesses in regard to various career development options. The lack of such self-awareness may be a particular challenge to forming an integral, constructive, and realistic self-concept because of the often invisible nature of learning disabilities. While compared to their university peers who have visible physical disabilities, students with LDs have been found to be less aware of how their disability might impact their career development (Zeleke, 2004). As a result, LD students tend to have more difficulty articulating this impact than students with physical disabilities (Zeleke, 2004). While most LD students may not be able to describe their learning disability properly, those

students who have only found out their LDs while in university may experience more difficulties in conceptualising LDs in their self-concept system. Given the existing gap in self-awareness, it is understandable why many of these students have a hard time to make a connection between their LD experiences and their career planning, and do not know how their LDs could affect their future job performance in the real world of work (Hitchings et al., 2001).

Among a host of moderating factors in LD students' self-concept, two determinants, namely, an internal locus of control and a sense of self-esteem, may be worthy of particular attention. Following Super (1990), the internal locus of control is viewed as a precursor to self-concept. Without an internal locus of control, individuals can hardly manage their own actions to make career decisions, leading to a low level of career maturity. It was found that students with LDs in Canada, Israel, and Singapore have a more external locus of control when it comes to life-career choices in comparison to their university peers without LDs (Harrison et al., 2007; Heiman, 2006; Martin et al., 2017). The aforementioned LD-induced social and cognitive functioning deficiencies can be the main hampering causes for LD students' inadequacy of internal locus of control (Sears et al., 2014; Weis et al., 2014). Besides, external conditions can also be part of the reason. For example, parental overprotection and advocacy for their children could prevent the LD students from understanding their own interests and/or how to engage in career exploratory behaviour with a sense of personal mastery (Hitchings et al., 2001).

Self-esteem refers to an individual's appraisal of his/her own self-worth, affecting the formation and development of one's healthy and positive self-concept system. Studies indicate that students with LDs often exhibit lower self-esteem than the general university population (Blake & Rust, 2002; Lindstrom et al., 2013). These students frequently suffer from LD-related personal issues including feelings of inadequacy, coping distress, and low-level depression, all of which affect their current level of career maturity and future career aspirations (Dipeolu et al., 2002; Blake & Rust, 2002; Harrison et al., 2007; Lindstrom et al., 2013). When LD students feel low self-esteem, they may experience more cognitive and emotional difficulties in putting an optimal and holistic focus on perceiving their internal qualities, such as attitudes, values, abilities, aptitudes, and interests. These are all key components in shaping and processing their self-concept that critically affects their level of career maturity (Chen & Chan, 2014).

Career decision-making skills

With a well-developed self-concept and a good understanding of the world of work, the third major component of career maturity points to the facet of decision-making and planning. This involves thinking about career-related information and setting out steps towards career goals (Sharf, 2006; Super, 1974, 1990). Central to making fine career decisions is the active cognitive processes of evaluating, assessing, comparing, selecting and narrowing down information on hand (Sears et al., 2014). This is one area where learning disabilities can pose a huge roadblock. Student with LDs may face particular challenges with the career planning and decision-making process that requires a complex and dynamic set of cognitive and social skills to process and digest the information they encounter (Martin et al., 2017; Weis et al., 2014). Due to the nature of learning disabilities, these students may constantly run into many more difficulties than their non-LD university peers in internalising the information gathered through career exploration (Hollis, 2001). LD students may require much more time in going through these processes and they may also need different methods to identify with and make connection to the process of career decision making that is geared more closely to their intellectual and personal learning needs given the context of their LDs.

