

An Online Program to Reduce Students' Career Indecision: A Turkish Pilot Study

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Abstract: This investigation was a pilot study to assess the efficacy of an Online Career Development Program (OCDP) designed to reduce 9th grade Turkish students' career indecisions. Based on a Career Indecision Inventory, 13 students (eight female, five male) who volunteered among the 9th grade students determined to have career indecision were included in the experimental group while 14 others (eight female, six male) were included in the control group. Participants in the experimental group were exposed to a six-week long psycho-educational OCDP designed to reduce career indecision. These one hour long weekly online sessions were based upon the Career Sailboat Model (see Figure 1). To evaluate the efficacy of the pilot program, the Career Decision Inventory, and a program evaluation form were utilized. It was determined in the quantitative findings that the program was effective in decreasing the career indecision of the participants of the experimental group. Supporting the quantitative findings, qualitative findings also indicate that the program may be effective.

Introduction

Perhaps one of the most universal tasks facing adolescents is that of making at least a tentative selection of career or future work. Career decision making is regarded as one of the important developmental tasks in the development of adolescents and adults (Sampson et al., 1996). Career decision making denotes a person's determining the profession they will have appropriate to their characteristics (Amir & Gati, 2006). On the other hand, some people experience indecision since career decision making includes a series of complex processes (Öztemel, 2012). Career indecision is defined in various ways. According to Chartrand et al. (1993), for example, career indecision means the difficulty felt while deciding on a career path. Kelly and Lee (2002) define it as the state of uncertainty an individual experiences while making a career decision. The common denominator in these definitions is the sense of difficulty experienced in making a career decision.

Career Indecision in High School Students

While it is possible to make career decisions throughout life, developmentally speaking, it is more common to make such decisions at certain phases of life, such as high school years. For example, in Turkey, students who have decided to attend a university after high school are expected to decide on which subject they want to study. High levels of career indecision are regarded to be one of the greatest obstacles to adolescents' career developments (Patton et al., 2003). Career indecision of some students may increase throughout their secondary education as they learn and realize what career options and opportunities there are (Ireh, 1999). Career indecision is clearly not associated with a single country but is widely experienced in a number of countries as reflected in recent literature (Argyropoulou et al., 2007; Babarović & Šverko, 2016; Demir, 2020; Gati et al., 2011; Germeijs et al., 2006; Kounenou, 2014). There are also research findings that show career indecision being experienced at a very high level during secondary education (Okutan & Göncü-Akbaş, 2019) and that career indecision is one of the

basic problems for secondary education students in Turkey (Demir, 2020).

The goal of this pilot study was to examine the efficacy of an Online Career Development Program and its ability to reduce career indecision for 9th grade students. In the Turkish education system, students in secondary education are required at the 10th grade to choose from four fields; Turkish-Mathematics, Science-Mathematics, Social Sciences and Foreign Languages. These choices determine the compulsory and elective courses students will take in subsequent years (Republic of Turkey Ministry of National Education, 2019). Kuzgun (2000) notes that 9th grade students in Turkey experience high levels of career indecision and further suggests that the reason was their lack of awareness of their personal traits, such as interests and abilities. Bacanlı et al. (2013) found that among high school students, the level of the ability to make a career decision is the lowest for 9th grade students. These investigators identify the 9th grade as particularly problematic with regard to career indecision.

