Integrating Motivational Interviewing in Career Counseling: A Case Study

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Abstract

Motivational interviewing (MI) is receiving increasing attention in the field of career counseling. However, none of the previous studies have concretely presented *how* this method could and *why* it should be integrated in career counseling. Through the use of a single case study design, this paper illustrates *how* a brief MI (BMI) intervention can be integrated into career counseling interventions to help resolve career dilemmas. An analysis of the interactions between the client and his counselor using the Motivational Interviewing Skills Code 2.1 illustrates *why* this method can be useful for career counseling. Immediate and long-term effects of the global career counseling intervention on the client's career decision-making difficulties, as well as the specific impacts of the BMI intervention, are assessed. This case study shows that the BMI approach can be integrated in a career counseling intervention to help career counseling clients overcome career dilemmas and increase their readiness to make career choices.

Keywords: career counseling, motivational interviewing, career decision-making difficulties, career dilemma.

Integrating Motivational Interviewing in Career Counseling: A Case Study

Motivation is a key component in the success of career-related tasks and transitions (Hirschi, 2009; Hirschi, Lee, Porfeli, & Vondracek, 2013; Kanfer, Wanberg, & Kantrowitz, 2001). However, this concept is not well integrated in career counseling theories and settings. Career counseling theories about career processes and career decisions are numerous. However, the role of motivation is not explicitly stated in these theories. For example, motivation is posited as a prerequisite to career decision-making in Gati, Krausz, and Osipow's (1996) cognitive taxonomy of career decision-making difficulties, but its role and nature are not clearly explained. In social cognitive career theory (Lent, Brown, & Hackett, 1994), motivation is partly explained by the self-evaluative processes underlying the outcome expectations, but the concept of motivation is not specifically addressed. Finally, life-design theory (Savickas, 2001) does afford motivation a prominent role in the client's career concerns, but this theory does not explicitly mention the role played by motivational factors in career development. Accordingly, career counseling interventions appear to have little if any immediate effect on the lack of motivation (e.g., Gati, Ryzhik, & Vertsberger, 2013; Masdonati, Massoudi, & Rossier, 2009). Vondracek, Ford, and Porfeli's (2015) living systems theory of vocational behavior and development is a recent and notable exception. This theory includes Ford's (1992) motivational system theory, whose principles to motivate humans have been found highly consistent with the components of MI interventions, thus supporting the integration of this method in career counseling (Author, 2015).

For this reason, career counselors are relatively unprepared to work with clients who are not motivated to attend career counseling or to make career changes (Stoltz & Young, 2013). Over the last decade, an increasing number of authors have suggested integrating motivational interviewing (MI; Miller & Rollnick, 1991, 2002, 2013) in career counseling to address this

shortcoming (Lierman, 2011; McClain, 2010; Reid, 2008; Author, 2015; Stoltz & Young, 2013). MI is certainly not the only method that can increase clients' motivation, but it is the one that has provided the most evidence of its efficacy (Ryan, Lynch, Vansteenkiste, & Deci, 2011). Moreover, this method can also be used to help a person explore and resolve a dilemma. This property is particularly interesting for career counseling because career clients may struggle with career dilemmas, such as balancing work and life, hesitating between two career options, etc. (Pittman, 2000; Stoltz & Young, 2013). Despite these advances, a concrete efficacy analysis or case illustration of the application of this method in this context has not yet been proposed. A case study analysis may provide support for the relevance and way of effectively implementing this method in the field of career counseling (Yin, 2008). Through a detailed observation of a specific situation, the case study design allows concentrating on the processes and outcomes of specific career interventions to emphasize what would be most appropriate to study on a larger scale. In this sense, conducting a case study can be considered a necessary and inexpensive assessment of how MI could be used in career counseling.

       MI is a client-centered method, introduced in a climate of trust and respect, that aims to enhance a person's motivation and commitment to change by exploring and resolving ambivalence through eliciting and exploring the person's own motives to change (Miller & Rollnick, 2013). In this method, the counselor's role is not that of an expert but that of a facilitator for the client, and as such, the client is responsible for arguing in favor of a change. For this reason, collaboration, acceptance, empathy, and evocation are the key components of the MI spirit (Miller & Rollnick, 2013). The method relies on four fundamental processes: (1) engage in an empathetic relationship with the person, (2) focus on a particular change goal, (3) elicit the person's own reasons for attaining this goal, and (4) plan the steps that the person is ready to take to attain this goal. These processes are supported by the strategic use of five key communications

skills: asking open questions, affirming, reflecting, summarizing, and providing information and advice with permission. Specific MI techniques can help the counselor to elicit and strengthen the person's change talk (by, for example, asking evocative questions, querying extremes, or exploring goals and values) and to strategically respond to the person's counter change talk (by, for example, emphasizing the person's autonomy, reframing, or agreeing with slight modifications), and to respond to signs of discord, such as interruption and disengagement (by, for example, apologizing or shifting focus) (see Stoltz & Young, 2013, for an application of these techniques in career counseling). According to the usual treatment settings, MI interventions can occur over more than one or two 50-minute sessions or over an even shorter period of time (Miller & Rollnick, 2009), such as brief MI (BMI). MI is often associated with the trans-theoretical model of change (TTM; Prochaska & DiClemente, 1984), a theoretical model of the stages and processes of behavior change. However, Miller and Rollnick (2009) have clarified the distinction between TTM and MI. The "TTM is intended to provide a comprehensive conceptual model of how and why changes occur, whereas MI is a specific clinical method to enhance personal motivation for change", and moreover, "MI was never *based* on the TTM" (p. 130).

MI was originally developed to improve clients' motivation to change their behaviors with respect to substance abuse, and several studies supported its efficacy in increasing motivation to change and affecting observable behavior changes in this context (e.g., Butler et al., 1999; McCambridge & Strang, 2004). The efficacy of MI has also been demonstrated in different health contexts and among various populations (see Lundahl, Kunz, Brownell, Tollefson, & Burke, 2010, for a meta-analysis). The numerous studies that have been conducted to assess the effectiveness of MI have led to the development of specific coding methods, including the Motivational Interviewing Skill Code 2.1 (MISC 2.1; Miller, Moyers, Ernst, & Amrhein, 2008), which classify the counselor's behaviors to determine if the interview is truly motivational and

analyze the client's talk to assess its evolution toward or away from a considered change. To explain MI efficacy, Miller and Rose (2009) have suggested an evidence-based causal chain according to which a consistent use of MI spirit and techniques contributes to the increase of the client's preparatory change talk (i.e., reason, ability, need, and desire to change) while diminishing the client's counter change talk (i.e., reason, ability, need, and desire not to change). In turn, the intensification of change talk contributes to increasing commitment talk, which strongly predicts effective change. Using the MISC 2.1, Gaume, Bertholet, Faouzi, Gmel, and Daeppen (2010) demonstrate that counselors' MI-consistent behaviors are likely to elicit clients' change talk and that the frequency and strength of the clients' change talk predict significant change in drinking behavior among young men (Gaume, Bertholet, Faouzi, Gmel, & Daeppen, 2013). Accordingly, the MISC 2.1 appears to be an effective tool to study Miller and Rose's (2009) causal links between the counselor's behaviors and the client's talk in the context of career intervention.