Similar to other human learning experiences, career decision-making skills are developed through previous decision-making experience. The experiences that accompany LDs makes these students less experienced with independent decision-making, putting them at a more severe disadvantage in a higher education context. As Hitchings et al. (2001) pointed out, active parental and teacher involvement in past academic and career decision-making increased the LD students' dependency

on others. These students are often less- or ill-prepared to make decisions for themselves due to a lower capacity to make effective decisions. Having just made the transition to their young adulthood from an age perspective (i.e. 18-plus years of age), students with LDs can face enormous psychological burdens when they realise that they now have to be much more self-reliant in making a wide range of critical decisions that are all closely connected to their future career prospects beyond university life. This can include finalising a major to envisioning a prospective work life that is fast approaching in literally “a few years” time. Experiencing low career maturity in the critical domain of decision making, students with LDs may need much assistance to improve their learning and attain a range of coping mechanisms that will increase their competency for more effective decisions pertaining to their academic, personal/social, and career wellbeing in their journey ahead.

Career self-efficacy and students with LDs

Self-efficacy, a core component of Bandura’s (1986) social cognitive theory, is a subjective, personal judgment about one’s own capacity to successfully execute a designated task or perform in life situations. The concept of self-efficacy has been widely adapted to the career development field, being elaborated extensively by models such as career self-efficacy theory (Betz, 2004) and social cognitive career theory (Lent & Brown, 2008; Lent et al., 2002). Self-efficacy has also been identified as another important psychological construct in understanding the unique life-career development experience of university students with LDs. It is suggested that self-efficacy considerably affects these students’ choice of activity, task perseverance, level of effort expended, and likelihood of success in various aspects of their lives (Ochs & Roessler, 2004). University students with LDs who exhibit lower levels of general self-esteem and internal locus of control are also likely to display less belief in their ability to engage effectively in the career decision-making and exploration process. With respect to career self-efficacy level, it was found that significant differences exist between the general university student population without LDs and students with LDs. Two studies in the United States found that career self-efficacy level was significantly higher among students without LDs than those with LDs (Harris, 2007; Luzzo et al., 1999).

Career self-efficacy pertains to individuals’ comprehensive ability to accurately assess their abilities and skills, to gather occupational information, to select career goals, to implement career plans, and to resolve career problems (Lent et al., 2002). In essence, the host of key elements comprising career self-efficacy is developed on the basis of past learning experiences. These learning experiences are influenced by individual factors, such as LD-induced deficiency, and external influences, such as previous interaction with parents and teachers. Internally, LDs and their related difficulties can hamper or delay the cognitive functioning and skills for LD students to attain their career self-efficacy accurately and effectively. Externally, if parents and teachers tend to make the majority of the life-career decisions for an LD student, then the student would be more susceptible to dependency on others’ belief while assessing his/her own ability to plan, select, and implement a prospective career alternative. The student might internalise such experience as evidence that he/she is lacking in the abilities relevant for life-career success (Luzzo et al., 1999).

Perceived barriers from significant others, such as parents and teachers, may also affect the student’s level of career self-efficacy. For example, when parents perceive that potential career options of their LD children would be limited due to prospective employers’ unwillingness to hire university graduates with LDs (Alston et al., 2002), the LD student under the circumstance could be directly and indirectly influenced by this perceived barrier. This may lead to doubts and questioning about their own ability to achieve a career goal and attain a desirable employment. Similarly, parents’ and teachers’ attitudes, confidence and aspirations for the LD student might also have an impact on the self-efficacy expectations the student holds for him-/herself in building and pursuing their career aspirations (Lindstrom et al., 2013). Students with LDs are less likely to be encouraged to obtain higher education, posing a negative effect on how they perceive not only their academic abilities but also their career attainment abilities

(Panagos & DuBois, 1999). Furthermore, career self-efficacy is intertwined with one's self-concept system in general, and vocational self-concept in particular. For students with LDs, a struggle to develop an integral and constructive self-concept affects their self-efficacy for life-career success and vice versa (Pajares & Schunk, 2001).

Career self-efficacy of students with LDs is worthy of attention because research has revealed significant correlations between career self-efficacy and a range of essential career development constructs such as career maturity, career exploration, vocational identity, and career decidedness (Hollis, 2001; Luzzo et al., 1999). To a broader extent, career self-efficacy can be viewed as an essential belief that is closely connected to all the areas of career maturity, enabling the intent and actions for career construction and career success. Yet, a key challenge is how to change the reality of fewer opportunities for successful career-related learning experiences so that LD students will improve and enhance their career self-efficacy in conjunction with a concerted effort to strengthen their self-efficacy expectations in all aspects of their personal/social, academic, and vocational lives.