Reducing Career Indecision with Group Interventions

Previous investigations have revealed that secondary education students experiencing career indecision need information and resources to support their career development (Ball, 2009; Galven & Negrete, 2017; Symonds et al., 2011; Torpey, 2015). Pyle and Hayden (2015) emphasize the importance of working through structured groups when it comes to topics on career development. Although these career development related services can be provided individually, it can be valuable to work in groups when there is no opportunity to provide an individual session to each student at schools where psychological counselors are overloaded with various tasks and a high number of students. Jordan and Marinaccio (2017) found that students can readily reveal themselves in small groups and that the group

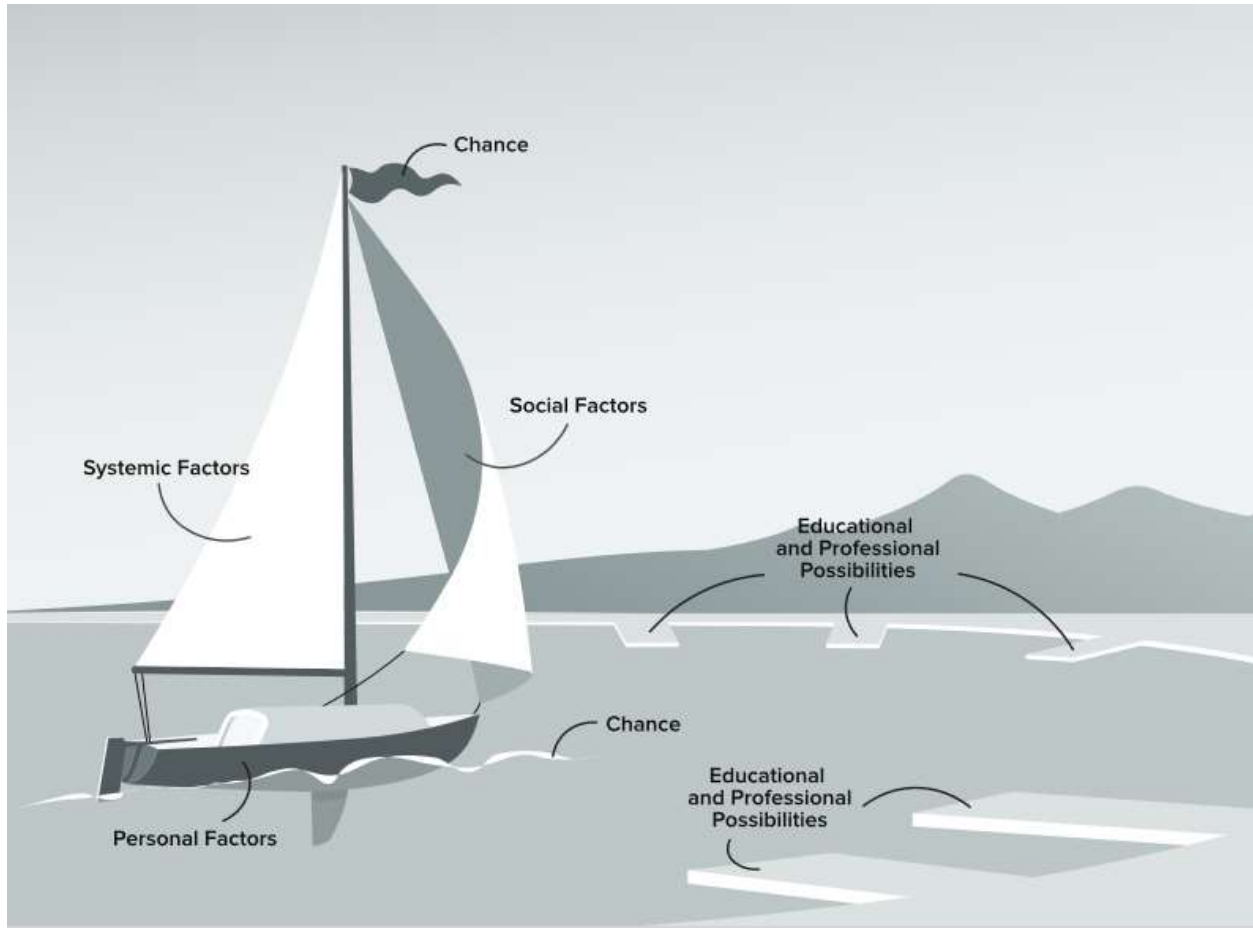
experience enables a thorough discussion of issues. Meta-analysis studies also show that career interventions realized in the form of structured group activities are more effective than other interventions (e.g., Whiston et al., 2003). Based on this, findings of group intervention studies targeting secondary education students who experience career indecision show that these interventions are effective on the participants' effective decision-making skills (e.g., Atlı, 2016; Baker, 2002; Cirişan & Turda, 2016; Coşgun, 2019; Di Fabio & Kenny, 2011; Doğan & Bacanlı, 2012; Ferrari et al., 2012; Gönültaş & Çakır, 2020; Gu et al., 2020; Kırdök, 2010; Salami, 2004; Şeker & Kaya, 2019).

