

Effect of Labour Market Information (LMI): Comparison Between Independent and Assisted Use of LMI

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Abstract

According to a large meta-analysis (Brown and Ryan Krane, 2000), labour market information (LMI) is a critical ingredient in achieving career goals of individuals. This study aims to assess the effect of LMI use, with and without the help of a counsellor, taking into account the possible presence of differential effects according to client consultation needs (career choice

or job search). Clients ($n = 203$) in job centres in New Brunswick and Saskatchewan were assigned randomly to two delivery modes: the independent self-help (use of LMI without help) or the assisted self-help (use of LMI with help of a counsellor). The results suggest that the LMI effect over time, although it is significant in both groups, is more important when participants are assisted by a counsellor. At the clinical level, this effect is moderate (Cohen, 1988). This result does not differ significantly according to the client consultation needs.

Résumé

D'après une importante méta-analyse (Brown et Ryan Krane, 2000), l'information sur le marché du travail (IMT) est un ingrédient critique à l'atteinte des objectifs de carrière des personnes. La présente étude a pour but de vérifier l'effet de l'utilisation de l'IMT, soit avec l'aide d'un conseiller ou sans son aide, et ce, en tenant compte de la possible présence d'effets différentiels liés au besoin de consultation des clients (choix de carrière ou recherche d'emploi). Pour ce faire, des personnes ($n = 203$) consultant dans des Centres d'emploi situés au Nouveau-Brunswick et en Saskatchewan ont été assignées de manière aléatoire à une méthode autonome (utilisation de l'IMT sans l'assistance d'un conseiller) ou assistée (utilisation de l'IMT avec l'assistance d'un conseiller). Les résultats suggèrent

que l'effet de l'IMT dans le temps, bien qu'il soit significatif chez les deux groupes, s'avère plus important lorsque les participants sont assistés par un conseiller. Sur le plan de la signification clinique, cet effet est de taille moyenne (Cohen, 1988). Ce résultat ne diffère pas significativement selon le besoin de consultation des participants.

Introduction

Labour market information (LMI) is an important component of the personal career development process (Gati and Tal, 2008; Gysbers, Heppner and Johnston, 2014; Patton and McCrindle, 2001; Sampson, Reardon, Peterson and Lenz, 2004; Savickas, 1999). In fact, "la cueillette d'information augmente la connaissance de soi et aide à prendre conscience des choix de formation et de carrière qui conviennent le mieux" (Savickas, 1999, p. 61) [*gathering information helps individuals become more self-aware and understand which training and career choices are most suitable*]. One major meta-analysis (Brown and Ryan Krane, 2000) reports that labour market information is one of the five essential ingredients in meeting personal career goals. This component appears to be all the more important as obtaining labour market information is often a need and a request explicitly expressed by clients (Masdonati, Perdrix, Massoudi and Rossier, 2014; Multon, Wood, Heppner and

Gysbers, 2007; Rochlen, Milburn and Hill, 2004). Although large quantities of LMI are available, it is often inaccurate, biased and therefore of questionable quality (Gati and Levin, 2015). According to a literature review (Savard, Michaud, Bilodeau and Arseneau, 2007), setting aside its quantity, quality and accessibility, LMI has a significant effect on career development only inasmuch as it is provided by a counsellor. In these authors' opinion, it could be argued that the counsellor plays an important role in helping individuals be more receptive to new information that is potentially useful to their career development process. Based on the findings of a study by Foskett and Hemsley-Brown (1999), it could also be argued that such assistance is important because many people are unaware of information relevant to their career development when it is not directly relevant to their own interests. This could be due to the fact that individuals tend to take an interest in information based on factors of desirability (Baltz, 1995) and selective open-mindedness, focusing on information that reinforces things they already know (Bougnoux, 1995).

Accordingly, although individuals have ready access to computerized LMI tools designed to provide information that is useful to their career development, Amundson (2000) believes that "ces outils ne sont efficaces que s'ils sont intégrés dans des relations de counselling positives" (p. 45) [*these tools are effective only if they are incorporated into positive counselling relationships*]. From this perspective, according to Savard et al. (2007), it is also possible "que l'information en soi n'est pas suffisante pour guider les individus dans leur orientation.