Stead et al. (2012) encourage the use of case studies in career counseling, especially for testing the implementation of innovative interventions. Therefore, conducting a case study is certainly an appealing preliminary approach to assess the possible ways to integrate MI in career counseling and to study its impact on the intervention. Through an analysis of the case of Lucas, we propose an illustrative example of the use of MI in career counseling as a specific intervention to solve a career dilemma as well as an opening analysis of the counselor behaviors and of the evolution of the client talk during this intervention. Lucas's case is selected because it illustrates the integration of MI within a traditional career counseling intervention. Client-related information is modified in accordance with APA ethical standards (APA, 2010). Using the MISC 2.1 coding tool, we establish links to Miller and Rose's (2009) causal chain model of MI efficacy. Additionally, information on the immediate and long-term effects of BMI will be

provided with a formal assessment of client indecision at the beginning of the career counseling process, at the end of the process, and at a three-month follow-up meeting. We also report the client's qualitative feedback on the specific impacts of BMI provided at subsequent meetings and at the follow-up meeting.

Method

Participants

The client. Lucas is a 16-year-old Caucasian boy in the first year of public high school. His grades are good, and he will not have to make a career-decision for two years, just before entering university. However, he asked for an appointment with the private Career Counseling Service of the University of XXX because he was anxious about not having made a decision regarding the career he would like to pursue. In [name of country], students must declare their major before entering a university. Additionally, Lucas indicated that he had been accepted into a special high school class for professional athletes in another [name of country] state and had to decide before the upcoming deadline if he wanted to enroll in this program. Enrolling in this special program would allow him to pursue his passion for soccer, but it would mean moving to a new city. He posited that this imminent choice made his career decision more urgent and was at the root of his request for career counseling intervention. He appeared distressed and reported having persistent and sometimes severe difficulty making even trivial decisions. This client was chosen as the focus of the study because he was identified as particularly suited for the BMI approach, due to his salient career dilemma. Moreover, he would be considered a typical client at the private Career Counseling Service of the University of XXX, which receives clients from various backgrounds ranging from youth in the school to work transition to adults in a mid-career transition.

The counselor. Lucas's counselor, the first author, is a member of a research team in the field of career counseling and vocational psychology. She is Caucasian, has a master's degree and is an experienced career counseling psychologist who is trained and supervised in providing standardized MI intervention sessions. She has been using MI in her practice for two years. She is currently pursuing a PhD in psychology at the University of XXX with a focus on the integration of MI in career counseling. The career counselor neither benefitted from nor had personal opinions on the best decisions regarding any of Lucas's choices.

Intervention and Procedure

Career counseling intervention. When Lucas called the Career Counseling Service of the University of XXX to make an appointment for career counseling, the secretary solicited his participation in the current research. He and his parents voluntarily agreed to and signed the consent form for recording the meetings and data collection for research purposes. The career counseling intervention consisted of four weekly face-to-face one-hour sessions, which correspond to the average duration of treatment in this center. All sessions were video-recorded. This kind of career counseling intervention has been described in previous studies that analyzed its immediate and long-term effectiveness (Masdonati et al., 2009; Perdrix, Stauffer, Masdonati, Massoudi, & Rossier, 2012). At the first meeting, Lucas was accompanied by both of his parents, which is typical in this career counseling service, as parents are considered a major support for career decision-making and the realization of career plans (Whiston & Keller, 2004). The aim of this meeting was to clarify Lucas's and his parents' needs and goals, to seek information regarding his current and future situation and to identify the main obstacles he was facing. His parents remained for the first 20 minutes, which were dedicated to the analyses of Lucas's and his parents' reasons for seeking intervention. Their requests were then reformulated in terms of goals for the present intervention. The remaining 40 minutes were devoted to gathering and

understanding Lucas's history and experiences. At the end of this first meeting, the counselor asked Lucas to complete a 'pro and con balance' homework exercise (Sampson, Lenz, Reardon, & Peterson, 1999) regarding the athlete class dilemma he was facing.

The second meeting began a week later by analyzing the results of this exercise, and the BMI technique was then introduced and conducted during the following 27 minutes of the meeting. Note that the use of this approach is unconventional at this career counseling center as well as in public career counseling centers in this geographical area. This specific intervention can be clearly delineated from traditional career counseling interventions because the discussion focused on the ambivalence toward enrolling in the athlete class. Thus, the BMI strategy was implemented at the very beginning of the second career counseling session and terminated at the introduction of the formal assessment phase of the counseling process, wherein a variety of questionnaires were used to evaluate career decision-making difficulties, vocational interests, work values, and personality traits. The BMI strategy was a spontaneous and unstructured intervention that addressed Lucas's career dilemma by exploring the possible outcomes of both decisions. Because the counselor had no ethical engagement in either of the options, her stance was equipoise, which is "the clinician's decision to counsel with neutrality in a way that consciously avoids guiding a client toward one particular choice or change and instead explores the available options equally" (Miller & Rollnick, 2013, p. 408). The content of this BMI approach is further described herein.

The third meeting was held the following week and consisted of individualized feedback and an interpretation of Lucas's assessment results in relation to the two career opportunities between which he was deliberating. The fourth and final meeting was dedicated to evaluating Lucas's best options and planning his next actions. Lucas's parents were also present at this final appointment, which is consistent with the normal procedures of this career counseling service. At

the end of the final session, Lucas again completed the Career Decision-Making Difficulties

Questionnaire (CDDQ). Three months later, the first author invited Lucas to attend a follow-up

meeting wherein he was asked to clarify the aspects of the career counseling intervention

program he found most beneficial and the long-term impacts of those aspects on his daily life.

Lucas completed the CDDQ for the final time.