Career counselling implications for students with LDs

Improve campus career service accessibility

Students with LDs are in dire need of awareness and skill enhancement for career exploration and decision-making through campus career services (Hitchings & Retish, 2000), yet there seems to be a very weak connection between this group and career services. For example, in one assessment of the use of on-campus career services in the United States, 61% of students with LDs felt they didn't need the service (Friehe et al., 1996). This gap may imply on the one hand a lack of self-knowledge on the part of the students, and on the one hand, a very inadequate promotion and outreach on the part of the career services. Thus, the services need to be tailored in more proactive and pertinent ways to aid the LD students (Crank & Deshler, 2001). There is a need for a deliberate effort to coordinate the various service resources on campus that can provide the LD students with related services that aim to improve their life-career wellness. The campus career centre can establish a closer and coordinated collaboration with other relevant services such as the university accessibility service, the student (mental) health service, the counselling service, the job placement service, the co-op programme, the academic advising and skills improvement services, student life services, and the like.

This collaboration can reduce the administrative boundary barriers that often hinder efficient service delivery, as well as increase opportunities for advocacy on behalf of the students. It also incorporates other relevant aspects of the LD students' life experiences into the helping equation. Meanwhile, the career centre should adopt effective outreach initiatives that deliver simple, educational, and clear messages to promote public awareness, especially to positively encourage the LD students to make the important connection between their current career planning and their prospective vocational wellbeing. While a variety of outreach methods such as posters, pamphlets, and workshops may be useful, the career centre personnel may adopt more creative and proactive approaches to reach out to their prospective LD clients. For example, visiting classes especially large-size undergraduate classes for a short public promotional presentation of 10 min could be an efficient alternative. Also, working more closely with the campus accessibility services where LD students seek help may be another workable option to reach this target group. Together, public education and targeted outreach may make the career centre more connected to potential LD students who need much career assistance yet often with low awareness and initiative on their own.

Provide meaningful assessment

Assessment of LD students' current status of career development such as aspects of career maturity, self-concept, self-efficacy, academic performance, social skills, and the like, can be an important part of career counselling interventions. This may include initial assessment of self (e.g. values, interests,

abilities, etc.), career-related factors (e.g. world of work information), and career developmental status of the client. Along with getting information from the client through dialogue, various career development psychometrics might be employed to gain information about the specific developmental stage a client with LD is at, as well as his/her other personal constructs such as values, interests, abilities and the extent of career-related knowledge (Sharf, 2006; Zunker, 2006). Due to the LD-related factors and circumstances, the counsellor should be sensitive, knowledgeable, and skilful in conducting and using the assessment as a facilitative vehicle that will be truly meaningful to the positive growth of the client. These skilled behaviours and empathy on the part of the counsellor are conducive to creating a strong working alliance based on trust, respect and mutual goals (Horvath & Bedi, 2002). The safe context of this alliance will encourage the student to more fully disclose how their LD is affecting them and then engage in the assessment and goal-setting process, in a way that is meaningful and purposeful.

First, take precaution while interpreting results from career testing as such measures are mainly based on norms of individuals without LDs, and their validation with the LD client is yet to be verified via more consideration. Second, always pay more attention to the information from direct and qualitative exchange with the client so that the experiences of LDs are incorporated into the analysis of the testing results. Third, always invite the client to be actively involved in explaining and making sense of the facts and phenomena that emerged from the assessment process. Fourth, make a smooth connection between career interventions and career assessment. In other words, issues and events emerging from the counselling process are shared and reflected upon for immediate qualitative assessment, making the assessment an integrated part of the career helping process.

