Career Information Practices of Guidance Practitioners

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Abstract

Although career development theories underline the central role of information in career choice and studies show that guidance practitioners are among the main information sources of people making career choices, the actual information practices of these practitioners in their interventions remain fragmented. Moreover, the studies on the theme of career choice associating information, information sources and information practices (whether it is among guidance practitioners or individuals in career choice) offer little conceptualization on these notions. To fill this gap, an online survey of 330 guidance practitioners in Québec was conducted to specifically document their career information practices (information sources consulted and categories of career information sought). Statistical analysis showed that the main career information sought relates to central elements of career choice (training programs and occupations) and the main information sources consulted are non-human and institutional. In addition, some contextual elements are associated with seeking and selecting certain categories of information and sources. The discussion highlights the importance of digital sources in their information practices, the association between the populations served and the choice of information sources and categories of career information and the role of co-workers as information support on career and beyond.

Résumé

Bien que les théories du développement de carrière soulignent le rôle central de l'information dans le choix de carrière et que les études montrent que les praticiens de l'orientation figurent parmi les principales sources d'information des personnes en choix de carrière, les pratiques informationnelles effectives de ces praticiens restent fragmentées. Également, les travaux sur le choix de carrière associant information, sources d'information et pratiques informationnelles (chez les praticiens de l'orientation ou les individus en choix de carrière) conceptualisent peu ces notions. Un sondage en ligne a donc été réalisé auprès de 330 praticiens de l'orientation au Québec pour documenter spécifiquement leurs pratiques informationnelles (sources d'information consultées et catégories d'information sur la carrière recherchées). Les analyses statistiques montrent que les principales informations recherchées portent sur des éléments centraux du choix de carrière (programmes de formation et professions) et les principales sources d'informations consultées sont non-humaines et institutionnelles. Également, certains éléments contextuels sont associés au choix de certaines sources et catégories d'informations. La discussion soulignent l'importance des sources numériques, l'association entre les populations desservies et le choix des sources d'information et des informations recherchées et le rôle des collègues de travail comme support informationnel sur la carrière et au-delà.

Guidance practitioners in Québec – career, school, educational and occupational counsellors[1] (Emploi-Québec 2020a, 2020b; Ordre des conseillers et conseillères d'orientation du Québec [OCCOQ], 2020) – use career information to support people in career choice (Goudet et al., 2010; Gouvernement du Québec, 2017). The interventions of those members of the OCCOQ are framed by a general competency profile, and

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[1] Career counsellors are members of a professional association and are responsible for assessing and counseling individuals to help them define their educational and occupational path. Employment counsellors help individuals integrate or adapt to the labour market. Educational and occupational counsellors have the role of informing individuals about educational and occupational issues.

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one sub-competency concerns the use of career information (OC-COQ, 2010). The development of skills associated with career information among guidance practitioners is also stressed by various stakeholders (Dislere & Vronska, 2020; Gacohi et al., 2017). A relevant, accurate and recent career information has a decisive influence on individuals' career choice (Gati & Levin, 2015; Jakšić & Perin, 2020; Owen et al., 2020). A lack of information is a major obstacle in making a career choice since it can lead to a difficulty in identifying educational options or planning for a job (Gati & Amir, 2010; Hirschi, 2011). Moreover, providing career information by guidance practitioners is one of the techniques with a significant effect on perceived self-efficacy related to career choice (Whiston et al., 2017)[2].

Before transmitting career information to people, guidance practitioners must seek and identify information sources to find it. Many approaches to seeking career information are available in academic publications such as methods for exposing the person to career information (Brown et al., 2003) or recommendations for using career information tools (Gore Jr. et al., 2012). However, these publications do not inform about sources and categories of career information that guidance practitioners actually mobilize in

2 Having career information in career choice process also contributes, from a social justice perspective, to determining the range of possibilities people have (Sampson et al., 2020).

their interventions. In addition, career information seeking is generally defined in a perspective of matching an individual's' skills to the labour market needs (Brown, 2012; Conseil de l'information sur le marché du travail [CIMT], 2020; Organisation for Economic Co-operation and Development [OECD], 2004). Nonetheless, this vision of career information seems to fit poorly today given the non-linear nature of occupational trajectories (Savickas & Pouyaud, 2016; Savickas et al., 2010). It is now more complex to make a career choice with the rapid development of information technology (Guichard, 2016). These changes make it more complex the monitoring of career information by guidance practitioners.

A review identified the main themes on career information practices of guidance practitioners (defined here as career information sources consulted and categories of career information sought).

Peripheral studies on this topic. Studies didn't specifically focus on their information practices, the latter being included in all other professional practices (counselling, assessment, etc.) (Ordre des conseillers et conseillères d'orientation et des psychoéducateurs et psychoéducatrices du Québec [OCCOPPQ], 2004a, 2004b). Other studies are not related to the specific context of guidance practitioners in Québec, emphasize relevance of information technology as an information source or a means of disseminating career information or focus on their information practices about

professional development (Beidoglu et al., 2015; Belser & Mason, 2021; CIMT, 2019; Sampson et al., 2019; Samson et al., 2014).

Influence of factors on information practices. Some factors related to the work context strongly influenced information practices of mental health and human relations practitioners, field to which guidance practitioners in Québec belong (Du Preez, 2019; Moring, 2017; Olsson & Lloyd, 2017; Widén et al., 2014). Thereby, the mission of the organization or the needs of individuals served may lead practitioners to favor certain categories of information, professional experience may lead to favor some information sources and budgetary constraints may force to mobilize only non-paying information sources (Clavier, 2019; Gallagher & Olsson, 2019; Vest & Jasperson, 2012).

Emphasis on individuals making career choices. Studies show that guidance practitioners are one of the main information sources mobilized by people making career choice (Aley & Levine, 2020; Chin et al., 2018; Owen et al., 2020). But on the specific topic of career information practices, researchers' attention is mainly focused on individuals making career choices from various angles (information needs, information sources, parental influence, cognitive information process, etc.) in various populations (high school students, immigrants, gender, ethnicity, socioeconomic status, etc.) (Griffin et al., 2011; Hooley et al., 2015; Liou et al., 2009; Simões & Soares, 2010).

