



Brief motivational interviewing training for teachers providing career services in Turkey: A pilot study

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Abstract

This mixed-methods pilot study examined the effectiveness of brief motivational interviewing (MI) training on middle school teachers' efficacy in providing career services to socioeconomically disadvantaged students. Forty-five teachers (55% men) received a six-hour training on the career-development needs of middle school students and MI techniques. Quantitative results indicated a significant effect of training on teachers' sense of efficacy regarding student engagement. Qualitative data indicated teachers' increased sense of efficacy in providing career services and their personal and professional development. These results imply that MI can be effective in supporting teachers' competencies and can motivate students of low socioeconomic status.

Keywords Motivational interviewing · Early career teachers · Teachers' efficacy

Résumé

Formation à l'entretien motivationnel pour les enseignants offrant des services d'orientation professionnelle en Turquie : Une étude pilote

Cette étude pilote utilisant des méthodes mixtes a examiné l'efficacité d'une brève formation à l'entretien motivationnel (EM) sur l'efficacité des enseignants du secondaire à fournir des services d'orientation professionnelle aux élèves défavorisés sur le plan socio-économique. Quarante-cinq enseignants (55% d'hommes) ont reçu une formation de six heures sur les besoins en développement de carrière des élèves du secondaire et sur les techniques d'entretien motivationnel. Les résultats quantitatifs ont indiqué un effet significatif de la formation sur le sentiment d'efficacité des enseignants concernant l'engagement des élèves. Les données qualitatives indiquent que

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les enseignants se sentent plus efficaces dans la prestation de services d'orientation professionnelle et dans leur développement personnel et professionnel. Ces résultats impliquent que l'EM peut être efficace pour soutenir les compétences des enseignants et motiver les élèves de faible statut socio-économique.

Zusammenfassung

Training in Motivierender Gesprächsführung für Lehrpersonen, die Berufsberatung in der Türkei anbieten: Eine Pilotstudie

Diese mixed-method Pilotstudie untersuchte die Effektivität eines kurzen Trainings in motivierender Gesprächsführung (Motivational Interviewing, MI) auf die Effektivität von Lehrpersonen der Mittelstufe bei der Bereitstellung von Berufsberatung für sozioökonomisch benachteiligte Schülerinnen und Schüler. Fünfundvierzig Lehrpersonen (55% Männer) erhielten eine sechsstündige Schulung zu den beruflichen Entwicklungsbedürfnissen von Mittelschülern und zu MI-Techniken. Die quantitativen Ergebnisse zeigten eine signifikante Auswirkung der Schulung auf das Wirksamkeitsgefühl der Lehrpersonen in Bezug auf das Engagement der Schülerinnen und Schülern. Die qualitativen Daten zeigten, dass die Lehrpersonen ein erhöhtes Gefühl der Effizienz bei der Bereitstellung von Berufsberatung und ihrer persönlichen und beruflichen Entwicklung hatten. Diese Ergebnisse deuten darauf hin, dass MI die Kompetenzen der Lehrpersonen wirksam unterstützen und Schülerinnen und Schüler mit niedrigem sozioökonomischem Status motivieren kann.

Resumen

Formación en la entrevista motivacional para profesorado que ofrece orientación profesional en Turquía: un estudio piloto

Este estudio piloto examinó, a través de una metodología mixta, la incidencia de la formación en la entrevista motivacional breve (MI, siglas en Inglés) sobre la eficacia del profesorado de secundaria en la orientación profesional a estudiantes en situación de desventaja socioeconómica. Cuarenta y cinco maestros (55% hombres) recibieron una formación de seis horas acerca de las necesidades de desarrollo de la carrera de los estudiantes de secundaria y técnicas de MI. Los resultados cuantitativos indicaron un efecto significativo de la formación sobre el sentido de eficacia que da el profesorado a la participación de los estudiantes. Los datos cualitativos indicaron incremento en el sentido de eficacia que tienen los docentes en relación con la orientación profesional que ofrecen y su desarrollo personal y profesional. Estos resultados implican que la MI puede ser eficaz para apoyar las competencias del profesorado y puede motivar a los estudiantes de nivel socioeconómico bajo.