  Content of the BMI. The four fundamental processes of MI and the most relevant

statements are used to guide the presentation of the content of the BMI approach. There were 258

statements gathered from the client and counselor. (1) Engagement process: the BMI started with

small talk about how Lucas arrived at the counseling center using public transportation

(statements 1 to 5; time: 0 min 0 s to 0 min 9 s) and a renegotiation of the goals for the career

counseling process (statements 6 to 25; time: 0 min 10 s to 2 min 45 s). (2) Focusing process: the

focusing process began with the counselor asking Lucas to present the 'pro and con balance'

exercise he had completed for homework (statements 26 to 74; time: 2 min 46 s to 7 min 49 s).

  (3) Eliciting process: the exercise evoked Lucas's thoughts about the change and clearly

revealed his ambivalence toward it. However, it was insufficient in helping him to resolve his

dilemma because the pros and cons were balanced. Nonetheless, this exercise led Lucas to an

alternative that would allow him to compromise between the two options, that is, to enroll in the

athletic program and travel to and from his current place of residence (statement 65; time: 6

min10 s to 6 min 45 s). At the end of this exercise, the counselor provided Lucas with a

pendulum metaphor to illustrate the dilemma he was facing (statements 75 to 81; time: 7 min 50 s

to 9 min 28 s) and shows him the benefits of the alternative. This intervention invited Lucas to

consider his tendency to be constantly dissatisfied. The patterns, redundancies, and exceptions to

his dissatisfaction were then explored and reframed in a positive way by the counselor

(statements 82 to 107; time: 9 min 29 s to 12 min 31 s). Still during the process of evocation, the

client elaborated on the best scenarios and their consequences for each of the two options as the counselor used two MI strategies, namely, querying the extremes and looking forward (statements 108 to 137; time: 12 min 32 s to 15 min 21 s). Following this exercise, the counselor asked Lucas about his feelings regarding the initial 'pro and con balance' exercise and the decision he had to make (statements 138 to 161; time: 15 min 22 s to 17 min 28 s). With the emergence of the alternative, it had become clear to Lucas that he actually wanted to enroll in the athletic program, but he was unsure of the best choice between moving from his current home and the alternative of traveling back and forth. The counselor then queried Lucas about what he could do and what he needed to know to clarify this ambivalence by using the MI looking forward strategy (statements 162 to 173; time: 17 min 29 s to 18 min 59 s). After a 12-second silence, Lucas clearly identified and affirmed his preference for the alternative option (statement 168; time: 18 min 12 s to 18 min 23 s). Using the MI querying the extremes strategy, the counselor asked about the consequences of that choice (statements 174 to 185; time: 19 min 00 s to 19 min 44 s) before explaining to Lucas that unfolding the potential outcomes of an option could help him make difficult decisions (statements 186 to 187; time: 19 min 45 s to 20 min 34 s).

(4) Planning process: to begin the planning process, the counselor asked Lucas to identify the next steps to be taken to obtain the information he needs, which triggered a sense of urgency in Lucas. He indicated that he had not thought of his need for information before, as he was not aware of his preference for the alternative solution before verbalizing it (statements 188 to 208; time: 20 min 35 s to 22 min 33 s). The counselor then investigated what would happen if the alternative was impossible, which led Lucas to reaffirm his decision to enroll in the program and allowed the counselor to emphasize Lucas's control over the decision-making process (statements 209 to 221; time: 22 min 34 s to 23 min 23 s). The counselor then elicited from Lucas the next

steps he would take by the next meeting (statements 222 to 232; time: 23 min 24 s to 24 min 24 s). The concreteness of this planning phase caused the client to express doubts about his family's reaction to his decision. The counselor then took a step back and helped Lucas think through the best way to announce his decision and the potential risks of not doing so (statements 233 to 250; time: 24 min 25 s to 26 min 22 s), which allowed him to make his final decision with greater confidence. The BMI intervention ended as the counselor summarized the steps to achieve by the next meeting and gave Lucas positive feedback on his decision-making process (statements 251 to 258; time: 26 min 23 s to 27 min 03 s). The session continued with the formal assessment phase.

Coding process. Only the BMI part of the second meeting was coded using the MISC 2.1 and further analyzed. The video recording of the interview was sequenced into statements with iMovie 9.0. Two external coders independently rated the counselor's behaviors and the client's talk during the BMI using the MISC 2.1. Both coders were Caucasian and were career counselors or clinical psychologists who had been extensively trained on the use of the MISC 2.1 in the context of clinical research on the impact of MI on young men's drinking behaviors (e.g., Daeppen et al., 2011; Gaume et al., 2013; Gaume et al., 2014). Their training was completed at the University Hospital of the state of XXX and comprised approximately 60 hours of sequencing interviews and classifying the statements of counselors and clients. They also participated in frequent supervision meetings to discuss the ambiguous cases and receive feedback. For the needs of the present study, they received guidelines regarding the application of this method in the context of career counseling.

Instruments

Motivational Interviewing Skills Code 2.1 (MISC 2.1; Miller et al., 2008). The MISC 2.1 is a coding tool designed to rate recorded interviews between a client and a counselor. The

instrument first requires the coders to sequence the interview into statements. The coders then code each counselor's statements into 18 different types of behaviors: emphasize control (EC); advise with permission (AP); raise concern with permission (RP); reframe (RF); support (SU); affirm (AF); complex reflection (RC); simple reflection (RS); open question (QO); facilitate (FA); filler (FI); give information (GI); closed question (QC); structure (ST); direct (DI); advise without permission (AW); raise concern without permission (RW); warn (WA); and confront (CO) (a list of these acronyms can be found in Table 1). These 18 types of counselor behaviors are then grouped into three categories according to their consistency with MI spirit and techniques: (1) MI-consistent behaviors (MICO), which include advise with permission, affirm, emphasize control, facilitate, open question, raise concern with permission, complex and simple reflection, reframe, and support; (2) MI-inconsistent behaviors (MIIN), which include advise without permission, confront, direct, raise concern without permission, and warn; and (3) other neutral behaviors (Others), which include facilitate, filler, give information, closed questions, and structure.

The coders are also asked to rate the client's statements into 17 different types of change talk: weak (O+1), moderate (O+2), and strong (O+3) other statements toward change; weak (R+1), moderate (R+2), and strong (R+3) reasons to change; commitment to change (C+); taking steps toward change (TS+); follow/neutral (F/N); weak (R-1), moderate (R-2), and strong (R-3) reasons not to change; weak (O-1), moderate (O-2), and strong (O-3) other statements away from change; commitment not to change (C-); and taking steps away from change (TS-). These 17 types of change talk are then grouped into three categories according to their relation to the target behavior change: (1) change talk (CT), which includes all the reasons to change, all the other statements in favor of change, commitment to change, and taking steps toward change; (2) counter change talk (CCT), which includes all the reasons not to change, all other statements

away from change, commitment not to change, and taking steps away from change; (3) and

follow/neutral (F/N) statements regarding the target behavior change.