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Conceptual issues. Studies do not always make a clear distinction between career information on the one hand and advice, opinions and recommendations about career on the other (Jenkins & Jeske, 2017; Kniveton, 2004; Yousefi, 2011). Furthermore, information source as a notion is rarely defined in these studies although there are several categories of sources (paper, digital, human). Regarding human sources, parents and friends do not necessarily have the expertise – as guidance practitioners – to provide relevant career information (Crowley & High, 2018; Owen et al., 2020). Finally, these studies focus either on occupational or educational information, whereas a study combining these two categories could be relevant for guidance practitioners as experts on both issues.

Although these review provide relevant elements of analysis (e.g., influence of contextual elements), it remains unclear how guidance practitioners in Québec specifically seek and find sources and career information as part of their interventions. Given the important role of guidance practitioners as information source in individual's career choice and limited scientific knowledge about their career information practices, it appears essential to examine this subject more precisely. Thus, this article aims to deepen the understanding of career information practices of guidance practitioners and its associations with specific work contexts.

Analytical Framework

Information Practices in Work Context

The field of library and information sciences (LIS) offers relevant conceptual and empirical work on information practices. Chaudiron and Ihadjadene (2009) showed that depending on the angle of analysis (information systems, users, information needs, seeking, valuation, etc.), epistemological and theoretical postures can vary greatly. Thus, several constructs are proposed: information seeking, information behavior, information use or information practices. Fischer, Erdelez and McKechnie in 2005 and Al-Suqri and Al-Aufi in 2015 cataloged the most influential theoretical models in various contexts to analyze information seeking behavior as the way people seek, select and use information through information sources. This theoretical corpus is however centered on population's information seeking behavior who seek information for themselves on various subjects (career, health, housing, entertainment, etc.).

Mc Kenzie (2003) and Savolainen (2008) conceptualize information seeking as information practices by offering a relevant perspective for our study. First, information practices are embedded in the contexts (social, political, cultural, economic) in which they occur, including workplaces. Second, they take into account both active information seeking activities (recognition of an information need and intentional actions to address it) as well as less-directed ones (obtaining information deemed relevant but not anticipated from non-specific actions). However, theses information practices are considered as everyday information seeking and do not take into account the specific issues of practitioners in workplaces.

There are few models for conceptualizing information practices in workplaces (Ihadjadene & Chaudiron, 2009; Widén, Steinerová and Voisey, 2014). A first conceptual approach focusses on the behavioral and cognitive dimensions of information seeking by analyzing the interactions between users and information systems. Although centered on users, the models of this approach all have in common to conceptualize information practices isolated from any context (the so-called «process-oriented» approach). A second conceptual approach, from management sciences, insists on information practices as a business intelligence activity. The main interest of these models is not so much the practitioners' information practices as the means to improve their work efficiency with so-called strategic information (Ayachi, 2007). This information seeking conception doesn't seem to correspond to the guidance practitioners' work in Québec, mainly focused on supporting individuals making career choices and working essentially in education and employability sectors (OCCOQ, 2021). A third approach proposes contextual models where

information seeking is conceptualized taking into account the work context, professional roles and tasks associated (Paganelli, 2016).

Given the guidance practitioners' specificities – diversity of tasks, populations served and sectors of activity (OCCOQ, 2021) – and the studies which stress the importance of various contextual elements on information practices in workplace, the model of Leckie, Pettigrew and Sylvain (1996) has been chosen. Based on empirical studies with professionals from the law, engineering and health care sectors, this model has been designed in a broad way in order to be used with different professional groups (Leckie, 2009). Unlike the samples of professionals studied to build this model – who seek information to make decisions mainly for themselves – guidance practitioners seek career information to help other people in career decision. Leckie, Pettigrew and Sylvain (1996) also note the variability of information seeking behavior of practitioners according to their status in their organisation, categories of people served, years of professional experience, expertise or tasks associated with their different professional roles – including assistance to people choosing a career. These factors, as contextual elements, might influence the choice, knowledge and usefulness of information categories and sources sought by guidance practitioners.

Studies mobilizing the model of Leckie et al. (1996) with other professional groups showed that contextual dimension seems to have a significant impact on the variability of information practices (Kwasitsu, 2003; Vakkari, 2005). Professionals must indeed deal with an organisational context which can foster or impede information seeking. The expression "information practices" is favored because it has the advantage of taking into account the contextual dimension in the activity of seeking information sources and information. In summary, based on definitions of Wilson (2016) and Savolainen (2008), we can conceptualize the career information practices of guidance practitioners as a set of actions and choices, embedded in a social context, for searching career information in different sources to support people in their career choice.

Information and Career Information

The notion of information is polysemous and mobilized in several disciplines. It has been conceptualized according to two main perspectives. First, objective information (as neutral content) is conceived as an object or a thing (Capurro and Hjørland, 2003) which exists in itself, independently of the person who seeks information and of the process of interpretation that this is based on information (Buckland, 1991). Second, subjective information is conceived as a sign which depends on the interpretation which is made of it. It is not fixed or defined in itself as information, but is part of a work of meaning or significance granted to it by the person (Le Codiac, 2004). This second approach does not dispute the objective nature of information that may exist in itself (such as statistics on employment, for example) but places greater emphasis on the subjective meaning that it may or may not assume depending on person's information needs (Gardiès et al., 2010). It is not so much the content of the information that matters as its relevance in a given context (Dinet & Rouet, 2002).

