Examining the Effectiveness of Career Intervention Program Based on Career Sailboat Model on High School Students' Career Indecision [1]

Kariyer Yelkenlisi Modeline Dayalı Kariyer Müdahale Programının Lise Öğrencilerinin Kariyer Kararsızlığı Üzerindeki Etkililiğinin İncelenmesi

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Abstract. The aim of this study is to examine the effectiveness of the career intervention program structured by the researchers by using career group guidance activities prepared by Korkut-Owen et al. (2015) based on the Career Sailboat Model on high school students' career indecision. The study is a quasi-experimental model with pretest-posttest control group. The study group of the research consisted of a total of 20 students, 10 in the experimental group and 10 in the control group, studying at different grade levels in an Anatolian high school in the province of Aksaray. The Career Decision Inventory developed by Çakır (2004) was used as a data collection tool in the study. A two-factor repeated measures ANOVA on a single factor was used to test the effectiveness of the career intervention programme implemented. The results of the study show that the post-test scores of the experimental group were significantly different from those of the control group (F_{1-18}=19.70, p<.05). In addition, the eta squared (η^2) value was examined to determine the extent to which the change in career indecision scores was explained by the experimental procedure. Accordingly, the results show that 52% of the change in total scale scores across the measurements can be explained by the experimental procedure (η^2=.52). The results show that the career indecision scores of the students in the experimental group showed a significant decrease compared to the indecision scores of the students in the control group and that the career intervention programme structured according to the Career Sailboat Model was effective on the career indecision of the students.
Keywords: Career indecision, Career intervention program, Career sailboat model, High school students.

Öz. Bu çalışmanın amacı, Korkut Owen ve diğerleri (2015) tarafından Kariyer Yelkenlisi Modeli'ne dayalı olarak hazırlanmış olan kariyer grup rehberliği etkinliklerinden yararlanılarak, araştırmacılar tarafından yapılandırılan kariyer müdahale programının lise öğrencilerinin kariyer kararsızlıkları üzerindeki etkililiğinin incelenmesidir. Araştırma öntest-sontest işlemine dayalı, kontrol gruplu yarı deneysel modeldedir. Araştırmanın çalışma grubunu, Aksaray ilinde bulunan bir Anadolu Lisesi'nde farklı sınıf düzeylerinde öğrenim gören 10'u deney, 10'u kontrol grubunda toplam 20 öğrenci oluşturmaktadır. Çalışma kapsamında veri toplama aracı olarak Çakır (2004) tarafından geliştirilen "Mesleki Karar Envanteri" kullanılmıştır. Uygulanan kariyer müdahale programının etkililiğinin test edilmesi amacıyla tek faktör üzerinde tekrarlı ölçümler için iki faktörlü ANOVA analizi kullanılmıştır. Çalışmadan elde edilen bulgular, deney grubu son test puanlarının kontrol grubu puanlarına göre anlamlı bir farklılık gösterdiğini ortaya koymaktadır (F_{1-18}=19.70, p<.05). Buna göre elde edilen bulgular ölçümler boyunca toplam ölçek puanlarında görülen değişimin %52'sinin deneysel işlem tarafından açıklanabildiği sonucunu göstermektedir (η^2=.52). Elde edilen bulgular; deney grubundaki öğrencilerin kariyer kararsızlığı puanlarının, kontrol grubundaki öğrencilerin kararsızlık puanlarına oranla anlamlı bir düşüş gösterdiğini ve kariyer yelkenlisi modeline dayalı olarak yapılandırılan kariyer müdahale programının öğrencilerin kariyer kararsızlıkları üzerindeki etkililiğinin ortaya koymaktadır.
Anahtar Kelimeler: Kariyer karasızlığı, Kariyer müdahale programı, Kariyer yelkenlisi modeli, Lise öğrencileri.

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Genişletilmiş Özet

Giriş. Korkut Owen (2015) tarafından geliştirilmiş olan 'Kariyer Yelkenlisi Modeli' de bireylerin kariyer kararı verme süreçlerini etkileyen bireysel, sosyal, politik, ekonomik, yasal ve sisteme ilişkin şans etmenleri gibi faktörleri açıklayan bir model olarak alan yazında yerini almıştır. Kariyer yelkenlisi modeli, kişinin önce kendini ve hayatındaki fırsatları keşfederek kariyer hedeflerini oluşturabilmesi ve kararlar verebilmesi sürecini ele almaktadır (Korkut Owen, 2015).

Kariyer yelkenlisi modeli, kariyer gelişim ve seçme sürecini metaforik olarak ele alan rotasını belirlemeye çalışan ve bu rotada ilerlemek isteyen bir yelkenin yolculuğuna benzetilmiştir. Kişinin kariyer yolculuklarının yönünü belirleyen etmenlerden biri olan bireysel özellikler kariyer yelkenlisinde gövde biçiminde ele alınmıştır. Kariyer gelişimini etkileyen etmenler arasında yer alan sosyal özellikler ise kariyer yelkenlisi modelinde yelken olarak sembolleştirilmiştir. Modelde ikinci yelken ise politik, ekonomik, yasal ve sisteme ilişkin özellikleri temsil etmektedir. Yelkenin hareket etmesi için ise gerekenler ise kontrol edilemeyen veya öngörülemeyen rüzgâr ve dalga ise şansı temsil etmektedir (Zorbaz, vd., 2020).