The use of this coding tool requires defining a target behavior change to code the client's

talk. For example, enrolling in the athletic program represented a transformational change leading

to a change in the client's current status, while not enrolling in the athletic program could be

regarded as a stability maintenance process (e.g., Vondracek, Ford, & Porfeli, 2015). Thus,

enrolling in the athletic program was defined as the targeted behavior change to code Lucas's

talk. This retrospective and artificial choice does not imply that the counselor's aim was to

promote this option at the expense of another option or to suggest that this option was the best.

The relevance of using the MISC 2.1 to code the client's talk when equipoise, i.e., exploring the

options without guiding the client toward a particular choice, is the specified stance of the

counselor will be addressed in the Discussion section of this article.

Previous studies conducted in the field of substance abuse treatment have demonstrated

relatively good inter-rater agreement for the MISC 2.1. Focusing on the counselor and

interpreting the indices according to Cicchetti's (1994) classification, Gaume et al. (2014) found

an excellent inter-rater reliability for the behavior classification with Cohen's κ = .87 and for the

three-categories level (MICO, MIIN, and Other) with intraclass correlation ranging from .83 to

.99. Regarding the client and reading the intraclass correlation indices according to Cicchetti's

(1994) classification, Gaume et al. (2013) found fair to excellent inter-rater reliabilities for the

frequent scores (O+ = .43; O- = .59; R+ = .67; R- = .78) and poor to strong inter-rater reliabilities

for the less frequent scores (TS- = -.05; C+ = .30; TS+ = .49; C- = .70). Considering Landis and

Koch's (1977) classification, Gaume et al. (2013) also found a substantial reliability for the three

categories' level (CT, CCT, and F/N) with Cohen's κ = .62.

Career Decision-Making Difficulties Questionnaire (CDDQ; Gati et al., 1996; Gati, Krausz, Osipow, & Saka, 2000). The CDDQ is a 34-item questionnaire that computes a total indecision score and assesses ten career decision-making difficulties that can be grouped into three higher-order categories: lack of readiness (LR), which includes lack of motivation, general indecisiveness, and dysfunctional beliefs; lack of information (LI), which includes lack of information about the process, about the occupations, about oneself, and about the way to obtain additional information; and inconsistent information (II), which includes unreliable information, internal conflict, and external conflict. The 34 items are rated on a 9-point Likert-type scale (*1 = does not apply to me* to *9 = fully applies to me*). In their validation of the CDDQ's French version, Author et al. (2015) reported a good internal consistency for the total CDDQ score (.93) and weak to good internal consistencies for the ten difficulties (from .58 to .87; *Mdn* = .78) and for the three categories (from .57 to .93; *Mdn* = .87). The structure of the French version was found to be similar to the original version (Gati, Krausz, & Osipow, 1996; Gati & Saka, 2001), although the three difficulty categories of the lack of readiness dimension, arising usually before engaging in a career decision-making process, appeared to be only moderately interrelated and thus may be considered independently (Author et al., 2015).

Analyses

Inter-rater reliability. Cohen's kappa was used to assess the inter-rater agreement reliability for counselor's behaviors and client's talk at both the statements and the categories levels. According to Landis and Koch (1977), the inter-rater reliabilities were good for the counselor's behaviors (κ = .75) and moderate for the client's talk (κ =.49 when considering strength and .57 when not). Similarly, Cohens' kappas were excellent (.81) for the counselor's overall categories (i.e., MICO, MIIN, Others) and moderate (.60) for the client's overall categories (i.e., CT, CCT, and F/N).

Content and transition analysis. The degree of the counselor's adherence to MI was compared to performance indices based on the Motivational Interviewing Treatment Integrity code (MITI 3.0; Moyers, Martin, Manuel, Miller, & Ernst, 2010), which considers the percentage of complex reflection, open questions, and MI-consistent behaviors, as well as the ratio of reflection to question. A proficient use of MI requires 50% or more complex reflections, 70% or more open questions, 98% or more MI-consistent behaviors, and a reflection-to-question ratio of 2.0 or more (Miller & Rollnick, 2013).

Based on Gaume, Bertholet, Faouzi, Gmel, and Daeppen (2010)'s work, the transitions between the counselor and the client's' statements were grouped as follows: (a) transitions from counselor to client (e.g., MICO followed by CT); (b) transitions from client to counselor (e.g., CCT followed by MIIN); (c) auto-transitions by client (e.g., CCT followed by CT); and (4) auto-transitions by counselor (e.g., MICO followed by F/N). The frequency of each transition was displayed in 2 x 2 matrix (presence/absence of the initial/subsequent event), and the odd's ratio (ORs) was used to determine if the observed transition occurrence was statistically significantly more likely to be observed than expected by chance. Observed transitions with an odds ratio equivalent or greater than one were considered to be more likely than that expected by chance.

Finally, and innovatively, the occurrence of the counselor's behaviors and the client's change talk were plotted to illustrate their evolution throughout the interview. To this end, the authors of the present study ranked each type of client talk and counselor behavior according to theoretical (Miller et al., 2008; Miller & Rollnick, 2013) and practical concerns. Thus, the counselor's behaviors were ranked based on their estimated degree of consistency with MI, on a continuum from 1 (*behaviors highly inconsistent with MI*) to 12 (*behaviors highly consistent with MI*) with neutral behaviors (Others) grouped at the baseline, as follows: (1) confront; (2) warn; (2) raise concern or advise with permission; (3) direct; (4) others; (5) open question; (6) simple

reflection; (7) complex reflection; (8) affirm; (9) support; (10) reframe; (11) ask for permission; and (12) emphasize control. Similarly, client talk was ranked according to its proximity to or distance from change on the following continuum ranging from 1 (*talk highly away from change*) to 17 (*talk highly toward change*): (1) taking steps away from change; (2) commitment not to change; (3) strong, (4) moderate, and (5) weak reasons not to change; (6) strong, (7) moderate, and (8) weak other statements away from change; (9) follow/neutral statements; (10) weak, (11) moderate, and (12) strong other statements in direction of change; (13) weak, (14) moderate, and (15) strong reasons to change; (16) commitment to change; and (17) taking steps toward change.