In Turkey, several group-based programs have been designed and attempted with the goal of reducing career indecision. A number of these programs have shown some success although they were based upon a variety of theories (e.g., Doğan, 2010; Kırdök, 2010). What remains to be tested is whether such group based services could be effectively delivered through an online platform. While there appears to be a need for some intervention to help reduce career indecision, the recent pandemic has forced many educators to rely upon online delivery platforms. However, in addition to delivery, there is a second variable that may be expected to affect efficacy and that is the selection of a theoretical model that can be quickly, easily, and effectively adapted for online delivery. While the Career Sailboat Model (CSM) originated in Turkey by Korkut-Owen et al. (2015), there is recent evidence of its utility in career planning and development (e.g., Demirtaş-Zorbaz et al., 2020; Doğan-Laçın & Yeşilyaprak, 2018).

The CSM arose and was inspired by a number of theories. System theory (Patton & McMahon, 1999), Planned Happenstance Theory (Mitchell et al., 1999), CareerScope Model (Amundson et al., 2005), and the constructivist approach with its numerous representatives were influences while developing the model. The goals of career

counseling are generally thought to include self-discovery along with increased awareness of educational requirements and job opportunities and developing action plans (e.g. Savickas, 2002; Zunker, 2015). The CSM provides a vehicle for examining each of these important aspects of the career counseling process and metaphorically likens the career choice process to a sea voyage aboard a sailing vessel from departure to destination as depicted in Figure 1.

FIGURE 1



Note: Image of the model with explanation of dimensions. Reprinted from “Kariyer Yelkenlisi Modeli [Career Sailboat Model]” by F. Korkut-Owen, T. Mutlu-Çaykuş, and S. Demirtaş-Zorbaz, in F. Bacanlı, & A. Büyükgöze Kavas, (Eds) Kariyer psikolojik danışmasında çağdaş kuramlar, yaklaşımlar ve modeller [Contemporary theories, approaches and models in career counseling] (p.125), 2022, Pegem Akademi: Turkey. Reprinted with permission.

Personal characteristics, which are important factors determining the direction of individuals' career journeys, are symbolized by the body of the career sailboat. *Social characteristics*, which are the second of the factors affecting career choice and career development, are represented by the sail of the sailboat. The second sail of the sailboat represents the *political, economic, legal, and system-related (systemic) qualities*. The effects of the wind and the current, which are necessary to move the sailboat but are neither fully controllable nor fully predictable, represent *chance*. In the model, decision-making processes are also taken into consideration within the

framework of the four dimensions and their interaction with one another. Even though it was developed in Turkey, the model is flexible and easily adaptable to other settings, languages, and cultures since the model addresses fundamental aspects of social and systemic realities. For a more comprehensive description of the CSM in English, reader may refer to Korkut-Owen et al. (2015). Using this model, a series of informal assessment instruments can be developed or adapted by school counselors for investigating these dimensions. There are studies showing that certain intervention programs that were developed based on this model were effective on university students (e.g., Demirtaş-Zorbaz et al., 2020; Doğan-Laçın & Yeşilyaprak, 2018, Gelibolu, 2016). The model was developed based on the individual, social, political, economic, legal, and system-related qualities and chance factors affecting career development and seem to provide a structure which would permit easy adaptation to online delivery.