Araştırma bulguları (Gelibolu, 2016; Laçin ve Yeşilyaprak, 2018; Zorbaz vd., 2020) kariyer yelkenlisi modeline dayalı müdahale programlarının üniversite öğrencileri örnekleminde etkililiğini ortaya koyarken, üniversite örneklemi dışında diğer örneklem grupları üzerinde kariyer yelkenlisi modelinin etkililiğine dayalı çalışmaların sınırlılığı dikkat çekmektedir. Modelin farklı örneklemler üzerinde sınanmasının ilgili literatüre önemli katkı sağlayacağı düşüncesinden hareketle, bu çalışma kapsamında, Korkut Owen (2015), tarafından geliştirilmiş olan 'Kariyer Yelkenlisi Modeli' temelli etkinliklerden oluşan kariyer grup müdahalesi programının lise öğrencilerinin kariyer kararsızlık düzeylerine etkisinin incelenmesi amaçlanmaktadır.

Yöntem: Bu araştırma kariyer yelkenlisi modelini temel alarak oluşturulan kariyer müdahale programının lise öğrencilerinin kariyer kararsızlıkları üzerindeki etkisini sınamayı amaçlayan, ön-test son-test modeline dayalı kontrol gruplu yarı deneysel bir araştırmadır. Yarı deneysel model, araştırmanın çalışma grubunun tesadüfi olarak belirlenmediği ve araştırma sürecinde ikincil değişkenlerin tam kontrolünün sağlanamadığı bir deneysel modeldir (Johnson ve Christensen, 2017).

Araştırmanın çalışma grubu, Aksaray il merkezinde bulunan bir lisede dokuzuncu, onuncu ve on birinci sınıfta öğrenim gören 10'u deney, 10'u kontrol grubunda toplam 20 öğrenci oluşturmaktadır. Deney ve kontrol gruplarını oluşturmak için dokuzuncu, onuncu ve on birinci sınıf şubelerinde öğrenim gören toplam 41 öğrenciye, yaşadıkları mesleki kararsızlık düzeylerini belirlemek amacıyla, Çakır (2004) tarafından geliştirilen Mesleki Karar Envanteri uygulanmıştır. Deney ve kontrol grupları, bu 41 kişilik öğrenci grubundan çalışmaya katılım konusunda olan gönüllü 20 öğrencinin 10'u deney grubuna, 10'u da kontrol grubuna bölünmüştür.

Çalışma kapsamında veri toplama aracı olarak Çakır (2004) tarafından geliştirilen "Mesleki Karar Envanteri" kullanılmıştır. Uygulanan kariyer müdahale programının etkililiğinin test edilmesi amacıyla tek faktör üzerinde tekrarlı ölçümler için iki faktörlü ANOVA analizi kullanılmıştır.

Bulgular: Kariyer Yelkenlisi Modeline dayalı olarak oluşturulan kariyer grup müdahalesi programının lise öğrencilerinin kariyer kararsızlık düzeyleri üzerindeki etkililiğinin sınanması olarak belirlenmiştir. Bu amaç doğrultusunda deney grubundaki öğrencilere 7 oturumluk kariyer grup müdahalesi programı

uygulanmış ve kontrol grubunda yer alan öğrencilere herhangi bir müdahalede bulunulmamıştır. Yürütülen bu program sonucunda, her iki gruptaki öğrencilere ön test- son test çalışması olarak mesleki karar envanteri uygulanmıştır. Verilerin analizi sonucunda elde edilen bulgular, Kariyer Yelkenlisi Modeline dayalı kariyer grup müdahalesi programının deney grubundaki lise kariyer kararsızlık düzeylerini azaltmada etkili olduğunu ortaya koymaktadır.

Tartışma: Kariyer yelkenlisi modeli, bireyin kariyer gelişimi ve seçimi etkileyen sosyal, sistem, bireysel ve şans etmeni olarak dört etmenin bireyin kariyer kararı verme sürecinde etkili olduğunu ortaya koymaktadır (Korkut Owen, 2015). Bu çerçevede çalışmanın temel amacı, Kariyer Yelkenlisi Modeline dayalı olarak oluşturulan kariyer grup müdahalesi programının lise öğrencilerinin kariyer kararsızlık düzeyleri üzerindeki etkililiğinin sınanması olarak belirlenmiştir.