In this study, we do not favor a specific perspective. Indeed, as part of their search for information on educational and occupational issues, we know that guidance practitioners are looking for objective information (requirements for a training program, employment forecasts, etc.) (OCCOPPQ, 2004a, 2004b). Nevertheless, the information sought and obtained is not all retained by them. Just as they don't necessarily systematically consult all the information sources of which they are aware. This selection involves a process of analyzing, giving meaning and evaluating the relevance of information sources and information according to the person's career needs[3]. From this perspective, career information will be defined as "intellectual material needed by a person to

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3 We join here the position of Kumar & Arulmani (2014): "while it is the government's role to make a robust labor market information system (LMIS) available, career guidance practitioners are expected to convert this data into information and customize it for their clients." (p. 237)

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ease, resolve, or otherwise address a situation arising" (Shenton & Dixon 2004, p. 299) insofar as the guidance practitioner who seeks information to support the people in career choice. Career information will be structured around two main components: educational and occupational information (Kumar & Arulmani, 2014; Santamaria & Watts, 2003). Educational information refers to personal characteristics associated with training programs or continuing education, admission requirements, educational institution and financial support measures or psychosocial support measures to support school perseverance or achievement (Obermeit, 2012; Perna, 2006). Occupational information refers to working conditions, tasks, duties and training related to professions, labour market forecasts, unemployment rate, job search techniques, personal characteristics associated with professions, specific requirements or regulations, support measures and programs related to employment integration (Bimrose et al., 2006; Drummond et al., 2009). Focussing explicitly on educational and occupational issues based on objective information, this perspective is a first step in conceptually distinguishing career information from advice, recommendations or opinions from sources without career expertise.

Information Sources

According to these definitions, information and sources are therefore closely linked since the situation to be addressed influences the type of sources considered to be relevant (Byström, 2002). Here, the concept of source can be defined as a kind of repository that drains and provides potential information (Xu et al., 2006). From there, academic publications suggest taxonomies of information sources with two main categories: human (family, friends, teachers, guidance practitioners, etc.) and non-human sources (television, internet, books, etc.) as well as institutional or formal sources and those which are not (Agarwal et al., 2011). Human or not, institutional or formal sources relate to those whose mandate is to formally provide information on a specific field such as career information[4]. This taxonomy, without aiming to be exhaustive, appears appropriate because it covers a large part of the information sources likely to be consulted by practitioners. It first takes into account human sources, a category known to be predominant in information practices, whether in career choice or not (Aley & Levine, 2020; Chin et al., 2018). Second, it distinguishes the formal versus non-formal nature of information sources, because people seeking information do not only use formal sources to

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4 An example of institutional information source in Québec is *IMT en ligne*, the main public website for labour market information. In the case of the information practices of young adults in their professional integration, Facebook is an example of non-institutional occupational information source (Supeno et al., 2021).

obtain information (Crowley & High, 2018; Robinson & Roksa, 2016).

The general research objective of this article aims to describe the career information practices of guidance practitioners. More specifically, it aims to:

1. Document the main career information sources mobilized (human or not, institutional/formal or not);

2. Document the main categories of career information sought (educational and occupational);

3. Test whether different parameters of the work context (field of expertise, sector of activity, population served, professional experience) are associated to the information sources mobilized and the categories of information sought.

Method

Participants and Procedure

Participants were active members of either one of the following professional associations in the career guidance field in the province of Québec, Canada: the OCCOQ, the Association Québécoise de l'information scolaire et professionnelle (AQISEP) and the Association Québécoise des professionnels en développement

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de carrière (AQPDDC)[5]. Participants were solicited on a voluntary basis through the mailing lists of the aforementioned professional associations. Email invitations including a link to the self-reported questionnaire were sent to OCCOQ, AQISEP and AQPDDC members via the organizations' mailing lists[6].

Participants were 330 guidance practitioners, among whom were career counsellors (84.2%), school counsellors (5.0%) and employment counsellors (3.4%). A total of 84.6% were women compared to 15.4% men. Participants were aged between 25 and 79 years old (M = 43.33; SD = 10.09) and had an average of 14.07 years of professional experience (SD = 8.77). The majority of the sample (97.1%) completed at least a bachelor's degree in career development or career guidance, and 89.3% of the sample

completed a master's degree in the same field (licensed career counsellors in Québec are required to have a master's degree). Additionally, the majority of the sample worked for public school boards (46.6%), colleges (13.2%) or community organisations (17.7%). A total of 69.9 % of participants worked primarily with individuals without a high school or vocational training diplomas, while 64.5% worked primarily with individuals with mental health or neuropsychological disorders. 90.5% of participants reported that their main tasks included individual interventions, while 59.8% indicated that punctual event management (e.g., career fairs) was part of their main tasks.

Measures

Research data were collected using an online Limesurvey questionnaire, hosted on a secured server of the researchers' university. The questionnaire was pretested to assess relevance and clarity of the questions with a sample of Master's students in career guidance (n = 6) and career counsellors (n = 10) with various duration of professional experience (less than 5 years to 5+ years), job titles (career counsellor, employment counsellor, school counsellor, personal academic advisor[7]) and sectors of activity (education: high school, CEGEP and

university[8]; employability; organizations). This pretest showed the general robustness of the questionnaire in terms of content and form.

The questionnaire was preceded by a consent form. The first section of the questionnaire asked about respondents' current employer and job title. The second section consisted of questions about the usage frequency of career information sources (non-human sources, institutional human sources and non-institutional human sources)[9] as well as categories of career information sought (educational and occupational information)[10] on a 5-point Likert scale ranging from "never" to "always." Here are two sample questions from this section: "Here is a list of sources of educational and occupational information that could be used in your guidance interventions. When you seek information in your interventions, how often do you use the following sources?" (career information sources); "When you seek information as part of your guidance

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5 In the absence of an organisation that gathers all guidance practitioners, those three main organisations affiliated to the field were selected. The OCCOQ grants licenses to practice to career counsellors whose professional title and the practice of certain assessment activities are reserved.
6 Considering that participants can be members of one, of two or of these three organizations and that the number of members of AQISEP and AQPDDC is unknown, the survey exact participation rate cannot be determined. However, 302 participants are members of the OCCOQ. As this organization had 2,394 active members during data collection (OCCOQ, 2019), the participation rate for these participants is estimated at 12.6%.

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7 Personal academic advisors work in CEGEPs to help students choose academic courses better suited to their needs.

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8 In Québec, high school is mandatory and represents five years of general formation following 6 years of primary school. CEGEP is post-secondary education where students can choose between courses that are uniquely preparatory to university or technical programs that allow them to go directly on the labour market or to university. University is accessible to anyone with a CEGEP diploma or any adult (21 years and older) with qualifying professional experience.
9 Career information sources are presented in Table 1
10 Categories of career information are presented in Table 2.