Online Career Development Services

There are studies focusing on face-to-face and online career counseling for university students about to embark on professional life (Pordelan & Hosseinian, 2020; Pordelan et al., 2021; Pordelan et al., 2018) and for unemployed young adults (Amundson et al., 2018). All of these studies concluded that both the face-to-face and online applications were effective. There are no studies in literature focusing on providing online career services for secondary education students. Though, there are studies on secondary education students that proved the effectiveness of education by applying online education to increase career adaptability by using the principles of constructivist approach (Nota et al., 2016).

The purpose of the current investigation was to construct a career development program for 9th grade students based upon the CSM and to deliver that program to a sample of students via an online platform. The current world pandemic has forced not only Turkey, but many other

countries, to rely upon online educational services delivery (American School Counseling Association, 2020; Republic of Turkey Ministry of National Education General Directorate of Special Education and Guidance, 2020a). The current pandemic and the resulting dependence upon online counseling and educational services makes the current investigation essential in helping to determine if online career development services can be effectively delivered via an online platform. In addition to investigating the efficacy of an online career development program in reducing career indecisions of 9th grade students, another purpose of this study was to solicit the participants' reaction to the model and the delivery method. According to the information at hand, this pilot study represents the first attempt to investigate the efficacy of an online career development program designed to reduce career indecision among 9th grade students in Turkey. This study sought to investigate the following two research questions:

1. Is an online career development program effective in reducing career indecisions of 9th grade students?
2. What are the participants' reaction to the model and the delivery method?

Method: Research Design

This pilot study was conducted utilizing a pre-test, post-test, quasi-experimental research design. Additionally, participants were surveyed using three open-ended, qualitatively evaluated, questions to further assess their reaction to the use of an online delivery platform. Such a methodology was seen as consistent with that proposed by Patton (2002) who argued that using multiple methods can be functional in program evaluation as they would allow a more comprehensive explanation of the findings.

Participants

The available population for this study was composed of 132 9th grade students from a

private secondary school in Istanbul whom were given the Career Decision Inventory (CDI). Students whose score suggested career indecision and who indicated a willingness to participate in an online program formed the sample population of students ($n=43$). A random sample of 13 subjects were selected and assigned as the experimental group and a further 14 students were randomly selected as a control group. In the literature, the number of participants recommended for the psycho-educational groups varies between 6-8 (Myrick, 2011; Stewart et al., 2009), 8-10 (Asner-Self & Feyissa, 2002), and 10-20 (Corey et al., 2014). This perspective number of the participants is well within the recommended range for this type of group. Participants' families were informed of the program, and they were asked to sign a consent form for their children. The analysis of CDI pre-test scores of the experimental and control groups through the Mann Whitney U Test showed that ($U = 77, z = -0.9, p > .35$) there was not a meaningful difference between the groups in the beginning in terms of their CDI scores.

Data Collection Tools

Career Decision Inventory and a short personal information form (included alias, their class branches, and gender) were used to collect data. In addition to these, the Program Evaluation Form was used to collect data from the experimental group at the end of the group study.

Career Decision Inventory (CDI)

CDI was originally developed by Çakır (2004) to measure career decision for use with Turkish students. This instrument was conceived and constructed in Turkish. In the inventory, career decision is evaluated with 30 items in five sub dimensions. Answers given to the items were prepared in a five-Likert type grading scale. Total score to be obtained from the inventory varies between 30 and 150; a low score indicates career decision while a high

score indicates career indecision. To determine its validity, CDI's correlation was calculated with Career Maturity Inventory; and the correlation coefficient was found to be $r = -.68$ and internal consistency coefficient $r = .85$ (Çakır, 2004). Internal consistency coefficient for CDI was recalculated for this study and was found to be $r = .93$. Although sub-dimensions of the CDI can be evaluated separately, total scores were used in this study.