Assessment of the BMI's subjective effects. The short- and long-term impacts of the BMI intervention were assessed through the evolution of Lucas's scores on the Career Decision-Making Difficulties Questionnaire prior to the intervention, after the intervention, and at the three-month follow-up session. To attain comparable scores between the different scales, raw scores on the CDDQ were divided by the number of items for each of the ten scales and by the number of scales for the three higher-order scales. The effects of the BMI intervention were also qualitatively assessed during the last two following career-counseling sessions and at the three-month follow-up, during which the client was asked about the effective implementation of the action plan agreed to during the BMI intervention. At the three-month follow-up, the client was also questioned about his current career project and his subjective feelings concerning the usefulness of the overall career counseling intervention.

Results

Ratings Frequencies

Table 1 displays frequencies for the counselor's behaviors and the client's talk as well as for the counselor and client's overall categories. The ratings of the counselor's behaviors display a high percentage of MI-consistent behaviors (98.46%) with only one MI-inconsistent behavior

(advising without permission; statement 81; time 9 min 3 s to 9 min 29 s). The percentage of

open questions is also relatively high (78.57%), but the percentage of complex reflections is low

(17.65%), as is the ratio of reflections and questions (1.21). The occurrence of two specific MI

behaviors, specifically, emphasize control (statement 221; time: 23 min 10 s to 23 min 21 s) and

reframe (statement 93; time: 10 min 47 s to 11 min 00 s and statement 184; time: 19 min 36 s to

19 min 38 s) is also noted. With regard to the client, the percentage of change talk is relatively

high (74.47%) compared to the percentage of counter change talk. The "Others" category

represents a major part of the client change-related talk (62.86%). Figure 1 displays the co-

evolution of the client's talk and the counselor's behaviors during the session. Furthermore, it

indicates that throughout the BMI intervention, the counselor displayed more MICO behaviors as

the client's talk in favor of the change option increased.

Articulation of Counselor's Behaviors and Client's Talk

Table 2 displays the occurrence frequency and the odds ratio of the different kinds of

transitions between the client and the counselor. The complete matrix contains 256 transitions,

41.8% of which were unlikely to occur by chance. Due to the extremely low frequency of the

counselor auto-transitions (7), these are not reported. The results indicate that the counselor's

MICO behaviors are statistically significantly more likely to be followed by the client's

exploration of the change (CT and CCT) than could be expected by chance. "Others" behaviors

also appear more likely to cause the client to argue against the change than could be expected by

chance, although this transition has not been frequently observed. On the contrary, the MICO to

F/N transition is the most frequent transition, though this occurrence is not statistically

significant.

It is of primary interest to note that the only MIIN behavior (advising the client without

permission about the benefits of the alternative) is followed by a counter change talk (the client

arguing against the alternative), although there is no statistical evidence to indicate that this is not caused by chance. Regarding the transitions from the client to the counselor and despite the lack of statistical evidence, each type of client talk appeared to be frequently followed by a counselor MICO behavior. Finally, the client's auto-transitions indicate that the client change talk is more likely to induce either a CCT or an F/N speech than can be expected by chance, although the observed frequency is extremely low.

Career Counseling's Impact on Career Decision-Making Difficulties

Figure 2 depicts the client's scores on the CDDQ over time. In the first measure, the client's CDDQ global scores indicate that lack of readiness is Lucas's most important source of difficulty (4.90), followed by lack of information (4.75) and inconsistent information (3.70). More precisely, general indecisiveness appeared to be the client's primary difficulty in career decision-making (7.33), which was followed by a lack of information about the occupations (5.33) and a lack of information about ways to obtain information (5.00). In contrast, Lucas exhibited a low degree of lack of motivation (1.67), external conflict (3.00), and unreliable information (3.67). The ratings regarding the other difficulties were moderate, ranging from 3.50 to 4.75. Lucas did not exhibit a particularly high level of internal conflict (4.00), which was the CDDQ dimension most likely to indicate an internal dilemma. This could be because this scale is focused on internal conflict specifically related to a career choice rather than to a broader career change.

At the end of the career counseling intervention, Lucas continued to demonstrate a high level of general indecisiveness (7.00). However, he also exhibited a considerable decrease in the lack of information about the occupations (2.67) and the ways to find information (2.00). Interestingly, there was a noticeable increase in the lack of motivation (5.33), whereas the score for unreliable information remained stable (3.67) and the score for external conflict decreased (1.00). A closer examination of the client's answers revealed that he respectively scored 7 and 8

on the following statements: "I know that I have to choose a career, but I don't have the motivation to make the decision now (I don't feel like it)" and "I believe that I do not have to choose a career now because time will lead me to the right career choice." These items were both previously rated a 2. Scores for other difficulties also decreased or remained stable, as scores ranged from 2.00 to 4.00. The client's scores for the global dimensions—lack of readiness, 5.90; lack of information, 2.83; and inconsistent information, 3.30—reflected this evolution.

At the three-month follow-up, the client exhibited a decline in all three global dimensions (lack of readiness, 3.90; lack of information, 1.67; and inconsistent information, 2.60). The client further reported decreases in his level of general indecisiveness (4.67) and in all other career decision-making difficulties (with scores ranging from 1.00 to 2.75), including lack of motivation, which returned to its original level (1.67).

Effects of Career Counseling and BMI Intervention on the Client's Situation

At the beginning of the third meeting, Lucas announced that the travel time between the two cities was too long, thus eliminating the considered alternative. Nevertheless, he maintained his decision to enroll in the athletic program and chose to move. Moreover, he reported positive feelings about this decision. The remaining meeting was dedicated to the discussion of his vocational interests, values, and personality assessments that thoroughly indicated a consistent Holland's (1997) type (investigative and realistic).

At the last meeting, he explained to his parents the five options he was willing to explore through short-term internships before making a final decision. He was in no rush to begin the internships, however, arguing that he still had two years before entering the university. Resolving his upcoming dilemma provided him with a great sense of relief and made the need to make an immediate career decision less salient. Although his parents agreed with his occupational choices, they also indicated that they would feel more secure in those choices if he would start the

internships as soon as possible. By the end of the interview, Lucas's parents asked him if he was able to make a decision regarding the athletic program. Lucas indicated that the discussion with his career counselor regarding this dilemma helped him to make that decision. At the three-month follow-up meeting, he indicated that he was very happy with the decision he made regarding the athletic program and that he had even made a career choice in the meantime. He also explained that he was able to use the 'pro and con balance' and 'looking at the best scenarios' exercises to make further important non-career-related decisions.