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interventions, how often do you seek information on the following?" (categories of career information). The third section included questions about age, gender, training, professional experience, population served, main tasks and responsibilities, working language, and professional affiliations[11].

Data Analysis

Descriptive analyses were conducted to document the main career information sources consulted by guidance practitioners as well as the main categories of career information they seek. Independent sample t-tests and analyses of variance were then performed to compare usage frequency of career information sources and categories of career information according to field of study, workplace and population served.

To conduct these analyses, sources and types of career information were grouped into categories on a theoretical basis. Career information sources were grouped into three categories according to the taxonomy that was previously adopted (see analytical framework): institutional human sources; non-institutional human sources; non-human sources. Career information categories consulted were grouped into four categories related to the two main components identified in the literature (educational and occupational information): characteristics of

training programs; school-based support measures; information and characteristics related to occupations, trades and jobs; employability and related support measures. An overall score was computed for each category using mean scores of items composing it.

A higher score means a more frequent use of those sources or categories of career information. Regarding comparison variables, field of study was divided into two categories: career guidance and career development fields [certificate, bachelor's degree or master's degree] or any other field (e.g., psychology, social work).

Workplace was divided into six categories: public school board; CEGEP; university; community organisation; self-employment; and other. Populations served were processed as binary variables corresponding to whether or not practitioners mainly worked with the seven proposed populations: individuals who are not functionally proficient in either French or English; immigrants; individuals without a high school or vocational training diploma; individuals with mental health or neuropsychological disorders; individuals with physical disabilities; individuals with intellectual disabilities; and individuals with limited skills in information and communication technologies.

Moreover, these categories were not mutually exclusive, meaning that participants could select more than one population. Finally, Pearson correlations were also conducted to test associations between usage frequency of career

information sources and categories of career information and professional experience.

Ethical Considerations

The present study has been approved by the ethics committee of the researchers' university and adheres to its ethical standards. In order to obtain the free and informed consent of participants, a consent form preceded the online questionnaire. By agreeing to complete the questionnaire, respondents indicated their consent to participate in the survey. After transferring the survey data to the database, all identifying data were removed and only identification numbers were kept to maintain anonymity. In order to ensure confidentiality, the data are stored electronically on a secured password-protected server of the researchers' university as well as in a password-protected database. Only members of the research team have access to the data.

Results

Main Career Information Sources

Table 1 presents usage frequency of career information sources. Results show that non-human sources are more frequently used by guidance practitioners than other sources. Indeed, most participants regularly use specialized educational and occupational information websites (89.1%), educational institutions' websites (85.6%), and websites of regional

Table 1

Usage frequency of career information sources

	N	Occasional use (%)	Regular use (%)
Non-human sources			
Specialized educational and occupational information websites	404	10.9	89.1
Educational institutions' websites	402	14.4	85.6
Websites of regional college and professional admission services	404	36.4	63.6
Newsletters	401	61.6	38.4
Government agencies and departments websites	398	63.3	36.7
Leaflets and brochures	402	69.4	30.6
Specialized books on educational and occupational information	398	72.1	27.9
Online job search engines	402	78.6	21.4
Professional orders and associations websites	404	82.2	17.8
Social media	401	83.5	16.5
Labour market partners websites	400	84.0	16.0
Websites of employment assistance organisations	399	88.7	11.3
Abroad study and employment websites	401	95.5	4.5
Institutional human sources			
Guidance practitioners within the organisation	365	54.2	45.8
Other professionals within the organisation	388	63.4	36.6
Non-practitioners within the organisation[13]	382	86.9	13.1
Non-institutional human sources			
Guidance practitioners outside the organisation	400	77.5	22.5
Other professionals outside the organisation	400	86.0	14.0
Non-practitioners outside the organisation	395	93.9	6.1
Specialized lists or discussion forums	397	94.2	5.8

[13] Non-practitioners within the organization refer here to people whose occupation does not correspond to the conception of the profession as generally defined in the sociology of professions and which meets the general characteristics of practitioners in guidance, mental health and human relations in Québec (specific expertise, university training, complex knowledge, regulated access to the field of practice) (Dubar et al., 2015).

college and professional admission services (63.6%). Human sources are much less frequently used by guidance practitioners, the most regularly used being institutional sources: 45.8% of participants consult with fellow guidance practitioners within their organisation while 32.6% consult with other professionals within their organisation.

Main Categories of Career Information Sought

Table 2 shows the frequency at which guidance practitioners seek different categories of career information. Regarding educational information, guidance practitioners most regularly seek information about admission requirements for training programs (91.8%); institutions where training programs are offered (91.0%); training programs content (88.4%) and employment opportunities related to training programs

(76.5%). Occupational information most regularly sought are those regarding tasks, duties and training related to professions; trades and jobs (92.8%); working conditions associated with professions; trades and jobs (85.4%); personal characteristics associated with professions, trades and jobs (83.6%); specific requirements or regulations associated with professions; trades and jobs (79.5%), as well as information about job offers in the labour market (56.4%).

Table 2

Usage frequency of career information

	N	Occasional use (%)	Regular use (%)
Educational information			
Admission requirements for training programs	379	8.2	91.8
Institutions where training programs are offered	378	9.0	91.0
Training programs description and content	378	11.6	88.4
Employment opportunities and prospects related to training programs	379	23.5	76.5
Financial support measures in training programs	376	75.0	25.0
Support measures for mental health as well as physical and intellectual limitations related to training programs	375	84.8	15.2
Support measures regarding student retention in training programs	377	84.9	15.1
Psychosocial support measures and programs related to training programs	375	89.3	10.7
Legal or regulatory information on training programs	372	92.7	7.3
Occupational information			
Tasks, duties and training related to professions, trades or jobs	377	7.2	92.8
Working conditions associated with professions, trades and jobs	377	14.6	85.4
Personal characteristics associated with professions, trades and jobs	377	16.4	83.6
Specific requirements or regulations associated with professions, trades and jobs	375	20.5	79.5
Information about job offers in the labour market	376	43.6	56.4
Information on labour market standards and regulations	372	76.6	23.4
Job search strategies and techniques	375	77.9	22.1
Support measures and programs related to continuing education	373	82.6	17.4
Employability support measures and programs	368	83.4	16.6
Support measures for mental health as well as physical and intellectual limitations related to employment integration or adjustment	374	86.4	13.6
Psychosocial support measures and programs related to employment integration or adjustment	372	87.4	12.6
Legal information related to employment integration or adjustment	369	95.4	4.6
Other information			
Information about mental disorders and mental health	373	73.5	26.5
Medical information	368	78.8	21.2