Introduction

Originally developed for use with clients struggling with alcohol-related problems (Miller, 1983), motivational interviewing (MI) has been utilized since the 1980s as a method to strengthen one's motivation towards lifestyle change. MI is defined as "a collaborative, person-centered form of guiding to elicit and strengthen motivation

for change” (Miller & Rollnick, 2009, p. 137). Examples of clinical experience and empirical evidence has proved its worth in facilitating change through resolving ambivalence and exploring the essentials of change (e.g., Burke et al., 2003).

First and foremost, MI is based on internally-driven motivation based on values, capacities and desires, rather than external sources of motivation. It is grounded on the keystones of collaboration between client and counselor, and elicitation of the client’s own arguments for change and autonomy. MI is a supportive technique for the counselor to clarify the client’s hesitations, thoughts and feelings, and work towards positive decision-making with full of empathy (Amrhein, 2004). It helps uncover decision-making difficulties, recognize a positive change of direction for those who are unsure or reticent of making a change, increase their awareness based on their aspirations and capabilities (Tripp et al., 2011).

MI is a preventive method based on four stages: open-ended questions, affirmations, reflective thinking, and summarizing (Miller & Rollnick, 2013); and utilizes various strategies to evoke change-based discussion such as posing evocative questions/examples, exploring decisional balance, looking back, looking forward, miracle questions or extremes, reflective listening, and the “Columbo approach” which means reflecting on the differences in clients’ speech (Miller & Rollnick, 2002; Sobell & Sobell, 2008).

Previous work indicated efficacy of MI across a range of problems such as reduction of alcohol intake, drug usage, and tobacco smoking (e.g., Burke et al., 2003; Colby et al., 2005; Hokanson et al., 2006; Schoener et al., 2006), bodily weight control (e.g., Burke et al., 2003; Resnicow et al., 2006), and the treatment of anxiety-based disorders (e.g., Slagle & Gray, 2007). Taking these promising results on health-related issues into account, Miller and Rose (2009) suggested using MI with any population feeling ambivalence towards change. Consequently, the use of MI in the career-support field has received attention since motivation is a crucial element in successfully tackling career-related tasks and transitions in the career development process (e.g., Gati et al., 2010; Hirschi et al., 2013), while the lack of motivation is a potential source of difficulty in career decision-making (Gati et al., 1996; Gati et al., 2000).

Considering that career interventions aim to foster clients’ autonomy and sense of control for future (e.g., Savickas, 2005), students’ motivation can be an effective resource for career experts to foster and promote, especially for students who lack motivation to move (Stoltz & Young, 2013). Supportively, the existing literature emphasized integrating MI into career guidance (e.g., Lierman, 2011; McClain, 2010; Reid, 2008; Rochat, 2018; Stoltz & Young, 2013) as a result of the positive impacts of MI for career development; increasing the level of positive career discussion, and reducing individuals’ ambivalence about career planning (e.g., Klonek et al., 2016; Rochat, 2019), resolving career dilemmas and increasing students’ readiness to make the pertinent career choices (e.g., Rochat & Rossier, 2016), and thereby increasing their chances of gainful employment in their chosen field (e.g., Britt et al., 2016).

Teachers play the role of good models and social support system for students even through career interventions (Dodd & Hooley, 2018). Therefore, it becomes beneficial to acquire the techniques of MI (Sheldon, 2010) so that they can help their

students, especially those from disadvantaged conditions with a sense of ambivalence towards to their future (Reid, 2008), realize the challenges they face with and set goals for future. Nevertheless, up to researchers' knowledge, there is no study investigating MI training for teachers.

Klonek et al. (2016) remarked the lack of MI perspective for teachers when they provided career information. Teachers equipped with the principles and techniques of MI are of critical importance in service of effective support for their students' engagement with school and thus their career future. In Turkey, the Middle School Guidance and Career Planning Course program (Milli Eğitim Bakanlığı [Turkish Ministry of National Education], 2014), is delivered by classroom teachers, who mostly have no prior career-specific training (see Nassar et al., 2019). Therefore, the aims of the present study were twofold: to examine the impact of brief MI training on middle school teachers' sense of efficacy for student engagement from socioeconomically disadvantaged conditions; and to reflect participants' impressions and their improvement regarding brief MI techniques.