Sans accompagnement adéquat, ils ne sont pas en mesure de considérer tout l'information nécessaire pour faire un choix éclairé" (p. 166) [*that the information itself is insufficient to guide the individuals on their [career] paths. Without adequate support, they are unable to consider all the information they need to make a well-informed choice*]. Similarly, in our fast-changing world of work (Organisation for Economic Co-operation and Development, 2013), every individual has his own career path and there "peut y avoir des besoins différents de clarification de l'information et des questions différentes relative à leur propre situation" (Savard et al., 2007, p. 163) [*may therefore be differing needs regarding information to be clarified and different questions about their own situations*]. This also highlights the importance of supplying personalized information that reflects the individual's needs and personal situation (Savard, Gingras and Turcotte, 2002), both in choosing a career and finding employment.

In view of the preceding, although previous studies suggest that LMI has a positive effect on career development and that that effect is maximized when information is passed on by a counsellor, Savard et al. (2007) point to several methodological shortcomings related to internal and external validity that considerably limit the scope of that finding. First and foremost, previous studies did not isolate the effect of LMI use from those of other career counselling intervention components not directly related to LMI (for instance, self-awareness questionnaires and activities to explore and clarify interests, values and aptitudes); this is critical if we are to ascertain whether the effects observed on career

development stem from LMI use rather than other career counselling intervention components. In addition, previous studies did not consider the influence of clients' individual consultation needs (career choice or job search) in coming to this finding. Furthermore, most of these studies are over 20 years old, and therefore do not reflect clients' greater accessibility to LMI, in particular via the Internet.

Study Objectives

In light of the methodological shortcomings mentioned earlier, this study aims to assess the effect of LMI use, with and without the help of a counsellor, taking into account the possible presence of differential effects related to client consultation needs (career choice or job search).

More specifically, the study has two main objectives:

First objective: Determine to what degree the assisted self-help method increases the effect of the client's LMI use compared to the independent self-help method.

Second objective: Analyze the presence of differential effects with the assisted self-help method compared to the independent self-help method, according to client consultation needs (career choice or job search).

Method¹

Participants

A total of 228 people took part in the study. However, 20 of them discontinued their participation and 5 did not fill out the questionnaires in their

entirety. The client sample used for this study therefore includes 203 people, namely 104 women (51%) and 99 men (49%) between 19 and 64 years of age ($M = 41$ years) who sought assistance at employment centres in New Brunswick or Saskatchewan. One hundred and twenty people in the sample live in New Brunswick, 71 (57%) of whom speak English as their primary language and 52 (43%), French. The 83 people who live in Saskatchewan all speak English as their primary language. A total of 24 people (12%) reported not having completed a high school diploma, while 23 (11%) completed a high school diploma, 35 (17%) have completed a vocational program, 49 (24%) have a college-level diploma, 34 (17%) have completed a bachelor's degree, 5 people (2%) have a master's degree and 33 people (16%) did not indicate their level of education. At the start of the study, 157 people out of the total of 203 participants (77%) were unemployed, 26 (13%) held part-time employment, 19 (9%) held full-time employment, and a single person did not indicate an employment status.

Instrument

To measure the effect of LMI, a self-administered questionnaire based on the Canadian Research Working Group on Evidence-Based Practice in Career Development (CRWG) evaluation framework was prepared specifically for this study (see Baudouin, Bezanson, Borgen, Goyer, Hiebert, Lalande et al., 2007). For the purposes of this study, several CRWG researchers agreed on items that were the best match for the evaluation framework. The questionnaire

consists of 14 items (ranked according to a five-point Likert scale graduated from 0 to 4) which are divided into three categories of effects clients may experience following their participation in interventions: changes in *knowledge*² pertaining to LMI (4 items), changes in *skills*³ in using LMI (5 items), and changes in *personal attributes*⁴ (more specifically in regard to confidence and optimism) (5 items). A high score in these three categories suggest superior LMI knowledge and skills as well as greater levels of confidence and optimism.