Associations Between Career Information Practices and Work Context

Table 3 presents the results of independent sample t-tests examining associations between field of study and usage frequency of career information sources and categories of career information. Significant associations, with moderate to large effect size, were found between field of study and usage frequency of non-human sources ($t(264) = -2.03$; $p = .04$; $d = .58$), information regarding school-based support measures ($t(264) = -2.40$; $p = .02$, $d = .81$), as well as information on employability and related support measures ($t(264) = -2.32$; $p = .02$, $d =$

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Table 3

Associations between field of study and usage frequency of career information sources and categories of career information

	Career guidance/development (n = 259)		Other fields (n = 7)			
	M	SD	M	SD	*t*	*d*
Sources of career information[14]						
Institutional human sources	1.98	.77	1.86	1.14	.40	.12
Non-institutional human sources	1.45	.62	1.59	.87	-.65	.20
Non-human sources	2.05	.47	2.40	.70	-2.03*	.58
Categories of career information						
Characteristics of training programs	3.25	.65	3.39	.57	-.58	.24
School-based support measures	1.44	.75	2.14	.96	-2.40*	.81
Information and characteristics related to occupations, trades and jobs	3.24	.67	3.39	.56	-.60	.25
Employability and related support measures	1.48	.85	2.23	.98	-2.32*	.83

Note. * = p < .05. M = Mean. SD = Standard deviation.

[14] The items assessing the types of career information sources are shown in Table 1 and the items assessing the career information categories are shown in Table 2.

.83). Specifically, guidance practitioners with a career guidance background less frequently used non-human sources and less frequently sought information about school-based support measures as well as employability and related support measures than other practitioners.

Table 4 provides the results for the analyses of variance with post-hoc tests[12] examining associations between workplace and usage frequency of career information sources and categories of career information. Significant associations were found between workplace and the use of institu-

12 When variances are equal, Tukey's correction is retained for post-hoc comparisons. When variances are unequal, Welch's test, as well as the Games-Howell correction for post-hoc comparisons are used.

tional human sources ($F_w(5,338)$ = 2.62; p = .03; ω^2 = .05), non-institutional human sources ($F(5,338)$ = 3.05; p = .01; ω^2 = .03), information regarding school-based support measures ($F_w(5,338)$ = 4.47; p = .001; ω^2 = .04), information and characteristics related to occupations, trades and job ($F_w(5,338)$ = 4.53; p = .001; ω^2 = .04), as well as information regarding employability and related support measures ($F(5,338)$ = 15.85; p < .001; ω^2 = .18). More specifically, according to post hoc comparisons using Bonferroni correction (when variances were equal) and Games-Howell (when variances were unequal), self-employed guidance practitioners use institutional human sources less frequently than guidance practitioners who work in public school

boards, CEGEPs, universities or community organisations, but use non-institutional human sources more often than guidance practitioners working in public school boards, CEGEPs or community organisations.

It also appears that guidance practitioners who work in public school boards and community organisations as well as self-employed practitioners use non-human sources more frequently than those working in other workplaces. In addition, guidance practitioners who work in CEGEPs less frequently seek information about school-based support measures than guidance practitioners working in public school boards and community organisations. CEGEP practitioners also less frequently seek information

Table 4

Associations between workplace and usage frequency of career information sources and categories of career information

	Public school board (n=166)	CEGEP (n=47)	University (n=19)	Community organisation (n=63)	Self-employed (n=20)	Other (n=14)		
	M SD	M SD	M SD	M SD	M SD	M SD	$F_{(5,338)}$	ω^2
Sources of career information								
Institutional human sources	2.01 (.74)$_a$	1.96 (.66)$_a$	2.02 (.67)$_a$	2.05 (.75)$_a$	1.08 (1.03)$_b$	1.87 (.82)$_{a,b}$	2.62* ^{e}	.05
Non-institutional human sources	1.39 (.63)$_a$	1.38 (.64)$_a$	1.64 (.72)$_{a,b}$	1.39 (.62)$_a$	1.69 (.61)$_b$	1.38 (.59)$_{a,b}$	3.05*	.03
Non-human sources	2.03 (.47)$_a$	1.99 (.45)$_{a,b}$	2.02 (.54)$_{a,b}$	2.09 (.42)$_a$	2.09 (.60)$_a$	1.81 (.45)$_b$	2.26*	.02
Categories of career information								
Characteristics of training programs	3.31 (.54)	3.37 (.59)	3.03 (.87)	3.34 (.64)	3.29 (.87)	2.55 (1.06)	2.08^e	.05
School-based support measures	1.49 (.72)$_a$	1.12 (.51)$_b$	1.77 (1.01)$_{a,b}$	1.62 (.70)$_a$	1.54 (.88)$_{a,b}$	1.14 (.87)$_{a,b}$	4.47** ^{e}	.04
Information and characteristics related to occupations, trades and jobs	3.19 (.64)$_a$	3.10 (.70)$_a$	3.00 (1.03)$_{a,b}$	3.51 (.49)$_b$	3.30 (.78)$_{a,b}$	2.96 (.85)$_{a,b}$	4.53** ^{e}	.04
Employability and related support measures	1.34 (.75)$_a$	1.06 (.67)$_{a,b}$	1.74 (.93)$_{a,c}$	2.12 (.72)$_c$	1.81 (.83)$_c$	1.70 (.75)$_{a,c}$	15.85***	.18