Method

Design

This pilot study was a part of career project consisting of five modules: career development characteristics and the needs of middle school students; motivational interviewing in career guidance; career adaptability skills; career-planning process; and, basic helping skills, that together aimed to increase teachers' competencies in providing career services to students within the context of a Career Planning Course (CPC) in Turkey.

The current study examined the impact of brief MI training on teachers' efficacy in providing career services to socioeconomically disadvantaged students. In 'motivational interviewing in career guidance module', participants received a "Brief Motivational Interviewing Training (brief MI training)" consisted of MI techniques, both theoretically and applied. The training was based on how to use specific techniques with students from disadvantaged conditions in their career indecision process. Using a mixed-method design, both quantitative and qualitative data were gathered. In *Phase I*, teachers' efficacy regarding student engagement was tested via a measurement with a single-group pre-test – post-test design; and in *Phase II*, perceptions about MI training were analyzed and reported.

Participants

The participants included 48 volunteer teachers (21 females, 27 males) from 11 different schools in the province of Gaziantep, Turkey. The training was designed for teachers who taught socioeconomically disadvantaged middle school students; thus, purposeful sampling was used. Although 48 teachers participated to the training, three participants (1 female, 2 males,) were excluded from the analysis as their

post-test measurements included many missing values. Thus, the sample consisted of 45 teachers, including 20 women and 25 men (55% men). The participants were from different teaching disciplines such as Science, Math, Music, Art, Turkish Language, English Language, Social Sciences, and Physical Education; also, most of them had teaching experience less than five years ($n = 39$).

Data Collection Instruments

In *Phase I*, data were collected through application of the Teachers' Sense of Efficacy Scale (TSES) (Tschannen-Moran & Woolfolk-Hoy, 2001), a 24-item measurement used to assess teachers' levels of efficacy. The scale consists of three subscales as "Efficacy for Student Engagement" (SE), "Efficacy for Instructional Strategies" (IS), and "Efficacy for Classroom Management" (CM). The reliabilities of the subscales ranged from .87 to .91. The Turkish adaptation of the scale by Çapa et al. (2005) resulted in a 3-factor model, with reliability assessed as .82 for SE, .86 for IS, .84 for CM, and .93 for the whole scale. The Cronbach's alpha coefficient calculated for internal consistency of the study was found to be .81.

In line with the aim of the current study's training, only the Efficacy for Student Engagement (SE) subscale of the TSES was used to gather teachers' sense of efficacy related to student engagement, since the researchers tentatively assumed that teachers required self-efficacy beliefs in order to engage with students in providing career-related services to their students, and especially to those who were socio-economically disadvantaged. Supportively, previous studies indicated self-efficacy to be one of the essential elements in promoting students' engagement and motivation (e.g., Ford, 2012; Linnenbrink & Pintrich, 2003), and teachers who worked at schools with a low socioeconomic status needed it more (e.g., Page et al., 2014). The SE subscale consists of eight items, formed on a 9-point Likert-type scale ('1: Nothing' to '9: A great deal'). Sample items from the SE subscale are, "How much can you motivate students who show low interest in school work?," "How much can you do to get through to the most difficult students?," and "How much can you do to get students to believe they can do well in school work?"

In *Phase II*, a survey consisting of seven open-ended questions related to the evaluation of brief MI training was applied to gather the participant teachers' perspectives. The survey was designed by the researchers taking Bandura's (1977) Social Cognitive Theory literature into account as well as with regards to increased efficacy of using MI techniques. The participants were asked seven questions based on the familiarity and usability of MI techniques, how efficient they felt about applying these MI techniques, and how the training influenced their application of MI techniques whilst dealing with students' career indecision. Two experts' opinions were gathered in terms of item clarity and understanding of the questions. Some example items from the survey are, "How efficient do you feel that you can use motivational interview techniques?," "In which aspects do you think that MI techniques can help you?," and "Please discuss your level of efficacy before and after you have learned and experienced MI techniques?"