Discussion

How MI can be Integrated in Career Counseling

This study aimed first at providing a concrete illustration of how MI can be used in career counseling. In this case, it was not necessary to use BMI to improve Lucas's readiness to attend career counseling due to his proactivity and high degree of motivation as confirmed by his initial score on the lack of motivation scale of the CDDQ. Here, MI spirit and techniques were integrated as complementary methods to explore and resolve Lucas's ambivalence regarding his career dilemma. Specific methods were used, such as the 'pro and con balance' exercise, the looking forward strategy to explore the unfolding of the diverse options, and the querying the extremes strategy, while remaining in accordance with the MI spirit. The results indicated that the counselor's behaviors were consistent, overall, with the MI approach, despite a moderate percentage of complex reflections, a low reflection/question rate, and the presence of one MI-inconsistent behavior.

Interestingly, the only MI-inconsistent behavior, advising without permission, can be associated with the "expert trap"—falsely assuming that the counselor has the best solutions to the client's problems (Miller & Rollnick, 2013). This MIIN is immediately followed by a counter change talk, which is consistent with previous research on the link between counselor's behavior

and client's change talk (Moyers & Martin, 2006; Moyers et al., 2007). Such a reactance

mechanism (Brems, 2001) is likely to occur when the client perceives his or her freedom to be

limited or threatened by someone else. Thus, the present case study raises concern over this

pitfall that could possibly be widespread in career guidance, where counselors are often

considered to be experts from whom we seek advice on career issues. Furthermore, it is worth

noting that the counselor's first attempt to move forward to the planning phase triggered the

client to backtrack, thus indicating that this move was made too quickly for the client. This

reaction suggests that curbing the desire toward achieving an action plan would be advantageous

for career counselors to foster their clients' engagement in the process. As Stoltz and Young

(2013) have suggested, the previous considerations highlight that integrating MI spirit and

techniques in career counseling may occur through specific dilemma-resolving interventions or

may be used to infuse usual career counseling settings to facilitate information delivery and

movement toward the planning phase.

Considering the counselor's background, attending a basic two-day workshop and one-hour

supervision seems to be a good start for practicing MI in career counseling, although ongoing

supervision may be required to improve clinical practice (e.g., Miller & Rollnick, 2009).

However, these results should be moderate given that the effectiveness of clinical interventions

are strongly sensitive to clinicians' characteristics (Blatt, Sanislow, Zuroff, & Pilkonis, 1996).

Accordingly, although Lucas's case study provides a concrete illustration of how MI integration

within a traditional setting of career counseling can offer good results within a short period of

time, these results must be confirmed by a wider study involving more counselors. Moreover, as

the client's dilemma did not require the counselor to have an ethical investment in the considered

change goal, the counselor had to counsel the client with neutrality and without guiding him in a

particular direction. Consequently, the current intervention did not provide the opportunity for the

counselor to demonstrate skills to cultivate change talk, soften sustain talk, or guide the client in a particular direction. Consequently, a limitation to this study is that it only shows how MI intervention may help clients solve career dilemmas and does not provide an illustration of how to increase a client's motivation to engage in career counseling. In this sense, future research should focus on other feasible uses of MI, such as career difficulties related to procrastination and low motivation. Moreover, to provide a clearer portrayal that MI has an effect on the outcome and to determine the efficacy of MI as a supplement to career counseling interventions, an experimental design comparing outcomes from MI-based and non-MI-based interventions would be required in future studies.

Why MI can be Integrated in Career Counseling

The second aim of this study was to provide information about MI's usefulness in career counseling. The overall career counseling intervention appears to have a positive impact on the client's indecision and an important short-term impact on the client's lack of information, which is consistent with previous results on the efficacy of this particular career intervention (Masdonati et al., 2009). However, Lucas's feedback during the subsequent sessions and follow-up highlight a specific perceived effect of the BMI intervention to help him solve his dilemma and to more easily make decisions in the future. These results suggest that this method may also have the additional specific impact of decreasing general indecisiveness, which is a chronic and generalized difficulty in making decisions (Frost & Shows, 1993) upon which traditional career counseling interventions appear to have little effect (Masdonati et al., 2009). This was also Lucas's greatest difficulty as he struggled to make a career decision. According to Lucas's feedback at the follow-up, the BMI intervention provided the client with a decision-making model and strategies that could be generalized in other life domains, and thus, it may have contributed to reducing his indecisiveness. In this context, MI meets the same goals as those of

cognitive career interventions that aim at increasing the general ability of people to solve problems (e.g., Sampson et al., 1999). Interestingly, Lucas's lack of motivation increased at the end of the career counseling intervention. This surprising result may be explained by the fact that Lucas felt relieved from the pressure and anxiety to make the decision immediately, which thereby allowed him to express a level of developmental indecision appropriate for his age.

Analyses of what occurred during the BMI intervention may provide some clues regarding this particular effect. Although the transition analysis was somewhat inconclusive because of the low frequencies within each category, it indicates that MI integration in career counseling may be efficient because the MI-consistent behaviors are likely to address the client's change talk and counter change talk. The graphical illustration shows a joint evolution between the counselor's behaviors and the client's change talk throughout the BMI process. In other words, as the client's speech tends more toward the change option and results in making a decision, the counselor displays a more complex use of MI-consistent behaviors. These observations are consistent with the results of studies on MI conducted in the field of substance abuse treatment (Moyers & Martin, 2006; Moyers et al., 2007) and with Miller and Rose's (2009) hypothesized causal chain model.

Plotting the counselor's behaviors and client's speech is a useful addition to the basic coding method for a case study, as it allows for a graphical representation of what occurred during a single intervention. However, ranking the counselor's behavior is an arbitrary decision that should be discussed within a committee of MI experts. Moreover, due to the case study design, it is not possible to determine to what extent counselor behaviors may predict client responses, and vice versa. For this reason, even if the case study appears to be an effective way to provide insights into the potential effects of MI, additional studies on MI efficacy in career counseling should be conducted. For example, the predictive power of counselors' behaviors on clients' talk

may be better determined in a large-scale study, as other authors have done in previous studies on

MI efficacy (e.g., Gaume et al., 2013; Gaume et al., 2014).

Considerations on the Use of MISC 2.1 in Career Counseling

The MISC 2.1 is an interesting instrument for assessing the counselor's adherence to the MI

principles and also for evaluating the evolution of the client's change talk during a BMI session.