İlgili konuya dair literatürdeki deneysel çalışmalar incelendiğinde, bu araştırmalardan elde edilen bulguları destekler nitelikte birçok çalışmanın olduğu görülmektedir. Bu çalışmalardan ilki Nazir ve Özçiçek (2023), ''Kariyer Yelkenlisi Modelini Kullanarak Covid-19 Salgınının Bireylerin Kariyer Seçimleri Üzerindeki Etkisini Anlamak'' adlı çalışmada Kariyer Yelkenlisi Modelinde, birey kariyer kararı verirken bireysel/kişisel, sosyal, sistem ve şans faktörlerini göz önünde bulundurmadığında kendine uygun olmayan kariyer seçimleri yapmasına neden olabileceğini vurgulamıştır. Bu çalışmada Covid-19 pandemisi şans faktörü olarak tanımlanmıştır. Bireysel, sosyal ve sistemle ilgili faktörler üzerinde şans faktörünün önemli değişikliklere yol açtığı ve bireylerin kariyer tercihi süreçlerini etkilediği görülmüş ve kariyer beklentileri yeniden şekillenmiştir. Bu çalışmayı destekler nitelikte olan bir diğer çalışma ise, Demirtaş Zorbaz ve diğerlerinin (2023), yürütmüş olduğu çalışmada, Kariyer Yelkenlisi Modeline dayalı beş haftalık bir psikoeğitim programının, iş arama aşamasında olan üniversite öğrencilerinin kariyer kararı verme öz yeterlilik düzeyleri üzerindeki etkisi incelenmiştir. Bu çalışmada elde edilen sonuç ise, ön test ve son test sonuçlarına bakıldığında sadece deney grubunun kariyer kararı verme öz yeterlilik düzeyinin anlamlı olarak artış gösterdiği sonucuna varılmıştır. Bir diğer destekler nitelikteki çalışma ise Atli ve Canpolat'ın (2023) yürütmüş olduğu araştırmada ise, Kariyer Yelkenlisi Modelinde belirtilmiş olan dört ana etmenin (sosyal, sistem, şans, bireysel) üniversite öğrencilerinin bölüm seçimlerini ne denli betimleyebildiğini ele almaktadır. Bu çalışma için 18-29 yaş grubunda yer alan üniversite öğrencileri ile yarı yapılandırılmış görüşme yöntemi kullanılmış olup, Kariyer Yelkenlisi Modelinde yer alan dört ana etmen başlığı altında bölüm tercihlerini etkileyen etmenlerin açıklanabildiği ve öğrencilerin bölüm tercihlerini en çok etkileyen etmenin bireysel etmen olduğu daha sonrasında ise toplumsal, sosyal ve şans etmenlerinin geldiği sonucuna varılmıştır. Bir diğer destekleyici çalışma ise, Korkut- Owen ve Şeremet (2023) yürütmüş olduğu çalışmada 9.sınıf öğrencilerinin kariyer kararsızlıklarını azaltmak amacıyla oluşturulan Çevrimiçi Kariyer Gelişim Programının pilot çalışmasıdır. Altı haftadan oluşan bu psikoeğitim programını Kariyer Yelkenlisi Modeline dayanmaktadır. Bu araştırma sonucuna göre, deney grubunda yer alan öğrencilerin kariyer kararsızlık düzeylerinin azaldığı görülmüştür. Sıralanan bu çalışmaların yanında kariyer yelkenlisi modeline dayalı diğer çalışmalardan (Zorbaz vd., 2020; Gelibolu,2016; Laçin ve Yeşilyaprak, 2018) elde edilen sonuçlar da bu araştırmadan elde edilen bulguları destekler niteliktedir.

Araştırmadan elde edilen sonuçlar çerçevesinde, kariyer yelkenlisi modeline dayalı kariyer grup müdahale programının lise kademesinde öğrenim gören öğrencilerin kariyer kararsızlık düzeylerini azaltmada etkili olduğu bulgusuna ulaşılmıştır. Araştırmanın bulguları, özellikle üniversiteye geçiş aşaması olan lise kademesinde kariyer gelişim sürecinde kararsızlık yaşayan lise öğrencilerine yönelik

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kariyer yelkenlisi modeli temelinde yürütülen kariyer müdahale programlarının gerek ilgili literatüre gerekse uygulama alanına önemli katkılar sağlayacağını ortaya koymaktadır. Bu araştırma sağladığı uygulama alanı ve ilgili literatüre sağladığı katkıların yanı sıra bazı sınırlıklar da barındırmaktadır. Bu çalışmanın sınırlılıklarından biri araştırmanın Anadolu Lisesinde öğrenim gören öğrenciler ile yürütülmüş olmasıdır. Bu çerçevede kariyer müdahale programının fen liseleri ya da mesleki eğitim veren ortaöğretim kurumlarında ve farklı sınıf düzeyleri ile sınanması, kariyer yelkenlisi modelinin etkililiği konusunda daha fazla veri sağlayacağından, bir öneri olarak sunulabilir. Araştırma kapsamında izleme çalışmasının yapılmamış olması bu programın sınırlılıklarından biridir. İzleme ölçümlerinin de yer aldığı Kariyer Yelkenlisi Modeline dayalı deneysel çalışmaların yapılması öneri olarak sunulabilir.