The analysis of the items and questionnaire's structure was based on the data collected from this study. The correlation between each item and the total score for the subscale to which it belongs are stronger than the correlation with the total score for the two other subscales. Nevertheless, an exploratory factor analysis with oblique rotation suggests that a single factor accounts for 57% of the variance in the results. In addition, the Kaiser-Meyer-Olkin measure of sampling adequacy is 0.947, considered to be excellent (Field, 2009; Tabachnick and Fidell, 2001). For this reason, only the combined reading score is considered. This score provides an estimate of the effects related to LMI knowledge and skills and an estimate of confidence and optimism levels regarding the achievement of career goals

The questionnaire has an internal consistency coefficient (Cronbach's alpha) of 0.94 for the combined score, signifying high reliability (Bernaud, 2014). This coefficient is the same for participants who completed the English version as for those who completed the French version. In

keeping with the CRWG's effect indicators, one dichotomous-response (yes/no) question was also added to gauge the LMI effect on the pursuit of subsequent career-choice or job-search steps. More specifically, the added question ascertains whether clients have a plan of action for using the documents and information resources acquired in the course of the study.

Procedure

The study lasted approximately three months. The researchers began by conducting interviews with the counsellors, the people responsible for delivering client services, to establish a standard protocol for evaluating initial employability that is also able to identify the consultation need (career choice or job search). Next, separate LMI binders were developed to address career-choice and job-search needs.

Special care was taken in developing the binders to ensure that LMI use is the factor responsible for the changes observed in clients. The career-choice binder provides valuable LMI resources designed to expand knowledge of various professions and the labour market in general and to assist in preparing a plan

¹ This article is based on data from two research reports with the same purpose. Anglophones data (Hiebert, 2012) and French data (Savard and Paquette, 2012) were merged to increase the power of statistical analysis and derive more valid results.

² Sample item: I am aware of the existence of paper or Internet records that may help me find career/employment options.

³ Sample item: I am able to find the information that can help me make progress toward my career/employment goal.

⁴ Sample item: I am optimistic about the future and confident that I will meet my career goal.

of action. It also contains tips on accessing these resources, guidelines for interpreting information and matching it to personal characteristics, and suggestions for incorporating the information into a plan of action. For its part, the job-search binder provides specialized LMI resources designed to help users with preparing for their search (e.g., resumé drafting), conducting the search (e.g., networking) and starting a new job (e.g., working conditions). It also contains tips on accessing these resources, guidelines on interpreting the information and suggestions for incorporating the information into a plan of action.

Subsequently, participant selection was carried out in a deliberate fashion. Clients visited employment centres for assistance with their career choice or job search and underwent an initial interview to assess their employability in keeping with the centre's regular practices. Those identified as having consultation needs related to career choice or job searches were offered an opportunity to take part in the study. The nature of the research and a description of what was expected of them, the counsellors' role and the requirements for receiving the \$100 participation fee were explained. Clients who volunteered to take part then signed a form confirming their free and informed consent, after which they were assigned randomly and alternately to either the independent self-help method (using LMI binders without a counsellor's help) or assisted self-help method (using LMI binders with a counsellor's help) and, in deliberate fashion, to the type of intervention suited to their consultation need, namely

career choice or job search.

Next, all clients received a LMI binder to help them with the ensuing steps, regardless of the method to which they were assigned. For the assisted method, clients took part in two information and consultation sessions lasting 20 to 30 minutes each. The sessions were held in two phases. In the first phase, the counsellor reviewed the client's goal and the steps to achieve it. In the second phase, the counsellor provided information and advice regarding LMI. That guidance aimed to ensure that clients were able to find the resources they needed, that they were processing and understanding the information properly, and that they were able to draw connections between LMI and information about themselves.