As this instrument provides information both on counselor behavior and on client talk, such a

coding tool could also be useful to assess change processes in a standard career counseling

intervention, as Heppner and Heppner (2003) have suggested. This case study also outlines some

limitations of this instrument to code the client's talk when equipoise is the required stance for

the counselor because of the need to specify a target behavior change. This is especially true in

the context of solving dilemmas and in the field of career counseling, in general, where change

can take many forms (Stoltz & Young, 2013) without the counselor having to adopt an ethical

investment for one of the available options. Thus, divergences may appear with regard to what

has been considered a target change. For example, the current BMI approach started with a

negotiation of goals for the career counseling process, which is a very positive outcome in terms

of the career counseling process. However, as it was not related to the considered target behavior

change, it was only categorized as an F/N statement. This limitation is also reflected by the fact

that discrepancy between the two coders mainly concerns the client's talk. Consequently, when

equipoise is the specified stance, the client's talk could be better defined as going toward or away

from option a, toward or away from option b, and so on, rather than toward or away from a target

behavior change.

<div align="center">**Conclusion**</div>

This study outlines how MI can be integrated in career counseling and why it is interesting to

do so. First, this case study demonstrates the feasibility of using MI in a traditional career

counseling setting to contribute to overcoming severe career difficulties, such as indecisiveness, which remain generally unsolved with typical career counseling techniques (e.g., Di Fabio & Maree, 2012; Masdonati et al., 2009). For this reason, it is worthwhile to encourage counselors to train in this method, as doing so will expand the scope of their career counseling interventions for solving more complex and severe career difficulties. Basic training in this method could include a two-day workshop and a supervision session. Designing workshops specifically adapted to career counseling might be one of the next challenges in the field. However, Miller and Rose (2009) warn against the faulty assumption of mastering MI after a single training workshop. Thus, seeking ongoing supervision on the use of MI seems to be extremely relevant. Second, the use of a validated coding tool developed in the clinical domain ensures the academic rigor of the qualitative methodology, as recommended by Stead et al. (2012). However, this tool must be adjusted to assess the client talk when equipoise is the needed stance for the counselor. Further studies should be conducted to better inform MI processes and efficacy in the field of career counseling.

References

American Psychological Association. (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: Author.

Author. (2015). Examining motivational interviewing in career counseling from a motivational system theory perspective. Manuscript submitted for publication.

Author et al. (2015). Validation of the Career Decision-Making Difficulties Questionnaire in France and Switzerland: Relationships with self-esteem and self-efficacy. *Journal of Career Assessment.* Manuscript conditionally accepted.

Blatt, S. J., Sanislow, C. A., Zuroff, D. C., & Pilkonis, P. A. (1996). Characteristics of effective therapists: Further analyses of data from the national institute of mental health treatment of depression collaborative research program. *Journal of Consulting and Clinical Psychology, 64*, 1276-1284. doi:10.1037/0022-006x.64.6.1276

Brems, C. (2001). *Basic skills in psychotherapy and counseling*. Belmont, CA: Brooks/Cole.

Butler, C. C., Rollnick, S., Cohen, D., Bachmann, M., Russell, I., & Stott, N. (1999). Motivational consulting versus brief advice for smokers in general practice: A randomized trial. *British Journal of General Practice, 49*, 611-616.

Cicchetti, D. V. (1994). Guidelines, criteria, and rules of thumb for evaluating normed and standardized assessment instruments in psychology. *Psychological Assessment, 6*, 284-290. doi:10.1037/1040-3590.6.4.284

Daeppen, J. B., Bertholet, N., Gaume, J., Fortini, C., Faouzi, M., & Gmel, G. (2011). Efficacy of brief motivational intervention in reducing binge drinking in young men: A randomized controlled trial. *Drug Alcohol Dependence, 113*, 69-75. doi:10.1016/j.drugalcdep.2010.07.009

Di Fabio, A., & Maree, J. G. (2012). Group-based life design counseling in an Italian context. *Journal of Vocational Behavior, 80*, 100-107. doi:10.1016/J.Jvb.2011.06.001

Ford, M. E. (1992). Motivating humans: Goals, emotions and personal agency beliefs. London, UK: Sage.

Frost, R. O., & Shows, D. L. (1993). The nature and measurement of compulsive indecisiveness. *Behaviour Research and Therapy, 31*, 683-692. doi:10.1016/0005-7967(93)90121-A

Gati, I., Krausz, M., & Osipow, S. H. (1996). A taxonomy of difficulties in career decision making. *Journal of Counseling Psychology, 43*, 510-526. doi:10.1037//0022-0167.43.4.510

Gati, I., Krausz, M., Osipow, S. H., & Saka, N. (2000). Validity of the Career Decision-Making Difficulties Questionnaire: Counselee versus career counselor perceptions. *International Journal of Psychology, 35*, 99-113. doi:10.1006/jvbe.1999.1710

Gati, I., Ryzhik, T., & Vertsberger, D. (2013). Preparing young veterans for civilian life: The effects of a workshop on career decision-making difficulties and self-efficacy. *Journal of Vocational Behavior, 83*, 373-385. doi:10.1016/J.Jvb.2013.06.001

Gaume, J., Bertholet, N., Faouzi, M., Gmel, G., & Daeppen, J. B. (2010). Counselor motivational interviewing skills and young adult change talk articulation during brief motivational interventions. *Journal of Substance Abuse Treatment, 39*, 272-281. doi:10.1016/j.jsat.2010.06.010

Gaume, J., Bertholet, N., Faouzi, M., Gmel, G., & Daeppen, J. B. (2013). Does change talk during brief motivational interventions with young men predict change in alcohol use? *Journal of Substance Abuse Treatment, 44*, 177-185. doi:10.1016/J.Jsat.2012.04.005

Gaume, J., Magill, M., Longabaugh, R., Bertholet, N., Gmel, G., & Daeppen, J. B. (2014). Influence of counselor characteristics and behavior on the efficacy of a brief motivational

intervention for heavy drinking in young men: A randomized controlled trial. *Alcohol Clinical and Experimental Research, 38*, 2138-2147. doi:10.1111/acer.12469

Heppner, M. J., & Heppner, P. P. (2003). Identifying process variables in career counseling: A research agenda. *Journal of Vocational Behavior, 62*, 429-452. doi:10.1016/S0001-8791(02)00053-2

Hirschi, A. (2009). Career adaptability development in adolescence: Multiple predictors and effect on sense of power and life satisfaction. *Journal of Vocational Behavior, 74*, 145-155. doi:10.1016/j.jvb.2009.01.002

Hirschi, A., Lee, B., Porfeli, E. J., & Vondracek, F. W. (2013). Proactive motivation and engagement in career behaviors: Investigating direct, mediated, and moderated effects. *Journal of Vocational Behavior, 83*, 31-40. doi:10.1016/j.jvb.2013.02.003

Holland, J. L. (1997). *Making vocational choices* (3rd ed.). Odessa, FL: Psychological Assessment Resources.