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Introduction

Choices and decisions made at certain stages of life play an important role in the formation of an individual's lifestyle. One of the most important choices is the profession. For an individual to be happy and successful in his/her life depends on an accurate career selection process (Turan and Kayıkçı, 2019). In the process of choosing a profession, an individual chooses a certain way of life and work. Individuals becomes happy and productive in the profession he/she chooses based on his/her abilities, wishes and interests (Sarıkaya and Khorshıd, 2009). It is possible to say that it will be difficult to maintain the profession in cases where the characteristics of the individual and the chosen profession do not match (Tuzcuoğlu, 2000). It is possible to say that making the right decisions in choosing a profession is of great importance not only for the individual, but also for society. According to Super (1983), although career choice is defined as a developmental process, especially adolescence years have a critical importance in terms of career choice. The developmental task expected in this period is to discover one's own interests and abilities and the characteristics of occupations, and to make a career choice at the end of the period. Sampson et al. (1999), one of the pioneers of the information processing approach, suggest that failure to fulfil these tasks in the decision-making process may cause difficulties in the process of making a career decision in the future. Students studying at the high school level face many tasks and responsibilities, such as choosing a field, course, and profession from the first to the last grade. High school students need to reach a level of vocational maturity to make appropriate and realistic career choices (Çakar and Kulaksızoğlu, 1997). This process is of critical importance, especially for students who are in the process of transition from high school to university, and high school students face many difficulties due to the differentiation of the qualifications sought by professions and the change in their job prospects (Atli and Gür, 2019). While some people can easily make decisions on important and critical issues without any difficulties, many people face difficulties before or during decision-making. These difficulties may prevent an individual from making decisions (Öztemel, 2013a). Many reasons for career indecision have been mentioned in previous studies. For example, individuals may experience indecision because their interests and abilities are not differentiated, or they may have difficulty making decisions because they have the opportunity to express themselves in more than one field when they have superior potential in every field (Kuzgun, 2006).

Career choice is of great importance to high school students. For the profession they intend to choose in the future, the course choices they will make in high school, the field preference, and consequently the higher education program they want to choose, are determined. Vocational guidance, career counselling, psychological counselling, and guidance services provided in schools constitute the basis of this development area. School psychological counsellors are expected to help students in their decision-making processes in vocational and career planning (Yeşilyaprak, 2018). In addition, many experimental studies (Çakır and Uzun, 2021; Fouad et al., 2009; Osborne, 2014; Özbay, 2017; Rowel et al., 2014; Şeker and Kaya, 2019; Turan and Çelik, 2023), which include career intervention programs to reduce career indecision and are based on different career development theories, have revealed the effectiveness of career group interventions on career indecision. The 'Career Sailboat Model' developed by Korkut Owen (2015) in Turkey has also taken its place in the literature as a model that explains factors such as individual, social, political, economic, legal and

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system-related chance factors that affect individuals' career decision-making processes. The career sailboat model deals with the process of creating career goals and making decisions by first discovering oneself and opportunities in one's life (Korkut Owen, 2015).
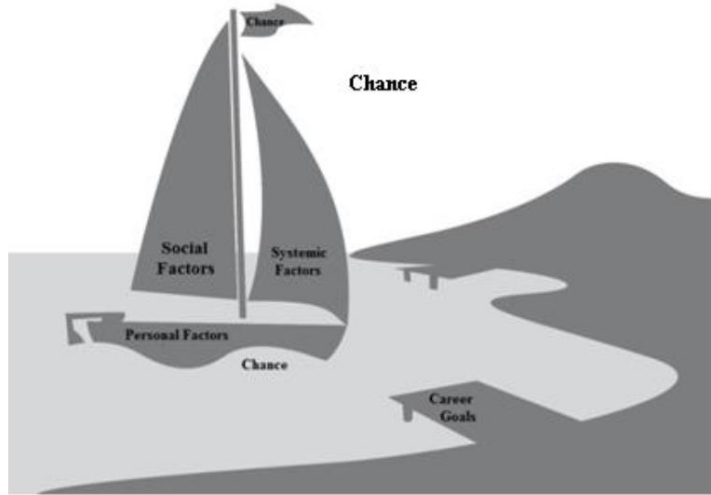
Figure 1: Career Sailboat Model (Korkut Owen et al., 2010)

The career sailboat model is likened to the journey of a sail that tries to metaphorically determine the route of the career development and selection process and wants to progress on this route. Individual characteristics, which are one of the factors that determine the direction of a person's career journey, are handled in the form of a hull in a career sailboat. Social characteristics, which are among the factors affecting career development, are symbolized as sails in the career sailboat model. The second sail in the model represents political, economic, legal, and systemic characteristics. What is needed for the sail to move is an uncontrollable or unpredictable wind, and the wave represents chance (Zorbaz et al., 2020).

Korkut Owen (2015) emphasised that these four factors, which are symbolised in the career sailboat model, have an effect on one's career choice and career process. These factors are briefly described as follows:

Individual Factors: Individual factors, which constitute the main body of the career sailboat model, play an important role in the career choice process of the individual, such as talent, interest, academic achievement, physical characteristics, perceptions of oneself and occupations, self-efficacy, and career maturity (Korkut Owen, 2015).

Social Factors: Social factors, which constitute one of the two sails of the career sail model, factors affecting career choices such as gender, family, tradition, and culture, are included under the title of social factors (Korkut Owen, 2015).

System-related factors: The political structure of the society in which the individual lives, the management style, job opportunities, labor market, education system, exams applied for transition to work, and legal decisions taken at the time of the individual's decision-making can affect career choices (Korkut Owen, 2015).

Chance: An individual's career choices may be based on opportunities rather than on private choices. One factor affecting career choices is unexpected situations or events that an individual cannot control. For example, conditions such as wars, floods, fires, earthquakes, and economic crises are considered chance factors (Korkut Owen, 2015).