Research Plan

This study used a factorial design involving two time levels (before and after the intervention). A *post-pre-evaluation* assessment approach was used since it provides a means of evaluating changes self-reported by clients in regard to their knowledge, skills and personal attributes in a single measurement time, meaning that they completed the post-test and pretest questionnaires during the same evaluation. For the pretest, they completed the questionnaire referring to the knowledge, skills and personal attributes that they believed they possessed at the commencement of the study, while for the post-test, they based their answers on the knowledge, skills and personal attributes they believed they possessed at the time of the evaluation. The *post-pre evaluation* took place four weeks after the study ended. This

type of evaluation aims to address problems that may arise as a result of the traditional pre-post approach which, in this research context, could produce an inaccurate evaluation of the intervention's effects (Rockwell and Kohn, 1989) because the pretest results are often overestimated. (Drennan and Hyde, 2008; Pratt, McGuigan and Katzev, 2000). This may be attributed to the fact that the participants, at the start of the experimentation phase, do not possess all the knowledge they need to properly answer the questions asked at the outset of the intervention program, which can invalidate the very idea of a pretest. From this perspective, asking the post-test and pretest questions at the end of the intervention program ensures that study participants have the necessary knowledge to adequately answer the questions and use the same frame of reference for both evaluations (Drennan and Hyde, 2008).

Results

Preliminary Analyses

T-tests for independent samples were performed to confirm the equivalency of the comparison groups. A first t-test suggests that there are no statistically significant differences ($t = 0.594$, NS) between the pretest combined scores for participants assigned to the assisted method ($M = 23.19$; $SD = 11.5$) and those of participants assigned to the independent method ($M = 24.02$; $SD = 11.1$). A second t-test suggests that there is a statistically significant difference ($t = 5.49$; $p < 0.01$) between the pretest combined scores for participants who consulted for a job-search-related need ($M = 19.87$; $SD = 10.37$) and those of participants who consulted for a

career-choice-related need ($M = 28.02$; $SD = 10.74$). This means that at the commencement of the study, participants who consulted for a job-search-related need report a higher level of LMI knowledge and skills as well as greater levels of optimism and confidence, as shown by their combined scale scores.

Combined Scale

To address the study’s two objectives, a repeated measures analysis based on three factors, namely measurement time (before and after), the assigned method (independent or assisted) and the intervention received according to consultation needs (career choice or job search), was performed with the combined score as the dependent

variable. The results presented in Table 1 show that scores over time (T) are considerably higher after the intervention than before it ($F = 796.11$; $p < 0.01$, $\eta^2 = 0.785$). In terms of its clinical significance, this effect is substantial (Cohen, 1988).

The main effect of the method (M) is non-significant ($F = 0.52$, *NS*). This means that when considering scores without regard to measurement time, the means for either group do not differ significantly. Nevertheless, the time (T) \times method (M) interaction is significant ($F = 9.15$; $p < 0.01$, $\eta^2 = 0.052$), meaning that the LMI effect over time, although significant in both groups, is greater when clients are assisted by a counsellor. In terms of its clinical significance, this effect is moderate (Cohen, 1988). In this

sense, and in regard to the study’s first objective, this result suggests that the assistance of a counsellor significantly increases the effect over time of the participant’s LMI use in terms of the combined score, when compared to independent LMI use.

Moreover, we see that the primary effect of the career-choice or job-search intervention (I) is significant ($F = 25.05$; $p < 0.01$, $\eta^2 = 0.12$), indicating that regardless of measurement time, participants who undergo the job-search intervention obtain higher scores than those who undergo the career-choice intervention. In terms of its clinical significance, this effect is major (Cohen, 1988). Moreover, the significant time (T) \times intervention (I) interaction ($F = 13.32$; $p < 0.01$); $\eta^2 = 0.06$) suggests that the