Note. n = 339. M = Mean. SD = Standard deviation. ^{e}Welch's statistic
Different subscript letters indicate significant differences between means at the $p < .05$ level. Same subscript letters indicate non-significant differences between means at the $p < .05$ level.
* p < .05. ** p < .01. *** p < .001

Table 5

Comparison between practitioners who serve individuals who are not functionally proficient in either French or English and those who don't on usage frequency of career information sources and categories of career information

	Serving individuals (n = 42)		Not serving individuals (n = 283)			
	M	SD	M	SD	t	d
Sources of career information						
Institutional human sources	2.00	.63	1.93	.82	-.50	.09
Non-institutional human sources	1.47	.65	1.44	.64	-.31	.05
Non-human sources	2.16	.39	2.02	.50	-1.68	.30
Categories of career information						
Characteristics of training programs	3.34	.64	3.21	.69	-1.14	.19
School-based support measures	1.83	.71	1.42	.76	-3.29**	.56
Information and characteristics related to occupations, trades and jobs	3.43	.58	3.20	.68	-2.10*	.37
Employability and related support measures	1.94	.79	1.46	.83	-3.52***	.59

Note. *p < .05. ** p < .01. *** p < .001. M = Mean. SD = Standard deviation.

about employability and related support measures than self-employed guidance practitioners as well as those working in community organisations, universities, and other workplaces. Moreover, public school boards practitioners less frequently seek information about employability and related support measures than community organisations and self-employed guidance practitioners.

Finally, community organisation practitioners more frequently seek information and characteristics related to occupations, trades and jobs than public school boards or CEGEP practitioners.

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Table 6

Comparison between practitioners who serve individuals without a high school or vocational training diploma and those who don't on usage frequency of career information sources and categories of career information

	Serving individuals (n = 236)		Not serving individuals (n = 89)			
	M	SD	M	SD	t	d
Sources of career information						
Institutional human sources	1.99	.75	1.80	.90	-1.84	.24
Non-institutional human sources	1.45	.65	1.41	.61	-.59	.07
Non-human sources	2.07	.49	1.96	.49	-1.78	.22
Categories of career information						
Characteristics of training programs	3.28	.63	3.09	.78	-2.23*	.26
School-based support measures	1.55	.77	1.26	.73	-3.16**	.39
Information and characteristics related to occupations, trades and jobs	3.28	.63	3.11	.77	-2.11*	.25
Employability and related support measures	1.61	.84	1.28	.80	-3.24**	.40

Note. *p < .05. ** p < .01. *** p < .001. M = Mean. SD = Standard deviation.

Table 7

Comparison between practitioners who serve individuals with mental health or neuropsychological disorders and those who don't on usage frequency of career information sources and categories of career information

	Serving individuals (n = 42)		Not serving individuals (n = 283)			
	M	SD	M	SD	t	d
Sources of career information						
Institutional human sources	1.95	.77	1.92	.86	-.25	.03
Non-institutional human sources	1.45	.66	1.41	.61	-.54	.06
Non-human sources	2.06	.47	2.00	.52	-1.03	.12
Categories of career information						
Characteristics of training programs	3.31	.65	3.07	.72	-3.04**	.35
School-based support measures	1.61	.72	1.20	.80	-4.72***	.54
Information and characteristics related to occupations, trades and jobs	3.28	.68	3.13	.67	-1.88	.22
Employability and related support measures	1.64	.80	1.28	.86	-3.75***	.43

Note. *p < .05. ** p < .01. *** p < .001. M = Mean. SD = Standard deviation.

The aforementioned differences all showed small to moderate effect sizes, except for the one related to the use of information regarding employability and related support measures, which showed a large effect size according to Kirk's (1996) standards.

Furthermore, correlations between years of professional experience and usage frequency of career information sources and categories of career information by guidance practitioners revealed only one significant positive association, although small, between years of experience and usage of non-human sources (r = .14; p = .01).

Subsequent tables (Tables 5 to 10) present independent sample t-tests results examining differences in usage frequency of career information sources and in categories of career information according to the populations served. Significant associations were found for all populations, except for immigrant populations. Thus, guidance practitioners who work with immigrant populations do not differ from those who don't on their information practices.

As presented in Table 5, guidance practitioners who work with individuals who are not functionally proficient in either French or English more frequently seek information about school-based support measures (t(323) = -3.29, p = .001, d = .56) as well as information regarding employability and related support measures (t(323) = - 3.52, p < .001, d = .59) than other guidance practitioners.

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Table 8

Comparison between practitioners who serve individuals with physical disabilities and those who don't on usage frequency of career information sources and categories of career information

	Serving individuals (n = 91)		Not serving individuals (n = 234)			
	M	SD	M	SD	t	d
Sources of career information						
Institutional human sources	1.99	.73	1.92	.82	-.79	.10
Non-institutional human sources	1.56	.63	1.39	.64	-2.22*	.27
Non-human sources	2.13	.46	2.00	.50	-2.18*	.27
Categories of career information						
Characteristics of training programs	3.31	.67	3.20	.69	-1.36	.17
School-based support measures	1.68	.78	1.39	.75	-3.21**	.39
Information and characteristics related to occupations, trades and jobs	3.39	.58	3.17	.70	-2.73**	.34
Employability and related support measures	1.78	.88	1.41	.80	-3.71***	.44

Note. *p < .05. ** p < .01. *** p < .001. M = Mean. SD = Standard deviation.

Table 9

Comparison between practitioners who serve individuals with intellectual disabilities and those who don't on usage frequency of career information sources and categories of career information

	Serving individuals (n = 53)		Not serving individuals (n = 272)			
	M	SD	M	SD	t	d
Sources of career information						
Institutional human sources	2.23	.63	1.88	.81	-3.53**	.48
Non-institutional human sources	1.60	.65	1.41	.64	-2.08*	.31
Non-human sources	2.11	.48	2.03	.49	-1.16	.17
Categories of career information						
Characteristics of training programs	3.27	.58	3.22	.70	-.48	.08
School-based support measures	1.78	.68	1.41	.77	-3.27**	.51
Information and characteristics related to occupations, trades and jobs	3.31	.58	3.21	.69	-1.00	.16
Employability and related support measures	1.74	.81	1.47	.84	-2.18*	.33

Note. *p < .05. ** p < .01. *** p < .001. M = Mean. SD = Standard deviation.