Data Analysis

In *Phase I*, the Paired-Sample *t* Test was used to detect any significant difference between the pre-test and post-test efficacy levels of the participants. At the qualitative phase of the study in *Phase II*, descriptive analysis was conducted on participants' responses about the brief MI training they received. Specifically, "consensual qualitative research" (CQR), which uses brief response open-ended qualitative questions (Spangler et al., 2012) and explores a limited number of cases by recognizing the importance of context (Hill et al., 1997), was taken as the qualitative data analysis approach. To prevent researcher bias, independent analyses were conducted for open-ended questions based on pre-defined titles of the semi-structured survey; that is, the results were reported accordingly with the survey questions. At first, the authors used an exploratory approach in order to become familiarized with the data (Braun & Clarke, 2006). After reading the responses numerous times, initial codes were formed independently. Then, the researchers came together to resolve any coding-based disagreements. An explanation for each code was provided, and a final mutual decision was settled upon a unique meaning regarding the whole dataset. Later, the initial codes were formulated into groups to reflect the responses. Both of the researchers reviewed the assigned codes to check whether or not they accurately reflected all of the responses. Finally, the responses were reported in a descriptive way.

Process

After the necessary ethical permission was received from the Ethics Committee and the Turkish Ministry of National Education, the training was planned to take place prior to the start of the Fall semester of the 2019-2020 academic year. As a part of career-based project, the brief MI training was implemented to middle school teachers to provide a basis for the career developmental characteristics and needs of middle school students. The brief MI training was designed in two parts within a 1-day training (e.g., Miller & Mount, 2001; Young & Hagedorn, 2012). Within the perspective of Bandura's (1977) Social Cognitive Theory (SCT), the brief MI training aimed to increase the teachers' (who had not previously received any training on this behalf) self-efficacy in providing student career services. Although MI is considered a complex process that involves longer training protocols (Miller & Moyers, 2006; Moyers et al., 2007; Moyers et al., 2005), previous studies have already addressed the efficiency of brief MI training (e.g., Madson et al., 2009; Osborn et al., 2020; Young & Hagedorn, 2012).

In the first part of brief MI training, the theoretical background and techniques of motivational interviewing were presented to the participants. They were asked to join a game to experience how the techniques could be utilized during a student career guidance interview. During the game, the participants were given several cards upon which different MI techniques were written. Then, the researcher read a case and the participants were asked to verbally offer their responses to assigned

cases. Finally, the participants explained their reasons for choosing a specific technique for the given case; and the whole group discussed the reasons of different responses, if any.

In the second part, the participants were divided into groups of two or three, and asked to create a scenario which they experienced in their own schools regarding career-based difficulties of students. Then, one participant played the role of the student facing career indecision, while the other participant played the role of the teacher conducting the motivational interview. During the role-play sessions, it was emphasized that the participants used the MI techniques they had been taught during the first part of their training (e.g., Columbo approach, change talk, reflective listening, extreme questions, and scaling questions).

At the beginning of the training, a pre-test was applied to measure the teachers' efficacy for student engagement; then, at the end of the second part of the training, the instrument was reapplied as a post-test, together with an evaluation form including open-ended questions about their perceived efficacy to conduct MI with students facing career indecision.

Results

Phase I

In *Phase I*, teachers' sense of efficacy regarding student engagement was measured at two different times (as pre-test and post-test followed by brief MI training). A Paired Samples *t*-Test was used to compare the means of two related normally distributed data. Skewness-kurtosis, Kolmogorov-Smirnov and Shapiro-Wilk tests of difference between two intervals, outliers and histogram were checked and the results indicated no violation of assumptions.

A Paired Samples *t*-Test was conducted to compare the efficacy level of the teachers in the pre-test and post-test conditions. The results revealed a significant difference in the scores for pre-test ($M = 47.82$, $SD = 6.14$) and post-test ($M = 51.18$, $SD = 8.63$) conditions; $t(44) = -2.55$, $p = .02$. The findings suggested that motivational interviewing strategies had an effect on teachers' sense of efficacy regarding student engagement. Specifically, as teachers got to know more motivational interviewing strategies, their level of sense of efficacy regarding student engagement (e.g., fostering students' motivation for school work) increased. The Cohen's d calculated for the effect size indicated a medium effect; Cohen's $d = .38$ (Cohen, 1988). Around 38 % of the variance in teachers' efficacy related to student engagement could be attributed to brief motivational interviewing training.