Program Evaluation Form

An evaluation form was designed by the researchers to obtain the views of the participants of the experimental group on the process and the actual benefits they get from the online program. For this reason three open-ended questions were asked. These three open-ended questions were about the program's contribution to their ability to make career decisions, the most beneficial parts of the program for them, and their views on the online delivery.

Data Analysis

Since the number of participants in the experimental and control groups were 13 and 14, respectively, non-parametric statistics were used to analyze data (Fagerland, 2012; Gay et al., 2009). To see whether there is a difference between the experimental and control groups in terms of the scores received from CDI, the Mann Whitney U test was used to analyze the pre-test scores and then the end-test scores. Moreover, the pre-test and end-test scores of the experimental and control groups were compared by the Wilcoxon Signed Rank Test. Answers given to the three open-ended questions in the Program Evaluation Form answered by 12 of the participants in the experimental group were evaluated as qualitative data. This qualitative data was used in evaluating the program, in explaining the effect of the experimental study on the participants, and in gathering their reactions for the future use of the program. Participants' statements were made on these

forms and were reviewed using descriptive content analysis, which is an approach utilized in situations where the conceptual structure of the research was previously clear and obvious and can be performed based on the questions (Yıldırım & Şimşek, 2016). As one of the precautions taken to ensure the quality of the descriptive content analysis, the data were read and evaluated by each of the researchers. Analysis was done by the researchers by focusing on explicit content and using a social constructionism paradigm that focuses on individuals' roles (Galbin, 2014). Also, direct quotations of the participants were given at the findings within the framework of thematically describing the answers written in the evaluation form (Wolcott, 1994).

Online Career Development Program (OCDP)

OCDP is an online psycho-educational program designed according to CSM; it is structured as a six-week program with 60-70 minute per week educational, behavioural, experiential dimensions. Non-test activities were used in the program. Recent government information was summarized for the students for later career decision making. Zoom was used in the application program carried out between December 2020 and January 2021. The program was implemented by the second author under the first author's supervision.

Delivery of the Pilot Program

A brief description of the program content and weekly delivery sequence follows. Session 1: Introductory icebreaking activity and housekeeping rules; CSM was introduced, and the expectations of the participants were discussed. An activity related to interests, skills, and character based on individual aspects was conducted, and the participants were given a work values survey to be completed as a homework assignment. Session 2: Activities on participants understanding the role their individual characteristics, specifically values,

play on their career choices were realized. At the end of this session, an activity aiming at balancing individual and social impacts was carried out to provide a transition to the importance of social factors in career development. As homework, participants were asked to read the pdf files on different professions from the Turkish Employment Agency (İŞKUR) Professions Guideline (2021). Session 3: Some occupations from the Turkish Employment Agency Professions Guideline were discussed in terms of what kind of people with what career values would be attracted to them. Then, an activity related people that they know and their occupations was carried out since family members, who are one of the most significant social factors, and other relatives are usually role models. Moreover, the effect of the media on different professions was discussed. Session 4: This session focused on what kind of personal characteristics would suit to which professions as well as on knowing people of that profession. It also aimed to summarize individual and social factors and to move onto systemic factors. To understand the systemic factor, Higher Education Council's (2019) "Report on the Future of Professions" and The Organisation for Economic Co-operation and Development's (2019) report were discussed. Moreover, participants were briefed on the changes that professions have undergone and will undergo and on the increased importance of different skills. In addition to these, the university entrance exam, which is federally run, was briefly mentioned, and examples were given for job interviews. Session 5: Firstly, previous sessions were summarized by the participants, then, the chance factor, which affects career development, was underlined; to this end, two activities were carried out. Focusing on chance aimed to ensure the participants realized the importance of flexibility during their decision-making process concerning their careers. Session 6: Participants were asked to write down and share notes on what they have noticed about each piece of the

sailboat as shown on the Career Sailboat Model image. Findings of the group study were revised through the summary of outcomes concerning each sailboat piece. As such, participants were ensured to have a holistic view. Then, they were asked to write a 3-year career plan on the form. Finally, the six sessions were briefly summarized, and Career Decision Inventory and Program Evaluation Form were applied online.