Attain work-world knowledge

To increase the level of career maturity and improve career decision-making competency (Super, 1990), students with LDs need much help in developing their knowledge base of the world of work. With meaningful assessment as a foundation, the counsellor should be very cognisant to help the client build this knowledge from both macro and micro domains. In the macro domain, a volume of general information related to the world of work can be provided, shared, and explored. For example, in surveying a host of occupational choices that are coherent to the interest of the client, information such as the nature of an occupation, main characteristics of the occupation, and basic and special requirements/demands of the occupation may be explored and understood. It is not unusual that this might well be the first time that the LD client has the true opportunity to access and try to digest such information, regardless how basic and common such information might seem to be seen by others without LDs. On the micro side, the counsellor needs to be knowledgeable to special information that may apply to not only to the LD client, but also the particular ramifications of such information on each individual client who may have very different needs and/or reactions to the information. For example, specific resources such as the legislative protection, issues of disclosure, possible accommodations in the workplace, and other similar information that have particular impact on the vocational wellbeing of the client may need to be explained and clarified. This kind of micro knowledge comprises a vital part of the career intervention task because it is of paramount importance to the career planning and decision making of the LD client. Very often university graduates with LDs simply have no knowledge on such significant information and as a result have used compensatory strategies in their workplace without asking their employer for possible accommodations. While there could be a complexity of reasons behind situations as such, these occurrences are in part due to a lack of understanding of the world of work knowledge that is of particular relevance to the coping experiences of the LD students who never had the opportunity to be guided to, and informed of, the resources available in the work world.

Of note, the career counsellor should facilitate the LD client to obtain and expand this world-of-work knowledge via a variety of means, focusing on increasing the client's own awareness and skills of information expansion. The clients come to realise that in many ways their deficit of LDs could be

compensated should their skills on building and utilising information of the work world are refined and enhanced.

Strengthen self-concept

A necessary and challenging helping task is to help the LD students integrate the LD experience into their self-concept formation and utilisation. The counsellor facilitates and empowers the client to reflect upon, explore, and understand the specific strengths and weaknesses in light of experiences with LDs in perceiving one's selfhood in general, and a vocational and career self in particular. Enhancing a positive and constructive self-concept may involve, among other things, three key elements while career counselling LD students. First, there is a need to integrate personal counselling into career counselling. This helping intervention has its special merit in working with LD students because LDs present a critical experience that influences all aspects of an LD student's life. Second, career counselling should empower the sense of hope, promoting a strength-focused rather than a deficit-oriented approach in building the selfhood. For example, facilitating the clients to identify their strengths and illustrating how individuals with LDs achieve career success can send a powerful message to strengthen a positive self-concept. Third, the sense of hope should include and reflect realism. This means to help the client accept the LDs and realistically assess how LDs could affect his/her competencies in current and prospective career development, finding possible alternatives to compensate or work around the weaknesses induced by LDs. Combined, these three key elements are to help the client validate an integral self that co-exists with the reality of LDs in planning and implementing viable career decisions.

Augment self-efficacy

Following Bandura (1986), the vital role of self-efficacy in individuals' vocational and career development has been well documented in research, being particularly represented by the career self-efficacy theory (Betz, 2004), and the social cognitive career theory (Lent & Brown, 2008; Lent et al., 2002). With regard to career self-efficacy, students with LDs have less confidence in their ability to achieve and are less likely to feel a sense of mastery or control over their situation. Socialisation experiences, such as over-dependency on others (e.g. parents and teachers) for own life-career decisions and lack of an internal locus of control have led them to acquire inaccurately low self-efficacy beliefs. In addition, the LD experiences present real challenges, making them believe that they are deficient in attaining success in their life and careers. As a result, many LD students may enter career counselling having already dismissed many potentially fulfilling occupational possibilities because of low career self-efficacy beliefs and outcome expectations (Lent et al., 2002).