Phase II

The qualitative findings were reported based on descriptive analysis. The codes were described with direct quotations as follows:

Familiarity of MI techniques

The teachers were asked to report their familiarity with MI techniques. Taking the frequencies into consideration; asking open-ended questions, reflective listening, scaling questions, and summarizing were among the techniques mostly used by the teachers without being aware of the fact that they were MI techniques. It was worth mentioning that the frequency of asking open-ended questions was found to be relatively high ($n = 28$); whereas evoking change talk ($n = 8$) and the Columbo approach ($n = 2$) were found to be low. The majority of the participants highlighted that they heard about the Columbo approach, scaling questions, evoking change talk (by provoking extremes) for the first time during this training.

Efficacy of using MI techniques

Throughout the training, the participants gained the opportunity to experience how to use MI techniques in the practice of career counseling conversation; therefore, this question reflected the participants' efficacy about using the techniques. Their responses indicated an increased level of awareness towards usage of MI techniques ($n = 29$) because they were unaware of such techniques being used in career counseling. Even though five of the participants noted that they did not feel that they were efficient, most of the participants stated having a 'mid-level' of efficacy ($n = 15$) or 'adequate' efficacy ($n = 15$). Compared to their pre-training level, the teachers mentioned that they would start to use the MI techniques because they had not only learned about them theoretically, but also used them practically. The number of participants who emphasized having a 'high level' of efficacy was five. Samples of their responses were as follows:

I didn't know about motivational interviewing techniques before I attended this training, but I think I'm more efficient now. I will use them as much as possible.

With the contribution of the training, I feel I'm efficient at a mid-level.

With this training, I feel as competent as possible.

Although I'm not at an advanced level, I think I can now help my students slightly more.

Usability of MI techniques

As the training was designed for branch teachers, not specifically for school counselors, the participants were asked about their opinions about the usability of MI techniques. The frequency of responses indicated that reflective listening, evoking change talk, extreme questions, and scaling questions were among those which could be used by the teachers easily ($n = 31$). Reflective listening was the most mentioned technique ($n = 26$) although it was not among the familiar techniques. The

participants stated that reflective listening was easy to use in understanding their students, and to value their opinions. The results also implied that the use of “questions” was easy to apply in conversations about students’ career indecision. Some of the participants’ responses were as follows:

Reflective listening can easily be used because above all, the individual needs to be understood, and we need to make them feel that we understand them.

Evoking change talk is great to foster new opinions instead of existing ones.

Change talk can make students dream so that many of their indecisive thoughts can be resolved.

Advantages of experiencing MI techniques

The participants were asked about their opinions towards experiencing MI techniques because one of the strongest contributions reported was that this brief MI training was based on practical training in which role-plays and drama were utilized. The responses could be summarized as following; increased self-efficacy, having a more professional manner, vocational development, coping with difficult students, understanding students better, better communication skills, and easy to reflect in real life. Some of the teachers ($n = 14$) stated that experiencing MI not only contributed to their own career but also to students’ life, because teachers will be able to help their students reflecting their opinions and feelings much more than previous indecisive conversations. The responses were explicit in that experiencing MI techniques could change teachers’ views towards career counseling since they discovered and reflected that vocational guidance does not mean directing students; instead, it should be based on increasing their students’ potential to choose their own way. Some of the participants’ statements were provided below:

I gained experience about questions which can increase my students’ potential without directing them, and I know that I will now use them often.

It will help students express themselves better and keep talking about themselves.

I feel happy because from now on, I will not use only the question of ‘What would you like to be in the future?’

Instead of extemporarily pointing out the right and/or wrong way of a career move, I will now follow a more scientific method.