| Method | Career Choice | | Job Search | | Total | | F | | | | | | | | | |
|-------------|---------------|---------------|---------------|-------|---------------|--------------|-----|---------------|--------------|-----------------------|-------------|----------------------|---------------------|----------------------|-------------|---------------|
| | Before | After | Before | After | Before | After | | | | | | | | | | |
| | n | M (SD) | M (SD) | n | M (SD) | M (SD) | n | M (SD) | M (SD) | T (p) | M (p) | I (p) | T x M (p) | T x I (p) | M x I (p) | T x M x I (p) |
| Independent | 63 | 21.49 (11.01) | 42.05 (10.71) | 46 | 27.52 (10.40) | 44.54 (8.65) | 109 | 24.04 (11.12) | 43.10 (9.93) | 796.11 (<0.01) | 0.52 (0.47) | 25.05 (<0.01) | 9.15 (<0.01) | 13.32 (<0.01) | 1.62 (0.20) | 1.64 (0.20) |
| Assisted | 46 | 17.65 (9.06) | 44.63 (8.19) | 48 | 28.50 (11.14) | 48.13 (5.72) | 94 | 23.19 (11.50) | 46.41 (7.22) | | | | | | | |
| Total | 109 | 19.87 (10.37) | 43.13 (9.77) | 94 | 28.02 (10.74) | 46.37 (7.48) | 203 | 23.65 (11.26) | 44.64 (8.91) | | | | | | | |

Table 1: ANOVA Comparing Before and After Combined Mean Scores by Intervention Type and Using Two Methods.

| | Method | Yes | No |
|--|-----------------------|-----|----|
| Do you have a plan of action that will help you use the documents and information resources that you obtained? | Independent (n = 108) | 84 | 24 |
| | Assisted (n = 94) | 88 | 6 |

One piece of data is missing in the independent method.

Table 2: Plan of Action

LMI effect over time, although significant for participants who took part in both types of interventions, is greater when they took part in the career-choice intervention. In terms of its clinical significance, this effect is moderate (Cohen, 1988). This result must be interpreted with caution because preliminary analyses show that the combined scores of participants who undergo the career-choice intervention is lower at the outset of the study, suggesting that the two groups are not equivalent.

The method (M) \times intervention (I) interaction is non-significant ($F = 1.62$, NS), indicating that regardless of measurement time, the scores of individuals who took part in the career-choice and job-search intervention do not differ significantly, regardless of the method used (independent or assisted). In this respect, and in regard to the study's second objective, the time (T) \times method (M) \times intervention (I) interaction is also non-significant ($F = 1.64$, NS). This finding means that the LMI effect over time, which was seen to be greater for participants assigned to the assisted method, does not differ significantly depending on the intervention received (career choice or job search). It therefore appears that the assisted method contributes to a greater LMI effect over time and that this effect does not vary according to the intervention received.

Plan of Action

To address the study's two objectives, analyses were performed to determine to what extent the assisted method of LMI use, in comparison to the independent method of LMI use, affected the

likelihood of the participants having a plan of action at the study's conclusion. First, Table 2 shows that of the 94 participants assigned to the assisted method, 88 felt that they had a plan of action at the study's conclusion while 6 did not. For the 108 people assigned to the assisted method, 84 felt they had a plan of action while 24 did not. Overall, then, 94% of participants assigned to the assisted method and 78% of participants assigned to the independent method felt they had a plan of action at the study's conclusion. A K χ^2 -2 test indicates that there is a significant relationship ($\chi^2 = 9.97$, $p < 0.01$) between the method assigned (independent or assisted) and the likelihood that the participant had a plan of action at the study's conclusion. In regard to the study's first objective, it is therefore apparent that participants assisted by a counsellor are more likely to have a plan of action at the study's conclusion. At the clinical level, the phi index (0.002) indicates that this relationship is weak. In relation to the study's second objective, it is important to note that the intervention conducted (career choice or job search) has no significant relationship with the likelihood of having a plan of action.