Kanfer, R., Wanberg, C. R., & Kantrowitz, T. M. (2001). Job search and employment: A personality-motivational analysis and meta-analytic review. *Journal of Applied Psychology, 86*, 837-855. doi:10.1037//0021-9010.86.5.837

Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics, 33*, 159-174. doi:10.2307/2529310

Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior, 45*, 79-122. doi:10.1006/Jvbe.1994.1027

Lierman, L. (2011, February). Incorporating motivational interviewing into career counseling. *Career Convergence Web Magazine*. Retrieved from http://ncda.org/aws/NCDA/pt/sd/news_article/39531/_self/layout_ccmsearch/false

Lundahl, B. W., Kunz, C., Brownell, C., Tollefson, D., & Burke, B. L. (2010). A meta-analysis of motivational interviewing: Twenty-five years of empirical studies. *Research on Social Work Practice, 20*, 137-160. doi:10.1177/1049731509347850

Masdonati, J., Massoudi, K., & Rossier, J. (2009). Effectiveness of career counseling and the impact of the working alliance. *Journal of Career Development, 36*, 183-203. doi:10.1177/0894845309340798

McCambridge, J., & Strang, J. (2004). The efficacy of single-session motivational interviewing in reducing drug consumption and perceptions of drug-related risk and harm among young people: Results from a multi-site cluster randomized trial. *Addiction, 99*, 39-52. doi:10.1111/J.1360-0443.2004.00564.X

McClain, M.-C. (2010, January). Eliciting change-talk. *Career Convergence*. Retrieved from http://ncda.org/aws/NCDA/pt/sd/news_article/38266/_self/layout_ccmsearch/false

Miller, W. R., Moyers, T. B., Ernst, D., & Amrhein, P. (2008). *Manual for the Motivational Interviewing Skill Code (MISC): Version 2.1*. Center on Alcoholism, Substance Abuse and Addictions. University of New Mexico, Albuquerque, NM. Retrieved from http://casaa.unm.edu/download/misc.pdf

Miller, W. R., & Rollnick, S. (1991). *Motivational interviewing: Preparing people to change addictive behavior.* New York, NY: Guilford Press.

Miller, W. R., & Rollnick, S. (2002). Motivational interviewing: Preparing people for change (2nd ed.). New York, NY: Guilford Press.

Miller, W. R., & Rollnick, S. (2009). Ten things that motivational interviewing is not. *Behavioural and Cognitive Psychotherapy, 37*, 129-140. doi:10.1017/S1352465809005128

Miller, W. R., & Rollnick, S. (2013). *Motivational interviewing: Helping people change* (3rd ed.). New York, NY: Guilford Press.

Miller, W. R., & Rose, G. S. (2009). Toward a theory of motivational interviewing. *American Psychologist, 64*, 527-537. doi:10.1037/a0016830

Moyers, T. B., & Martin, T. (2006). Therapist influence on client language during motivational interviewing sessions. *Journal of Substance Abuse Treatment, 30*, 245-251. doi:10.1016/J.Jsat.2005.12.003

Moyers, T. B., Martin, T., Christopher, P. J., Houck, J. M., Tonigan, J. S., & Amrhein, P. C. (2007). Client language as a mediator of motivational interviewing efficacy: Where is the evidence? *Alcoholism-Clinical and Experimental Research, 31*, 40-47. doi:10.1111/J.1530-0277.2007.00492.X

Moyers, T. B., Martin, T., Manuel, J. K., Miller, W. R., & Ernst, D. (2010). *Revised global scores: Motivational Interviewing Treatment Integrity 3.0 (MITI 3.0)*. Centre on Alcoholism, Substance Abuse and Addictions. University of New Mexico, Albuquerque, NM. Retrieved from http://casaa.unm.edu/download/miti3.pdf

Perdrix, S., Stauffer, S., Masdonati, J., Massoudi, K., & Rossier, J. (2012). Effectiveness of career counseling: A one-year follow-up. *Journal of Vocational Behavior, 80*, 565-578. doi:10.1016/J.Jvb.2011.08.011

Pittman, G. (2000). Dilemmatic constructions of career in the career counseling interview. *The Career Development Quarterly, 48*, 226-236. doi:10.1002/j.2161-0045.2000.tb00288.x

Prochaska, J. O., & DiClemente, C. C. (1984). The transtheoretical approach: Crossing traditional boundaries of therapy. Homewood, IL: Dow/Jones Irwin.

Reid, H. L. (2008). Career guidance for at risk young people: Constructing a way forward. In J.

    A. Athanasou & R. Van Esbroek (Eds.), *International handbook of career guidance* (pp.

    461-485). Dodrecht, The Netherlands: Springer.

Ryan, R. M., Lynch, M. F., Vansteenkiste, M., & Deci, E. L. (2011). Motivation and autonomy in

    counseling, psychotherapy, and behavior change: A look at theory and practice. *The*

    Counseling Psychologist, 39, 193-260. doi:10.1177/0011000009359313

Sampson, J. P., Lenz, J. G., Reardon, R. C., & Peterson, G. W. (1999). A cognitive information

    processing approach to employment problem solving and decision making. *The Career*

    Development Quarterly, 48, 3-18. doi:10.1002/j.2161-0045.1999.tb00271.x

Savickas, M. L. (2001). Toward a comprehensive theory of career development: Dispositions,

    concerns, and narratives. In F. T. L. Leong, & A. Barak (Eds.), *Contemporary models in*

    vocational psychology: A volume in honor of Samuel H. Osipow (pp. 295-320). Mahwah,

    NJ: Erlbaum.

Stead, G. B., Perry, J. C., Munka, L. M., Bonnett, H. R., Shiban, A. P., & Care, E. (2012).

    Qualitative research in career development: Content analysis from 1990 to 2009.

    International Journal for Educational and Vocational Guidance, 12, 105-122.

    doi:10.1007/S10775-011-9196-1

Stoltz, K. B., & Young, T. L. (2013). Applications of motivational interviewing in career

    counseling: Facilitating career transition. *Journal of Career Development, 40*, 329-346.

    doi:10.1177/0894845312455508

Vondracek, F. W., Ford, D. H., & Porfeli, E. (2015). A living systems theory of vocational

    behavior and development. Rotterdam, The Netherlands: Sense.

Whiston, S. C., & Keller, B. K. (2004). The influences of the family of origin on career

development: A review and analysis. *The Counseling Psychologist, 32*, 493-568.

doi:10.1177/0011000004265660

Yin, R. K. (2008). *Case study research: Design and method*s. London, UK: Sage.