Efficacy towards providing career counseling

The participants were asked about their efficacy towards using MI techniques in providing career services. Significantly, they stated that the brief MI training positively influenced their efficacy ($n = 37$) both on a personal and professional level. More explicitly, they noted that their knowledge and experience increased; and as a result, they felt much more self-confident. Their awareness increased; they learnt how

to ask better questions to understand their students and discover students' values thanks to the use of better communication tools. Moreover, dramatization increased their awareness towards the conditions faced in socioeconomically disadvantaged students ($n = 29$). Having discussions and role-plays about students' career indecision together with other teachers from the same province helped them how to guide their students better by using helpful techniques ($n = 11$). Besides, the teachers discovered their common mistakes in career counseling process, and the importance of this professional development. The following responses were provided to reflect their perspectives:

It positively affected my professional life; I discovered that I was making mistakes while supposing that I was motivating students.

It increased my awareness, and now I will prepare my questions and conduct in-depth conversations with my students.

I have become a better listener. I realized that learning how to ask the right questions can lead you in the right direction.

I will be more professional in providing career counseling support because my level of awareness has increased considerably.

To tell the truth, this training was valuable for me.

Difference in level of efficacy before and after learning MI techniques

The last question was based on a comparison before and after the training in terms of the participants' efficacy towards providing career services to students facing career indecision. Whilst the previous question addressed the level of efficacy, this question was specifically aimed at the difference between before and after the training. Overall, the participants indicated that they were quite satisfied with the training ($n = 45$). Compared to the pre-training condition, the teachers' efficacy increased, and most of them rated their level of efficacy after completion of MI training, on a 1–10-point scale, in which 10 represents high level, as "8" on average. Surprisingly, some of the participants clearly stated that prior to the training, they only knew how to "direct" their students to resolve their career indecision, which was an inappropriate method. Instead, during the training, the teachers discovered that they should let their students find their own ways through application of the correct MI techniques ($n = 9$). In line with the quantitative findings, the participants underlined their 'mid-level efficacy' in using MI techniques rather than an 'advanced' level. However, the majority of the participants clearly stated that compared to their pre-training, they felt much more efficient, and will use MI techniques in the future. Some of the participants' responses on this issue were as follows:

Before the training, I was using sentences or implications expected by the society; but after the training, now I will only use the techniques to help students understand themselves, and leave the final decision up to them.

I might have made some mistakes in providing career support due to lack of knowledge about motivational interviewing before, but from now on, I will pay greater attention to provide the efficient support.

Before I participated in the training, I was not thinking about the questions, but from now on, I will give them greater importance.

Before the training, I did not think that I was efficient theoretically or practically, but after the training, I feel much more competent and efficient.

Undoubtedly, my level of efficacy has increased, even if it is not at a high level, I feel more efficient compared to previous level.

I thought that this was the school counselor's responsibility, but after the training, I discovered that I could also use MI techniques in the career indecision process.

Discussion

This pilot study examined the influence of brief MI training on middle school teachers' sense of efficacy regarding student engagement (Phase I), and reported their perspectives about the use of MI in providing career services to their students (Phase II). The quantitative phase of the current study indicated a significant impact of the brief MI training on the participant teachers' efficacy for student engagement. Considering that middle school teachers in Turkey are expected to provide career-related services and career information to their students, especially through the Career Planning Course as in this case, the findings proposed that brief MI training can foster their capabilities and increase the level of efficacy in providing career support. More particularly, working with students from disadvantages area such as low SES requires that teachers motivate students to perform well in school and prepare for their future (Reid, 2008), which calls for teachers to have a sense of efficacy in engaging with their students (Tschannen-Moran & Woolfolk-Hoy, 2001), as supported by the current results.

Considering that teachers' self-efficacy refers to their beliefs about their abilities in performing specific behaviors (Tschannen-Moran & Hoy, 2007), providing effective career services can contribute to teachers' self-efficacy. Consistent with the current results, the relevant literature indicated that teachers' self-efficacy feelings affected their skill development and professional practice (e.g., Ning et al., 2015; Perera et al., 2019), including student interaction and engagement (e.g., Hajovsky et al., 2020; Summers et al., 2017). Moreover, this finding somewhat supported that the teachers' efficacy were related to variables such as student motivation (e.g., Midgley et al., 1989), or their own motivational orientation (e.g., Mahler et al., 2018) in the sense that learning new methods and skills to promote students' motivation increased teachers' efficacy feeling. Similarly, the previous work indicated that one day MI training for counselors and counselor trainees increased empathic tendency via learning change talk, which promoted self-efficacy of the participants