Discussion

Summary of Findings

Based on the results reported herein, there is reason to believe that LMI use offers clients substantial benefits. Indeed, there is a considerable increase in the effect of the combined score, which measures an individual's knowledge of LMI, skills in using LMI, and confidence and optimism levels regarding the likelihood of achieving his career goals. It is

important to remember that the factor analysis of the questionnaire under study did not make it possible to distinguish between the three categories. Nevertheless, this study is distinguished by the fact that LMI use is isolated from other career counselling components that are not directly related to LMI (e.g., self-awareness questionnaires and activities to explore and clarify interests, values and aptitudes) and that LMI quality control was ensured by means of LMI binders remitted to participants to assist them in reaching their career goals. As a result, this study provides support for the meta-analysis by Brown and Ryan Krane (2000) according to which information on the labour market is a critical ingredient for the effect of career-development interventions.

In regard to the study's first objective, the results suggest that participants who were assisted by a counsellor report a considerably greater improvement in terms of their LMI knowledge and skills along with greater levels of optimism and confidence, as gauged by their combined scale scores. As mentioned above, at the clinical level this difference in the degree of improvement is moderate. The fact that participants were assigned randomly and alternately to the assisted or independent method supports the validity of this finding. In addition, this finding also supports two meta-analyses on career development (Brown and Ryan Krane, 2000; Whiston, Sexton and Lasoff, 1998), which report the moderate effect of career interventions when compared with control groups that did not receive any assistance from a counsellor. Moreover, we should point out that in contrast to these meta-analyses, participants who received no help

with LMI use did in fact use the LMI binders. They were actually exposed to the same information, but it appears that the assistance of a counsellor makes a substantial difference in the outcome.

This difference in the degree of improvement between individuals assigned to the independent method and those assigned to the assisted method may be due to factors inherent in research and in the processing of labour market information that are required to achieve their career goals. In regard to research, Gottfredsson (1996) states that the first sources of information consulted are generally those closest and most easily accessible to the individual in question. In this respect, there is reason to believe that the assisted method enabled participants to access sources of information that they would not have used without the assistance of a counsellor. In terms of information processing, a number of researchers suggest that individuals have a limited capacity to process large quantities of information (Amir, Gati and Kleiman, 2008; Kleiman and Gati, 2004; Krieshock, Black and McKay, 2009; Sampson, Lenz, Peterson, and Reardon, 1999). According to Gati and Tal (2008), people process only a limited portion of the information available in a selective and biased manner, and they have difficulty drawing connections between LMI and personal characteristics while taking the full complexity of the LMI into account. Although the LMI binders provide tips on information processing, assistance from a counsellor may make it easier to “decode” that information (Bernaud, Di Fabio and Saint-Denis, 2010). In fact, according to Bernaud, Di Fabio and Saint-Denis (2010), a counsellor can be seen as a “translator-interpreter” of the information. He can help give

the information meaning, explain it, put it into perspective and draw connections with the individual’s own characteristics (Bernaud et al., 2010). Still in regard to the study’s first objective, 78% of participants assigned to the independent method and 94% of those assigned to the assisted method have a plan of action for using the documents and information resources acquired. According to Gysbers et al. (2014), having a plan of action at the conclusion of an intervention is an effective way of enabling individuals to achieve their career goals because it allows them to plan, concretely and in real time, the steps they must take to achieve those goals. In this light, since most participants using both methods report that they have a plan of action at the study’s conclusion, there is reason to believe that the LMI binders, which included suggestions for developing a plan of action, played a part in that outcome. Nevertheless, we note that participants assigned to the assisted method are more likely to have a plan of action and, furthermore, that they are less likely not to have one when compared with participants using the independent method. According to Amundson, Harris-Bowlsbey and Niles (2009), the lack of support and follow-up from a counsellor can, for certain individuals, lead to inaction following an intervention. Assistance from counsellors may have played a part in providing such support and follow-up by reminding participants of the importance of actually applying the information gleaned from a plan of action.