A limited number of experimental studies involving intervention programs based on the career sail model can be seen in the relevant literature. Zorbaz et al. (2020) examined the effect of a psycho-educational programme based on the career sailboat model on the career adjustment and optimism of university students in the transition to work. As a result of this research, it was concluded that the psycho-education program based on the Career Sailboat Model increased the career adjustment and optimism levels of university students in the experimental group at the transition-to-work stage. This finding suggests that psycho-educational programs based on the Career Sailboat Model should be widespread in order to increase the levels of career adaptability and optimism of individuals who are at the stage of transition to work life.

Laçin and Yeşilyaprak (2018) tested the effect of a group intervention program based on the career sailboat model on university students' career choices and decisions. When the students in the experimental group were evaluated, members verbally stated what they gained at the end of each session. The vocational Outcome Expectancy, Career Decision Competence Expectancy and Career Future Scales were applied before and after the career intervention program, and it was concluded that each student's verbal feedback at the end of the session supported the results of the scales. In a study conducted by Gelibolu (2016), similar findings were obtained regarding the effectiveness of the career sailboat model.

While the research findings given above reveal the effectiveness of intervention programs based on the career sailboat model in a sample of university students, it is noteworthy that studies based on the effectiveness of the career sail model on sample groups other than the university sample are limited. Based on the idea that testing the model on different samples will make a significant contribution to the relevant literature, this study aimed to examine the effect of a career group intervention program consisting of activities based on the 'Career Sailboat Model' developed by Korkut Owen (2015) on the career indecision levels of high school students. Considering the education system in Turkey and the university transition system, it can be said that the high school age has a critical importance. In this context, it is believed that this career group intervention based on the Career Sailboat Model will contribute to the field of practice in terms of helping students to overcome the indecision problem they experience in both course selection processes and higher education programme preferences.

Methods

Research design

This study was a quasi-experimental research with a control group based on the pre-test post-test model, which aimed to test the effect of a career intervention program based on the career sailboat model on high school students' career indecision. The quasi-experimental model is an

experimental model in which the study group is not determined randomly and full control of secondary variables cannot be achieved in the research process (Johnson and Christensen, 2017). The experimental process of the research is given in table 1.

Table 1.
Experimental process

Group	Pre-test	Processing	Post-test
Experimental Group	*Vocational Decision Inventory*	Group intervention based on the career sailboat model	Vocational Decision Inventory
Control Group	*Vocational Decision Inventory*	-	*Vocational Decision Inventory*

Working group

The study group consisted of 20 students, 10 in the experimental group and 10 in the control group, studying in the ninth, tenth, and eleventh grades in a high school in Aksaray city center. To form the experimental and control groups, the Vocational Decision Inventory developed by Çakır (2004) was applied to 41 students studying in the ninth, tenth, and eleventh grades to determine their level of vocational indecision. The experimental and control groups were formed by dividing 10 of the 20 volunteer students who were willing to participate in the study from this group of 41 students into the experimental group and 10 of them into the control group. Before the experimental and control groups were formed, the data obtained from the vocational decision inventory were analysed and the students who were below the average were assigned to the experimental and control groups on a voluntary basis.

Data collection tools

Vocational Decision Inventory: The Vocational Decision Inventory was developed by Çakır (2004) to measure vocational indecision levels of high school students. The inventory is a five-point Likert scale (1=very suitable for me, 5=not suitable for me at all) and consists of five factors and 30 items. The five factors in the inventory were defined as insufficient knowledge of oneself, internal conflicts, irrational beliefs about the choice of profession, lack of professional and field knowledge, and external conflicts. Factor analysis was applied to determine the construct validity of the Vocational Decision Inventory, and as a result of this analysis, 5 factors explained 40.53% of the variance. It was concluded that the item-total correlation coefficients of the scale ranged from .23 and .57. According to the factor analysis results applied to determine the construct validity of the scale, the factor loadings of the items collected in 5 factors ranged between .36 and .73. The reliability of the Vocational Decision Inventory (VDI) was tested using two methods. Cronbach's alpha coefficient, which symbolizes the internal consistency level of the inventory, was found to be 0.85. Another method is the consistency between two applications (score invariance of the inventory - stability level), which was found by the test-retest method. The final form of the scale, consisting of 30 items, was reapplied to 45 students five weeks later. The correlation coefficient between the score comparisons of the two applications (r=

0.83) also indicates the reliability of the test. Considering the reliability coefficients obtained using both methods, we conclude that it is a reliable measurement tool. The total score is obtained from the inventory. The high scores obtained from the inventory indicate that the student has a high level of vocational indecision (Çakır, 2004). The internal consistency coefficient calculated for this scale in this study was found to be 0.82.

Process

To carry out the experimental process of the research, a meeting was held with the students in the experimental group in the group guidance room located next to the guidance service, which was suitable for the application in the high school where the scale applications were carried out in order to collect data, and parental consent forms were distributed to 10 students for their parents to sign. In the first meeting, the students were informed about the aims and content of vocational group guidance based on the career sailboat model, and the student work booklets reproduced for the students were distributed to the students. It was emphasized that it was important for the process to be efficient for students to bring the booklet with them in all sessions. The training program was conducted in seven sessions of 40-50 minute sessions once a week. Summarised information about the sessions is given in table 2.