Findings

In this section, firstly, quantitative data obtained from the experimental procedure was provided, then qualitative data obtained in order to evaluate the program was given. To understand the efficacy of the experimental procedure, the Wilcoxon Signed Rank Test was applied to the pre-test and post-test scores students in the experimental group got from the CDI as it is shown in Table 1.

Table 1
Wilcoxon Signed Rank Test Results Applied to the Pre-Test and Post Test Scores of the CDI of Experimental Group

Measurement	Ranks	N	Mean Rank.	Sum of ranks	Z	p
Pre and post test	Negative	12 ^a	7.50	90	-3.11	.002
	Positive	1 ^b	1.00			
	Equal	0 ^c				
	Total	13				

^a Pre-test < Post test

^b Pre-test > Post test

^c Pre-test = Post test

p < .01

According to test results, there is a significant difference between the pre-test and post-test scores of the experimental group in favour of the post test ($z = -3.11, p < .002$). Test results revealed a statistically significant positive change after experimental procedure with a large effect size ($r = .62$). This indicates that the experimental procedure has created a change in

the experimental group. Findings show that there is no difference in the pre and post test scores of the control group ($z = -1.09, p > .27$). In relation to this, the Mann Whitney U Test was applied to the CDI post test scores of the experimental and control groups to see whether there is a difference between the groups. Analysis results can be found in Table 2.

Table 2
Results of the Mann Whitney U Test Applied to the CDI Post test Scores

Groups	N	Sum of ranks	Mean rank	U	z	p
Experimental	13	101.5	7.81	10.5	3.88	.0001
Control	14	276.5	19.75			

p < .05

According to the Mann Whitney U Test results, there is a meaningful difference between groups ($U = 10.5, z = -3.88, p < .0001$). Line averages of the groups show that the difference is in favour of the experimental group. This can

be explained by the experiment creating a difference for the participants in the experimental group.

In this section, findings related to the answers the participants in the experimental group gave

to the three-ended questions in the Program Evaluation Form were presented. The first open-ended question is about how the program benefitted them. Their reactions on this issue can be gathered under three groups. The first group includes general evaluation reactions about the program while the others are on the effect of the program in alleviating career indecisions and the participants realizing the factors affecting their career choices. It was seen that the participants have used general evaluation expressions about the effect of the program ($n=9$). P6 (Participant #6) "*Overall, it was highly beneficial.*" P10 "*I have found it to be beneficial.*" The second group's reactions were about the effect of the program on alleviating career indecisions ($n=7$). Some examples are as follows: P8 "*I am an indecisive person, I have always been like this; until I joined this group, I've had no idea what my interests and skills are, what professions match these, or what the specific characteristics of these professions are. I had a vague idea what I wanted to be, but I was not clear on that, and I was nervous. Now I have no such anxiety; I am quite clear about my roadmap, my interests, and professions matching my interests.*" According to the third group's reactions, the program seems to make participants realize the factors affecting their career choices ($n=6$). Some examples of these reactions are as follows: P3 "*I had no idea what could happen in the future in the fields I had in mind, but now I do thanks to the program. I also learned that chance as a factor can affect the fate of my profession.*" P11 "*Information about job sectors was very useful. Learning about what is what. Most of all, I have understood myself a little bit better, and I have realized that I should give more importance to my values.*"