Turning to the study’s second objective, the method (independent or assisted) does not have any differential effects according to the client consultation need (career choice or job search). This suggests that a counsellor’s assistance is important

for either of these consultation needs. However, participants in the career-choice intervention report considerably greater benefits than job-search intervention participants in terms of their combined score. As mentioned earlier, the LMI effect on the clinical level is considered to be moderate. This result could be explained by the critical importance of LMI when an individual is comparing different options as part of the career choice process (Gati and Tal, 2008). However, participants in need of a career choice intervention showed considerably lower pretest scores. Accordingly, the difference in improvement levels may be due to statistical regression, a phenomenon caused by instrumentation errors (Creswell, 2014; Heppner, Kivlighan and Wampold, 2008). The result of this phenomenon is that groups of participants with lower pretest scores are likely to report greater changes over the course of an intervention (ibid.).

Still in relation to the second objective, the results suggest that there is no relationship between the career-choice and job-search interventions undergone and the likelihood of having a plan of action at the study’s conclusion. This may be due to the fact that executing a plan of action was equally important in career-choice interventions as in job-search interventions.

Implications for Practice

This study has three implications for the career development practice, namely identification of the client’s need, the nature of the LMI intervention, and career self-management (Hiebert, 2012; Savard et Paquette, 2012). There is reason to believe that providing accessible, specific information according to the consulting client’s need (career

choice or job search) contributes to the intervention's success. The LMI binders used in this study contained relevant information geared specifically to the career choice or the job search.

In regard to the nature of the intervention, it seems logical that whatever method (independent or assisted) is used, it will be more successful if it provides for a combination of the following three factors: identifying LMI resources, consolidating lists of LMI resources in a single, easily accessible and easy-to-use format (LMI binders), and suggestions on how that information should be used (Hiebert, 2012; Savard et Paquette, 2012).

In regard to career self-management, the results of this study suggest that participants can manage their own careers when they need minimal help with LMI. To that end, the LMI binders produced as part of this study can be used with certain clients without a counsellor's assistance being required. However, this study shows that the help of a counsellor (two sessions lasting 20 to 30 minutes each) produces even greater benefits for participants in terms of both their combined scores and the likelihood of having a plan of action at the study's conclusion. Consequently, it is reasonable to conclude that such assistance allows certain participants to derive more substantial benefits from the LMI. However, the study does not identify which participants could benefit more from the assistance of a counsellor.

Implications for Future Research

To the best of our knowledge, this study is the first to establish an intervention protocol designed to isolate LMI use from other career counselling components not directly related to LMI. Although this study

suggests that LMI has considerable effects and that those effects are reinforced by the assistance of a counsellor, the results do not suggest that all forms of LMI produce beneficial effects, but rather that the use of a tool like the LMI binders developed as part of this study can do so (Hiebert, 2012; Savard et Paquette, 2012). In this respect, it would seem appropriate for other studies to replicate the same intervention protocol based on the LMI binders developed as part of this study.

Certain improvements could be made in future studies. First, it would be a good idea to measure the effects immediately after the sessions. Since this study measured the effects of LMI use four weeks after the study was completed, the observed effects may not be the result of the LMI interventions conducted.

In addition, future studies could broaden the intervention's scope to include other needs that might potentially be addressed with LMI, such as job retention (Hiebert, 2012; Savard et Paquette, 2012). Moreover, it would be wise to prepare intervention protocols involving more than two support sessions with the counsellor. A meta analysis by Brown and Ryan Krane (2000) suggests that the effect of career interventions is maximized when four or five sessions are held. In this way, it would be possible to determine whether assisted LMI use produces more meaningful effects at the clinical level when participants receive counselling over a longer period.

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Prix Etta-St.-John-Wileman

This award is designed to recognize and celebrate individuals who have devoted their lives to enhancing the field of career development. It honours Etta St John Wileman, a champion and crusader of career, work and workplace development in Canada in the early 20th century.

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Ce prix vise à souligner et à célébrer l'apport des personnes qui ont consacré toute leur vie à améliorer le domaine du développement de carrière. Ce prix honore la mémoire d'Etta St. John Wileman, pionnière et fervente militante du développement de carrière et de l'amélioration des conditions de travail au Canada au début du XXe siècle.

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