To enhance the critical and constructive functioning of self-efficacy, the counsellor can help the LD students identify and consider which career paths they may have already eliminated on the basis of their inaccurate self-efficacy beliefs. The students can be guided to modify the incorrect and/or low self-efficacy beliefs as they approach their career choices. Since perceived performance accomplishments are the most potent source of information for altering self-efficacy beliefs, the counsellor can assist the students to exercise and obtain new performance experiences in areas in which aptitude seems to be high but self-efficacy is low. With meaningful assessment that indicates personal strengths and weakness, the counsellor can positively direct and challenge the LD student client to become aware of his/her personal capacities to which he/she had paid little or no attention. Helping the student understand his/her potential in past and present academic performance may be the starting point to draw one's attention to the role and function of self-efficacy in various aspects of life experiences, leading to the utilisation of self-efficacy in career planning, exploration, and decision-making actions. In the meantime, a better understanding of the LD-induced limitations can help the client avoid the trap of an unrealistic overestimation of his/her self-efficacy in exploring prospective career options.

Another area where low self-efficacy beliefs can negatively influence LD students is the career search process. Career search self-efficacy refers to people's expectations regarding their ability to competently perform various career search activities, including personal exploration, career exploration, information attainment and analysis, networking, job interviews, and other related activities. Interventions which are designed to promote career search self-efficacy are extremely necessary with LD students because they may experience significant difficulty in the career search process. Because of LDs, these students with poorly defined and incorrect self-efficacy beliefs might not otherwise engage in the career exploration and job search activities which are necessary to find a meaningful and satisfying career path. As self-efficacy is developed through a variety of different learning experiences, career counselling can facilitate and reinforce certain learning experiences.

Utilising key principles in the social cognitive framework (Bandura, 1986) to facilitate and strengthen self-efficacy, the counsellor can have LD students participate in four different types of experiences which can promote career efficacy expectations. The first type of learning experience is enactive attainment which teaches the student to gain more mastery experiences that will lead him/her to achieve success in performing a targeted behaviour such as talking with clarity, consistency, and confidence in communication with others. Second, the counsellor can provide verbal persuasion to offer information, advice, encouragement, and facilitation to the student. Thirdly, the counsellor makes the student aware of the physiological arousal he/she may experience, and develop skills for stress management and relaxation training to cope with emotions that interact with cognitive functioning in various personal/social and educational aspects of their lives, leading to the enhancement of career maturity. Finally, the student learns through vicarious experiences where he/she might observe the counsellor modelling an effective targeted behaviour.

Given LD-induced challenges and limitations, vicarious learning may be of particular pertinence to LD students. A range of exploratory learning activities can be employed to facilitate the diverse needs of each LD student. This learning may include, but not limited to activities such as seeking career information, engaging in informational interviewing, job shadowing, job simulation, mock job interviews, accessing mentorship and identifying successful career role models with LDs, and other relevant experiential learning opportunities that will facilitate LD students to attain, refine, and utilise effective coping skills that can concretely translate their heightened career maturity, self-concept, and self-efficacy into more effective actions for life-career success.

Conclusion

Career counselling young university students with LDs requires tailored helping strategies that address the special needs of this group. Helping LD students understand their strengths and weaknesses and how such dynamics will impact their current academic life and future work-life begins with a safe, empathic, and supportive counsellor-client work alliance. This facilitative helping environment ensures that the counsellor and the LD student client work collaboratively to make sense of the LD-induced difficulties in the client's unique life experiences, finding more effective coping mechanisms and skills in dealing with these difficulties.

It should be noted that the current discussion has only looked at some of the issues among a range of complex life-career development needs and challenges in the lives of young university students with LDs. More is yet to be studied and addressed. Although the discussion is rooted in a North American context, it may be heuristic to career counselling services and practice in other higher education institutions beyond the North American border. This is because helping special needs students such as those with LDs has become an important mandate for career development and counselling services in higher education as universities and colleges around the globe are drawing more attention to advocate critical aspects of diversity, democratic participation, social equality, and social justice while helping special needs groups enhance their life-career wellbeing.

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