As second open-ended question sought to elicit from the participant the useful components of the program. The reactions of this question can be gathered under two dimensions. The first one is related to the information about professions while the other one is about

activities targeting self-realization. It is noteworthy that expressions which indicate that obtaining information about professions was highly beneficial were more frequently voiced ($n=9$). Some of the examples of this are as follows: P2 "*I now have knowledge of more professions; thus, while it was difficult for me to choose a career before, now it is easier since some questions in my head have been eliminated.*" P12 "*The most beneficial application was giving information about professions.*" For those participants who indicated enhance self-awareness and the ability to relate to professions activities were identified as beneficial ($n=6$). P1 "[The] Activity which was related to professional values." P4 "*The most useful activity was to learn about professions related to my individual traits.*" P9 "*PDFs introducing professions and activities that made me aware of my traits.*" P10 "*Those that enabled me to learn about professional interest and values.*"

The final open-ended question inquired about satisfaction with the online delivery platform. P6 "*Since everything is online due to COVID, it seems normal that the group study is online as well.*" Although the majority of participants preferred the face-to-face ($n=7$), they indicated that the online study was good, beneficial, and effective. P3 "*It was more helpful than I thought it would, but I think it would be better if it were face-to-face.*" P5 "*Of course it would have been much better if it was face-to-face, but the online study was indeed effective.*" Responses of the participants were quite positive.

Discussion

This pilot study sought to determine the efficacy of an online career development program to reduce career indecision and the results obtained strongly suggest the efficacy of such a program with significant differences between pre-post scores for program participants as well as significant differences between experimental and control group post

scores. Both quantitative and qualitative findings suggest the efficacy of the program in alleviating the participants' career indecision. Previously conducted studies have demonstrated the efficacy of structured group activities for career interventions (e.g., Whiston et al., 2003). The results of this study suggest that an online career development program appears to result in similar outcomes as in earlier face-to-face investigations where group intervention studies targeting secondary education students who experience career indecision (e.g., Atlı, 2016; Baker, 2002; Cirişan & Turda, 2016; Di Fabio & Kenny, 2011; Doğan & Bacanlı, 2012; Ferrari et al., 2012; Gönültaş & Çakır, 2020; Gu et al., 2020; Salami, 2004). Although there are studies in the literature which show the efficacy of the career intervention studies with university students designed based on CSM (Demirtaş-Zorbaz et al., 2020; Doğan-Laçın & Yeşilyaprak, 2018; Gelibolu, 2016), there are no experimental studies conducted with the participation of secondary education students. On the other hand, there are studies designed for 9th grade based on different theories and models (e.g., Çakır, 2004; Doğan, 2010; Kırdök, 2010), later adapted to 10th grade students (e.g., Coşgun, 2019; Şeker & Kaya, 2019) with proven efficacy. These studies found out that experimental procedures helped reduce secondary education students' career indecision. In other words, it can be argued that this online quasi-experimental study also contributed to alleviating 9th grade students' career indecision.

Qualitative data obtained in the study also points at the program's efficacy. The answers given to the first open-ended question, which was about the program's contribution to the participants, indicate that the participants found the program to be useful, that it contributed to reduce their indecision and enabled them to realize the factors influencing their career/professional choices. In other words, the participants indicating on the statistical analyses how the program was effective on alleviating

their career indecision supports qualitative findings. The most beneficial part of the program was said to be the information about professions and the activities aiming them to relate to professions. This finding is consistent with Niles and Harris-Bowlsbey (2013) and Zunker (2015) who contend that the aims of career counseling are self-discovery and discovering education and job opportunities. Similarly, career awareness is among the aims and proficiency fields determined in the draft class guidance program prepared by the Republic of Turkey Ministry of National Education General Directorate of Special Education and Guidance (2020b). In other words, the fact that what students say about the most beneficial activities in the program overlap theoretically with the aims of career psychological counseling is significant. Views concerning the program being carried out online indicate that, generally speaking, the program being online was received positively and regarded as beneficial. Responses of the participants suggest that while face-to-face delivery was considered preferable, use of an online platform may be an effective, desirable option. A common response of the participants was that this online program exceeded their expectations, and they expressed a high level of satisfaction of the program as delivered. Djadali and Malone (2004) argue that the most effective of the online career counseling services are those that combine technology with face-to-face dimensions. In their study carried out with the participation of university students instead of high school students, Wong et al. (2018) determined that 35% of the participants leaned towards online psychological counseling services and that the rest preferred face-to-face ones. In this respect, it may be more effective to provide hybrid career services as opposed to either online or face-to-face.