(Osborn et al., 2020). Although career counselors reported low proficiency about MI in some studies (e.g., Klonek et al., 2016; Rochat, 2019), these results could be also explained by the fact that counselors have educational background regarding basic and advanced helping skills, but even brief MI training is a useful resource for teachers while working with students, especially those who have lack of motivation and career indecision. In addition, it could be inferred that providing career services makes up only one small part of their duties, especially when compared to their primary teaching role, which could also result in an imbalanced relationship with their students when it came to the provision of career guidance; thus, they need more specific training. Moreover, the role of “educator,” which can be assumed as the most prominent among the roles of a teacher, may not be seen as useful in helping the students (as “clients”) to resolve their ambivalence, or to explore their values and goals within the MI process (Miller & Rollnick, 2013). Considering the content of MI training included the use of empathy, change talk, reflective listening, scaling questions, extreme questions, and the Columbo approach, rather than giving advice or teaching, the teachers might have felt increased efficacy about using MI during such an engagement with their students.

Similarly, the qualitative data showed that the teachers valued the brief MI training they received in various aspects, at most their increased efficacy. Although this phase of study aimed to invite participants to evaluate the brief MI training, the results included evaluations of the training as well as increases in self-efficacy beliefs of teacher participants. First, the results showed that they were familiar with asking open-ended questions. The participants stated that they learned about the Columbo approach, scaling questions, and evoking change talk during their MI training, and that they were able to use reflective listening and extreme questions to help students facing career indecision. This result was somewhat consistent with previous studies that showed brief MI could positively influence a client’s career indecision (Rochat & Rossier, 2016), and MI triggered clients’ change talks (e.g., Ford et al., 2015; Klonek et al., 2016). Similarly, Stoltz and Young (2013) suggested integrating MI techniques into career services, especially for the resolution of career dilemmas and for the provision of career information.

The teachers frequently stressed that the brief MI training promoted their self-efficacy by increasing their personal and professional development. The teachers stated that their knowledge and practice increased and they felt much more efficient compared to before receiving the training. Supportively, the previous research indicated that teachers’ needs for professional development and participation in professional development activities, like the brief MI training in the current study, affected their self-efficacy (e.g., Perera et al., 2019). Particularly, considering that most of the teachers in the current study had 5 years or less experience, supporting competencies of early career teachers in providing career services to students, especially those from disadvantaged areas, might have promoted their efficacy. The relevant literature indicated that attrition was high among early career teachers because of low self-efficacy (e.g., Borman & Dowling, 2017). Thus, fostering the competencies of early career teachers in a specific area was encouraged (Elliott et al., 2010). In this sense, teaching new techniques via MI training and increasing early career teachers’ competencies in providing career services might have helped to promote the

teachers' self-efficacy to some degree. Similarly, a systematic review of training in motivational interviewing by Madson et al. (2009) reported that the training resulted in increased participant confidence, knowledge, and interest in using MI, as well as their intention to use it in the future.

At last but not the least, the teachers reported having realized their most common mistakes in providing career services, such as not respecting their students' autonomy, not understanding their students' values and context (such as low socioeconomic status), not listening to their students sufficiently, deeply, or effectively, and giving personal advice to their students appreciated by the society or guiding them in a particular direction. It can be inferred that the brief MI training also increased the teachers' ethical awareness in providing career services and career-based information to their students. This can be explained by the very nature of the training, as MI acknowledges the respecting of clients' rights and capabilities to make their own decisions (Miller & Rollnick, 2009). Accordingly, these findings supported the knowledge that ethically speaking, MI should be based on a non-directive way of providing help and support in the case of a client's ambivalent decision or their decision about taking a particular path (Miller & Rollnick, 2013), such as leaving school or restricting their career choices unnecessarily as in the current case.