Table 10

Comparison between practitioners who serve individuals with limited skills in information and communications technologies and those who don't on usage frequency of career information sources and categories of career information

	Serving individuals (n = 42)		Not serving individuals (n = 283)			
	M	SD	M	SD	t	d
Sources of career information						
Institutional human sources	1.98	.74	1.90	.85	-.90	.10
Non-institutional human sources	1.48	.63	1.40	.65	-1.23	.13
Non-human sources	2.12	.48	1.96	.49	-2.95**	.32
Categories of career information						
Characteristics of training programs	3.24	.67	3.21	.69	-.41	.05
School-based support measures	1.66	.76	1.29	.73	-4.50***	.49
Information and characteristics related to occupations, trades and jobs	3.29	.74	3.18	.61	-1.42	.15
Employability and related support measures	1.82	.80	1.24	.77	-6.69***	.73

Note. *p < .05. ** p < .01. *** p < .001. M = Mean. SD = Standard deviation.

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Similarly, guidance practitioners who work with individuals without a high school or vocational training diploma more frequently seek information about school-based support measures (t(323) = -3.16, p = .002, d = .39), as well as information on employability and related support measures (t(323) = -3.24, p = .001, d = .40) than other guidance practitioners do (see Table 6).

Regarding guidance practitioners who work with individuals with mental health or neuropsychological disorders, as compared to other guidance practitioners, they more frequently seek information about characteristic of training programs (t(323) = - 3.04, p = .003, d = .35), school-based support measures (t (323) = -4.72, p < .001, d = .54) and employability and related support measures (t(323) = -3.75, p < .001, d = .43) (see table 7).

Guidance practitioners who work with individuals with physical disabilities use non-institutional human sources (t(323) = -2.22, p = .03, d = .27) and non-human sources (t(323) = -2.18, p = .03, d = .27) more frequently than other guidance practitioners. In addition, they more frequently seek information regarding school-based support measures (t(323) = -3.21, p = .001, d = .39), information and characteristics related to occupations, trades and jobs (t(323) = -2.73, p = .007, d = .34) and employability and related support measures (t(323) = - 3.71, p < .001, d = .44) (see Table 8).

Guidance practitioners who work with individuals with intel-lectual disabilities use institutional human sources (t(323) = -3.53, p = .001, d = .48) and non-institutional human sources (t(323) = 2.08, p = .04, d = .31) more frequently than other guidance practitioners. They also more frequently seek information about school-based support measures (t(323) = -3.27, p = .001, d = .51) and employability and related support measures (t(323) = 2.18, p = .03, d = .33) (see Table 9).

As for guidance practitioners who work with individuals with limited skills in information and communication technologies, they more frequently use non-human sources (t(323) = -2.95, p = .003, d = .32) than other guidance practitioners and more frequently seek information regarding school-based support measures (t(323) = -4.50, p < .001, d = .49), as well as employability and related support measures (t(323) = -6.69, p < .001, d = .73) (see Table 10).

Discussion

The discussion is struc-tured around six themes (Themes 1 to 3 for the first two specific research objectives, Themes 4 and 5 for the third specific research objective and Theme 6 regarding implications for practice). Regarding the results of association between career information practices and work context, given the number of analyses performed on the sample, the probability of Type I error is increased. To overcome this limitation, we decided to focus on results with moderate effect sizes or greater (d ≥ 0.50; ω^2 ≥ 0.06) in this section. The effect sizes make it possible to better assess the magnitude of the differences between the groups than the p-value (Sulli-van & Feinn, 2012).

The Digital and Institutional Nature of Privileged Sources of Information

The predominance of digital sources, all institutional or formal, testify their well-esta-blished importance in the career information environment of guidance practitioners, compared to the other categories of sources (e.g., specialized books, leaflets), which is consistent with studies that highlight the importance of digital technology in information practices (CIMT, 2019; Moring, 2017; Sampson et al., 2019). If human sources are less sought, the ones sought are usually institutio-nal since it is above all guidance practitioners within the organiza-tion who are mobilized, followed by other practitioners but still within the organization (e.g, psy-chologists, social workers). The institutional nature of the main sources mobilized thus seems to indicate that their expertise in career information constitutes a criterion of choice for guidance practitioners (Clavier, 2019; Sam-son et al., 2014).

Predominance of Career Information Related to Characteristics of Training Programs and Occupations

Information concerning characteristics of initial training

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programs (admission require-ments, content, institutions) is more often sought than informa-tion about school-based support measures (e.g. financial support, psychosocial support). The most frequently sought occupational information relates directly to the professions (tasks, functions, wor-king conditions, personal characte-ristics, job offers) rather than em-ployment-related support measures (e.g., employment support, support programs). These categories of in-formation therefore seems central in guidance practitioners' interven-tions regardless of their sector of activity. Considering that nearly 90% of the sample hold a master's degree in career counseling, it is possible that the main part of their professional tasks is to support people in clarifying educational or occupational choice (Samson et al., 2014) in different ways (e.g., individual or group counseling, information sessions).

On another note, anything relating to integration and reten-tion in employment and continuing training did not constitute priority information sought by the majority of the sample. In addition, given that 64.5% of guidance practitio-ners declare working with people with mental health or neuropsy-chological disorders, it may be surprising that seeking informa-tion on various support measures (e.g., school perseverance, mental health) does not show up as a regular information practice.

Information and Sources Beyond Educational and Occupational Information

The mobilization of prac-titioners from other disciplines as information sources suggests that guidance practitioners also seek non-career related information deemed relevant for their interven-tions. Considering that a majority of guidance practitioners reported working with populations with mental health and neuropsycho-logical disorders, these characte-ristics might influence their inter-ventions to the point of seeking specialized information or sources. Table 1 indicates that medical, mental disorders and mental health information are regularly sought and used by at least one in five practitioners in the sample (while over 60% reported working with populations with these characteris-tics). This observation is consistent with studies highlighting the growing complexity of guidance interventions due in particular to issues other than career among the populations served (Walker & Peterson, 2012). On the other side, results also show that information related to support measures (men-tal health, psychosocial, etc.) is not frequently sought.