Limitations

One of the limitations of the study is that it did not utilize a mixed-methods research design,

but it rather relied upon a two-group pre-post experimental design with control. The purpose of collecting qualitative data was to solicit the reactions of the experimental subjects to participation in the treatment group and to use their reactions for further refinement in the delivery of future online career indecision programs. One of the other limitations of the study is the fact that the participants consisted of students only from a private school. In this respect, findings can be generalized to the 9th-grade students who have similar characteristics to those of the participants of this study. Another limitation is the use of only one control group and no placebo group. Future studies may be planned with the inclusion of a placebo group. The final limitation is that the observation test has not yet been applied to the participants three or six months after the completion of the experimental procedure to see whether the efficacy of the intervention persists. On the other hand, quantitative and qualitative findings indicate that the participants found the program to be useful. The preponderance of responses on the open-ended questions gave ample reason to believe that the participants thought that they had benefitted from this structured program and expressed the idea that their classmates would benefit from it as well. In this respect, arranging and applying similar programs would contribute to field selection processes of 9th-grade students when they become 10th grade students.

Further Directions for Research

These results may be the first to demonstrate that such a program, delivered via an online platform, offers counselors yet another option for delivering career development content and techniques. Although career indecision has been effectively treated using a variety of programs and theoretical bases, the results of this study suggest that the Career Sailboat Model may be an effective program base to treat career indecision. The efficacy of this OCDP can be tested further through attempts to replicate this investigation with far larger and more diverse

subject groups at different secondary education levels and in more diverse socio-economic settings. Moreover, further studies on such topics as career adaptation, career decision-making proficiency, and career development needs could be carried out in the future to see the efficacy of the program.

Implications for Career Practice and Education

Such a program can be an option for the school counselors, especially during pandemics or weather conditions where it is difficult for students to come together; in other words, it could be an option in situations where face-to-face options cannot be provided. In this study, according to the feedback of the participants, 9th-grade students indicated that the activities they have found most beneficial are those introducing more career fields and activities through which they can know themselves better. In this respect, it might be better to allocate more time to activities based on individual factors that would enable participants to know themselves better and to research systemic factors in which already existing and prospective professions are introduced, while allocating less time to activities concerning social factors and chance. It is promising that participants indicated they have benefitted from the program being applied online. On the other hand, because they have also indicated that they may have preferred it to be face-to-face, planning some sessions online while some of them face-to-face might be a solution.

A review of the current study would reveal that addressing career needs of secondary students can be an amazingly complex process that would require not only a firm grounding in career development theory but also a working knowledge of effective delivery models and platforms. Certainly, few could have foreseen the requirement to shift from face-to-face instruction to hybrid, or even fully digital, delivery of services. The creation of an effective treatment program for students struggling with

career development issues will certainly require not only technical, academic, and creative skills but also an added component of cognitive and behavioral flexibility. The authors strongly believe in the utility of giving counseling students opportunities to identify areas of concern among secondary students, opportunities to design potential treatment approaches and to acquire the technical skill to deliver services and treatments using a variety of delivery platforms.

Conclusion

In this initial study, the efficacy of the Online Career Development Program in alleviating 9th-grade students' career indecision was examined and the results seem to indicate that such a program may provide an effective intervention for reducing career indecision among some students. The quantitative data indicates increased confidence in career decision making, and the qualitative data obtained also points to the efficacy of the program. Although the results suggest that such a program may be of value, certainly more additional study with far larger and more diverse samples will need to be done.

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