Notwithstanding the strengths of this study, a number of limitations need to be taken into consideration when interpreting or generalizing the results. First and foremost, there was no use of control group, which might imply biased estimates of impact although it was seen debatable (e.g., McKillip, 1992) and single-group pretest-posttest design was suggested in educational studies (Gay et al., 2012). Moreover, considering ethical and pedagogical reasons (e.g., the majority of volunteer participants were from rural disadvantaged districts of Turkey and in need of such a program), and the issue of timing (e.g., the program should be conducted prior to the start of the new academic year) (see Schanzenbach, 2012), all voluntary teachers were included in the study without using a control group. Using no control group could bring another question whether other (non-MI) career-related training approaches would also have the same (or better) results on teachers' self-efficacy. Apart from pedagogical reasons explained above regarding why it was not possible to use control group in this study, it can be tentatively assumed that the brief MI training would be still effective on teachers' efficacy beliefs even comparing with other trainings, considering aforementioned studies which showed the impacts of one-day brief MI training on efficacy of the participants (e.g., Osborn et al., 2020) and the associations between teachers' self-efficacy beliefs and student engagement and motivation (e.g., Hajovsky et al., 2020; Perera et al., 2019; Summers et al., 2017).

Another limitation was that the brief MI training program consisted of two parts within a 1-day training. Yet, it should be noted that brief MI training was already proven to be an effective method in the literature (e.g., de Roten et al., 2013; Miller & Mount, 2001; Osborn et al., 2020; Young & Hagedorn, 2012). In addition, the brief MI training applied in the current study was not only based on giving didactic instruction, as in most MI training studies (see Madson et al., 2009), it included role-playing as well as group discussions and other exercises. The training encompassed student-centered counseling skills, change talks, handling resistance and

avoiding confrontation, reflective listening and empathizing, which were among the stages suggested by Miller and Moyers (2006). However, future studies could aim to develop a more comprehensive supervised training program which might function more as an alternative certification program aimed at increasing teachers' competencies in a specific area for early career teachers (Elliott et al., 2010); and thereby examine the students' outcomes longitudinally. The last limitation was that response shift bias might have arisen due to changes in the participants' evaluations as a result of applying self-reporting measurements. Therefore, a true- experimental design, in which retrospective pre-test is taken prior to the experimental application, could be suggested as a further step to progress beyond the current study's pilot application.

Conclusion

The current study indicated that brief MI training, which supported teachers by gaining some specific and useful techniques to foster career development of their students from low SES, increased teachers' self-efficacy regarding student-engagement as well as in providing career services. The middle school years are of critical importance in helping students with their career development (Akos, 2004), and therefore, teachers have a crucial role in the provision of support through the delivery of career services and information, and in the conversations held with students (e.g., Dodd & Hooley, 2018). One powerful way of improving this process is to foster students' motivation, which is significantly needed in the case of career indecision or dilemmas faced by students, especially those who are at risk or from a disadvantaged status (Reid, 2008), about their future and thereby increase their school engagement (Blustein, 2006; Hirschi et al., 2013). Thus, the present study provides empirical evidence on use of brief MI to promote teachers' competencies.

The results of the present study have some implications for practice. The findings somewhat verify the influence of MI training in early career teachers' sense of efficacy through supporting their personal and professional development. Hence, it seems that when teachers learn some new specific techniques, they are more likely to increase their competencies, which in turn can produce some outcomes such as student engagement and effective services for students' career development. Consequently, teacher training programs such as brief MI can be developed as an alternative certification program (Elliott et al., 2010) in the support of teachers' self-efficacy. As suggested by Perera et al. (2019), teachers with high scores on the student engagement inefficacious profiles might be included in professional development programs aiming at teaching strategies to motivate students. Apart from tailoring interventions according to teacher self-efficacy profiles, in-service training programs should be targeted for early career teachers to improve their competencies through some specific trainings, considering high attrition rates during those years as aforementioned.

The current study also showed that MI training increased the awareness of the teachers' ethical perspectives, as reported in previous research (e.g., Klonek et al., 2016), in providing career services through increased understanding of motivating students without confrontation and specific attention not to direct them down to

a particular path. Thus, programs and interventions should be provided to branch teachers to improve their professional competencies in service of students' career development, including the ethical perspective. To be proactive, teacher education undergraduate programs might include specific, sustainable courses for in-service teachers to gain knowledge and skills regarding career development of students.

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Declarations

Conflict of interest The authors declare no conflict of interest.

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