Workplace

The organizational prox-imity induced by working in the same workplace appears to be an element facilitating access to the main human sources declared that are guidance practitioners and other professionals within the

organization. This proximity (or-ganizational, social) with human information source is well docu-mented (Agarwal et al., 2011; Su-peno et al., 2016). Having access to practitioners offering support services might influence guidance practitioners' information prac-tices. They would not only be less inclined to consult non-human sources, benefitting from infor-mation that is likely to be more personalized and contextualized or referring the individual served directly to these practitioners – which means not having to seek specific information on support measures (e.g., support school, mental health and psychosocial adaptation).

On another point, Table 4 indicates that CEGEP practitioners less frequently sought information about employability and related support measures than self-em-ployed guidance practitioners as well as those working in commu-nity organisations, universities and other workplaces. In the same way, public school boards practitioners less frequently sought information about employability and related support measures than community organisations and self-employed guidance practitioners.

Associations Between Characteristics of Populations Served, Information and Sources

Information on acade-mic support measures is more frequently sought by guidance practitioners who support people who are not proficient in either

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French or English, who suffer from mental or neuropsychological disorders, with intellectual disabilities or with limited skills in information and communication technologies. This seems to indicate that supporting the career choice of these populations require specific information on support measures for school perseverance or psychosocial adaptation. This could therefore explain why other practitioners – probably in the field of psychosocial support – are declared as information sources as discussed previously.

In addition, information on employment and the associated support measures are more frequently sought by guidance practitioners who work with people who are not proficient in either French or English and those with limited skills in information and communication technologies. These two characteristics seem to indicate a matters of concern for these populations' employment. However, more analyses are needed to determine whether these guidance practitioners work more in community organizations for example whose mandate is focused on support for socio-professional integration.

The characteristics of populations served are also associated with certain types of sources. Guidance practitioners who work with people with intellectual disabilities more frequently use institutional human sources. This characteristic may imply such complexity in guidance intervention that it requires specialized human source in order to obtain personalized information – which

a non-human source could not provide.

The survey did not investigate the reasons or circumstances in which these guidance practitioners may or may not mobilize human sources. Here is a research avenue to explore considering the important role of human sources in information practices. The model of Leckie et al. (1996) turned out to be theoretically relevant because results show that some contextual elements do influence the guidance practitioners' information practices (characteristics of the populations served and field of expertise). Other elements of the model, such as professional experience identified as important in other professional groups (Kwasit-su, 2003), was not associated to information practices. In addition, conceptually distinguishing human and non-human sources, as well as institutional ones, made it possible to refine the analysis.

Implications for Practice

While digital information sources have numerous advantages (Beidoglu et al., 2015), they nevertheless raise questions about the skills needed to assess their validity, quality and credibility as well as the information conveyed (Sampson et al., 2018). Faced with the rapid growth of digital information sources, guidance practitioners must remain vigilant and critical (Sampson & Osborn, 2014; Shen, 2016). A posture that can be developed either by following dedicated training courses or by calling on their colleagues

to cross-check the information collected. In addition, the free availability of several web information sources also makes them accessible to the people served. First, it can lead them to questioning the guidance practitioner's expertise. Second, having access to information sources does not mean that the person is able to exploit their full potential as part of their career choice without the support of a guidance practitioner (Milot-Lapointe et al., 2017).

Our results showed the influence of the context and certain characteristics of the populations served which should be further explored in two directions. First, in terms of information seeking and needs of guidance practitioners. Secondly, in terms of adequacy between information sought and vocational needs of populations served. Indeed, information seeking or the consultation of non-career related sources of information by guidance practitioners working with populations suffering from various disabilities (neuropsychological, intellectual) or linguistic difficulties raise important questions about initial and continuing training of guidance practitioners on career information. In this regard, guidance practitioners working in organizations seem to be able to rely on other guidance practitioners as well as practitioners from related disciplines as human information sources.

On the other side, we may have a legitimate concern about the quality of the information support available (in terms of recency,

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relevance and precision) for guidance practitioners working in organizations with less expertise or working alone like self-employed guidance practitioners. In this context, participation in discussion groups of guidance practitioners (face-to-face or via the Internet through discussion forums, for example) may constitute a relevant alternative to overcome this issue. Especially since we know that these practitioners may have doubts about their career information skills (OCCOPPQ, 2004a, 2004b).

Conclusion

The objective of this study was to describe the career information practices of guidance practitioners in Québec. The main findings show the predominance of digital and institutional information sources. The preference for institutional sources probably illustrates their credibility granted by guidance practitioners. Results also indicate that guidance practitioners mainly seek information directly related to training programs and professions. It should also be noted that, although almost two-thirds of the sample mentions working with people with mental and neuropsychological disorders, information related to support measures (e.g., mental health, school perseverance) is little sought after. Finally, among the different parameters of the work context (field of expertise, sector of activity, population served, professional experience) that are likely to influence the sources and information sought, some populations' characteristics and to a lesser extent, the field of expertise and the sector of activity point to some differences in information practices.

Limitations

Given that our sample is not representative of the population of guidance practitioners in Québec, the results cannot be generalized. It would be difficult to obtain such a representative sample since there is no organization in Québec gathering all guidance practitioners, given the diversity of their initial training, work contexts and populations served. It is also important to remember that multiple analyses were performed on the sample, which increases the probability of Type I error. As previously mentioned, the discussion focused on results with moderate or large effect sizes to overcome this limitation. In addition, a significant part of the sample works in the education sector – which gathers half of Québec's career counsellors, members of the OCCOQ (OCCOQ, 2021). On the basis of this research, future research could focus on certain sectors of activity – such as employment, rehabilitation, health and social services for example – or certain professional sub-groups specifically (e.g., employment counsellor, educational and occupational counsellor) to identify the potential particularities of their information practices.

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