Table 2.
Session Summary

Session Number	Session Summary
Session-1	The aim of the first session was to familiarize the participants with the aims of the career intervention program, teach them some rules to be followed in the process, and understand the importance of following these rules. Then 'Interest, Ability and Personality Activity' was applied. The aim of this activity is to gain awareness by thinking about the interests, talents, and personality traits of an individual.
Session-2	In this session, the activity named 'Vocational Value Decoding' was applied. The aim of this session was to make the individual realize how vocational values are determinant in the process of choosing a vocation.
Session-3	In this session, the activity titled "Do Vocations Have Gender?" was implemented. It aimed to raise awareness about how the individual takes into account the characteristics of himself/herself in the context of the culture and family in which he/she is in when choosing a vocation/job, especially to what extent he/she is affected by gender roles.
Session-4	In this session, the activity named "Vocational Windmill" was applied, and it was aimed at making the individual realize that unexpected events or situations in his/her life can be effective in their vocational decisions and to take into account the factor of chance in vocational planning.
Session-5	In this session, the activity named 'Alaatin's Career Fairy' was implemented. It aims to make the individual realize how system-related factors affect him/her when making decisions.
Session-6	In this session, an activity called 'Family Window' was implemented. It aims to make the individual realize how his/her family affects him/her in the process of choosing a vocation.
Session-7	In the last session, an activity called 'Adjusting Your Compass' was applied. It aimed to enable individuals to recognize their strengths, weaknesses, obstacles, and support, and to accelerate healthy decision-making.

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Ethical approval

This study, titled "Examining the Effectiveness of a Career Intervention Program Based on the Career Sailboat Model on Career Indecision Among High School Students," was conducted in accordance with research and publication ethics, as approved by the Niğde Ömer Halisdemir University Ethics Committee on February 29, 2024, under decision number 2024/04-07.

Data analysis

In the first stage of data analysis, descriptive statistics including the mean and standard deviation values of the experimental and control groups were included. In the second stage, a two-factor ANOVA analysis for repeated measures on one factor, which is a parametric test, was used to compare the pre-test and post-test scores of the experimental and control groups. Before the analysis, the assumptions of two-factor ANOVA for repeated measures were checked. Büyüköztürk (2014) stated the assumptions to be met for this analysis as normality of distribution, homogeneity of variances and equality of covariances for binary combinations of measurements. As a result of the analyses, it was seen that the assumptions of two-factor ANOVA analysis for repeated measures were met. Within the scope of this research, the margin of error was taken at .05. In this analysis, the main effect of the treatment groups (experimental and control), the main effect of repeated measures (pre-test and post-test), and the group measurement (2 × 2) joint effect were tested. According to this analysis, the group and measurement joint effects were significant, indicating that the experimental procedure was effective. Dependent group t-test analysis was used to determine the significance of the difference between the pre-test and post-test scores of the experimental group.

Results

This section presents the findings related to the analyses of the scores obtained by the experimental and control groups from the vocational decision inventory pre-test and post-test applications.

Table 3.
Pre-test- Post-test Score Averages for Total Scale Score of Professional Decision Inventory

Group	N	Pre-Test $\bar{X}$	Pre-Test Ss	Post-Test $\bar{X}$	Post-Test Ss
Experiment	10	105	15.18	73.90	23.27
Control	10	85.20	22.90	90.70	16.28

When Table 3 was analyzed, it was observed that there was a decrease in the post-test scores of the experimental group compared to the pre-test, whereas there was an increase in the post-test scores of the control group compared to the pre-test. In order to obtain the significance of the difference between the mean scores and the findings on whether the career group intervention

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programme applied in line with the purpose of the study was effective in reducing the career indecision of the students, a two-factor anova analysis was performed for repeated measurements on a single factor and the findings regarding the results of the analysis are given in Table 4.

Table 4.
Two-Factor ANOVA Results for Repeated Measures Regarding Career Indecision

Source of Variance	Sum of Squares	Sd	Mean Squares	F	p	η^2
Intergroup	314707,600	1				
Group (E/C)	22,500	1	22,500	.037	.850	.002
Error	10998,900	18	611,050			
Intragroup						
Measurement (Pre-test- Post-test)	1638,400	1	1638,400	9.64	.006*	.35
Group*Measurement	**3348,900**	**1**	**3348,900**	**19.70**	**.000***	**.52**
Error	3059,700	18	169,983			

*p<.05

The findings obtained as a result of the examination of Table 4 reveal that there is a significant decrease in the career indecision scores of the students in the experimental and control groups in favor of the experimental group students (F= 19.70, p<.05). This finding shows that the change observed in the career indecision levels of the students in the experimental group included in the career group intervention program compared to the pre-experiment period was different from the change observed in the career indecision levels of the students in the control group. This result showed that the career group intervention program was effective in reducing students' career indecision levels. In order to obtain the findings regarding the significance of the difference between the Career Decision pre-test and post-test scores of the students in the experimental group, a dependent group t-test was performed, and the results are given in Table 5.

Table 5.
Comparison of Experimental Group Career Indecision Score Measurements

Measurement	N	X̄	Ss	t	p
Pre-Test	10	105	15.18	5.21	.001*
Post- Test	10	73.90	23.27		

*p<.05

When Table 5 is analyzed, it is seen that the difference between the experimental group's pretest-posttest mean scores was statistically significant (p<.05). However, according to the results of the dependent groups t-test for the control group pre-test–post-test mean scores, no significant difference was found between the control group pretest-posttest mean scores (p>.05).

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Discussion, Conclusion and Recommendations

The career sailboat model reveals that four factors, namely, social, system, individual, and chance factors affecting career development and choice, are effective in the individual's career decision-making process (Korkut Owen, 2015). In this framework, the main purpose of the study was to test the effectiveness of a career group intervention program based on the Career Sailboat Model on the career indecision levels of high school students. For this purpose, a 7-session career group intervention program was applied to students in the experimental group, and no intervention was applied to students in the control group. As a result of this program, a vocational decision inventory was applied to the students in both groups as a pre-test–post-test study. The findings obtained from the data analysis revealed that the career group intervention program based on the Career Sailboat Model was effective in reducing high school career indecision levels in the experimental group.

When the experimental studies in the literature on the relevant subject are examined, there are many studies that support the findings obtained from these studies. The first of these studies is Nazir and Özçiçek (2023), "Understanding the Impact of the Covid-19 Pandemic on Individuals' Career Choices Using the Career Sailboat Model", in which it was emphasized that when the individual does not consider individual/personal, social, system, and chance factors when making career decisions, it may cause him/her to make inappropriate career choices. In this study, the Covid-19 pandemic was defined as a risk factor. It was observed that the chance factor caused significant changes in individual, social, and system-related factors, and affected the career choice processes of individuals, and career expectations were reshaped. In another study supporting this, Demirtaş-Zorbaz et al. (2023) examined the effect of a five-week psychoeducation program based on the Career Sailboat Model on the career decision-making self-efficacy levels of university students in the job search phase. The result obtained in this study was that only the experimental group's career decision-making self-efficacy level increased significantly when the pre- and post-test results were examined. Another supportive study is the study conducted by Atli and Canpolat (2023), which deals with the extent to which the four main factors (social, system, chance, and individual) specified in the Career Sailboat Model can describe the departmental choices of university students. For this study, a semi-structured interview method was used with university students in the 18-29 age group, and it was concluded that the factors affecting department preferences under the four main factors in the Career Sailboat Model could be explained, and that the most influential factor on students' department preferences was the individual factor, followed by social, system, social, and chance factors. Another supportive study is the pilot study of the Online Career Development Programme, which was created to reduce the career indecision of 9th grade students in the study conducted by KorkutOwen and Şeremet (2023). This six-week psychoeducation program was based on the Career Sailboat Model. According to the results of this study, it was observed that the career indecision levels of the students in the experimental group decreased. In addition to these studies listed, the results obtained from other studies based on the career sailboat model (Zorbaz et al., 2020; Gelibolu, 2016; Laçin and Yeşilyaprak, 2018) also support the findings obtained from this research.

Considering the finding that career indecision is a significant predictor of high school students' anxiety (Corkin et al., 2008; Öztemel, 2013b; Santos et al., 2014) the research finding that career group

intervention based on the career sailboat model is effective in reducing high school students' career indecision is important in terms of revealing the effectiveness of career group interventions both in schools and in practice areas working with high school students. In addition to its contributions to the field of practice, the findings obtained from the research have also contributed to the limited number of studies based on the career sailboat model. In this context, it can be suggested that practitioners working with high school students should support students' indecision problems by using empirically tested career intervention programmes based on the career sailboat model. In addition, it can be suggested to researchers conducting scientific studies in the field to conduct studies based on this model in different samples or in different research designs.

This study has some limitations in addition to the application area it provides and its contributions to the relevant literature. One of the limitations of this study is that it was conducted with Anatolian High School students. In this context, testing the career intervention program in science high schools or vocational secondary education institutions with different grade levels can be presented as a suggestion, as it will provide more data on the effectiveness of the career sailboat model. The lack of a follow-up study within the scope of this study is one of the limitations of this program. Experimental studies based on the Career Sailboat Model, including follow-up measurements, can be presented as recommendations. One of the limitations of the study is that it did not include qualitative data reflecting the views of the students who participated in the Career Group intervention programme. One of the suggestions for researchers conducting experimental studies based on the career sailboat model is to include qualitative data and allow students to reflect on their views of the programme.

Recommendations for the field of application can be summarized as follows: High school students are faced with the responsibility of first choosing a field or course, and then selecting a higher education program. At this stage, it may be recommended that students experiencing indecision be included in career intervention programs that incorporate activities based on the career sailboats model, which has been proven effective in developing decision-making skills and providing career awareness.

References

Atli, A., and Gür, S. H. (2019). Occupational preferences of high school students and factors affecting these preferences. *Journal of Career Psychological Counselling*, 2(1), 32-53.

Atli, B. and Canpolat, M. (2023). Evaluation of factors affecting university students' department preferences in terms of career sailboat model. *Journal of Career Psychological Counselling,* 6(1), 1-18. https://doi.org/10.58501/kpdd.1280440

Aydın, D. (2002). The effect of group guidance on realistic behaviour of high school 1st grade students in their field preferences [unpublished doctoral dissertation]. Ankara University.

Büyüköztürk, S. (2014). Deneysel desenler (4.baskı). Ankara: Pegem A Yayıncılık

Corkin, D., Arbona, C., Coleman, N., and Ramirez, R. (2008). Dimensions of career indecision among Puerto Rican college students. Journal of College Student Development, 49(2), 1-15. https://doi.org/10.1353/csd.2008.0015

Çakar, M., and Kulaksızoğlu, A. (2013). Comparison of vocational maturity and locus of control levels among senior high school students. *Marmara University Atatürk Faculty of Education Journal of Educational Sciences*, 9(9), 113-131.

Çakır, M. A. (2003). The effect of a vocational group guidance program on vocational indecision levels of high school students [unpublished doctoral dissertation]. Ankara University.

Çakır, M. A. (2004), Development of Vocational Decision Inventory, *Ankara University Journal of Faculty of Educational Sciences*, 37 (2), 1-14.

Çakır, M. A., and Uzun, K. (2021). Investigation of vocational indecision levels of high school students participating in vocational group guidance programmes. *Academia Journal of Educational Research*, 6(2), 442-456 https://doi.org/10.53506/egitim.918375

Demirtaş Zorbaz, S., Korkut Owen, F., Arıcı Şahin, F., and Mutlu, T. (2023). Career sailboat: A model for enhancing career decision-making self-efficacy among job seekers. *British Journal of Guidance & Counselling*, 51(2), 284-297. https://doi.org/10.1080/03069885.2023.2177615

Fouad, N., Cotter, E. W., and Kantamneni, N. (2009). Effectiveness of a career decision-making course. *Journal of Career Assessment*, 17(3), 338-347. https://doi.org/10.1177/1069072708330678

Gelibolu, S. (2016). Testing the vocational group guidance programme based on career sailboat model. In Proceedings of the 7th International Educational Research Congress. On Sekiz Mart University.

Johnson, R. B., and Christensen, L. (2017). Educational research: Quantitative, qualitative, and mixed approaches (6th ed.). SAGE Publications.

Korkut Owen, F. , Açıkel, M., Arıcı, F., Çağ, P., Demirtaş, S., and Emir, E. (2010). Kariyer danışmanlığı için bir model önerisi: Kariyer Yelkenlisi Modeli, [A suggested model for career counselling: Career Sailboat Model], *12.Rehberlik Sempozyumu*, AREL Okulları, İstanbul, 27 Mart 2010.

Korkut Owen, F. (2015). A tool for school counsellors: Career sailing model. *Yaşadıkça Eğitim Dergisi*, 29(1), 33-48.

Korkut Owen, F., and Şeremet, R. (2023). An online programme to reduce students' career indecision: A Turkish pilot study. *Asia Pacific Career Development Journal*, 6(2),19-32. http://AsiaPacificCDA.org/Resources/APCDJ/A0006_2_02.pdf

Kuzgun, Y. (2006*). Introduction to vocational guidance and counselling*. Nobel Publication.

Laçin, B. G. D. and Yeşilyaprak, B. (2018). Group intervention programme based on career sailboat model. *Anemon Muş Alparslan University Journal of Social Sciences*, 6(2), 185-192. https://doi.org/10.18506/anemon.332616

Lenz, J. G., Reardon, R. G., Peterson, G. W., and Sampson, J. D. (2001). *Applying cognitive information processing theory*. In W. Patton and M. Macmahon (Eds.), Career development programmes: Preparation for lifelong career decision making (p. 46).

Nazir, T., and Özçiçek, A. (2023). Understanding the impact of the COVID-19 pandemic on the career choices of individuals by using career sailboat model. *Frontiers in Education*, 7, 1036971. https://doi.org/10.3389/feduc.2022.1036971

Osborne, L. K. (2014). Using a cognitive information processing approach to group career counseling with visually impaired veterans. *Professional Counselor*, 4(2), 150-158.

Özbay, G. (2017). Effectiveness of the cognitive information processing based career counseling programme on decısıon making skills*. International Journal of Civilisation Studies*, 2(2), 65-82. https://doi.org/10.26899/inciss.16

Öztemel, K. (2013a). Perceived social support and gender as predictors of high school students' career decision-making difficulties. *Turkish Journal of Educational Sciences*, 11(3), 241-257.

Öztemel, K. (2013b). An ınvestigation of career ındecision level of high school students: Relationships with personal ındecisiveness and anxiety. *Online Journal of Counseling & Education*, 2(3).

Peterson, G.W., Sampson, J.P., Lenz, J.G. and Reardon, R.C. (2002). *A Cognitive Information Processing Approach to Career Problem Solving And Decision Making*. (Eds: Duane Brown and Associates). Career Choice and Development. Jossey-Bass A Wiley Company. https://doi.org/10.1002/j.2161-0045.1999.tb00271.x

Rowell, P. C., Mobley, A. K., Kemer, G., and Giordano, A. (2014). Examination of a grou counselling model of career decision making with college students. *Journal of College Counseling*, 17(2), 163-174. https://doi.org/10.1002/j.2161-1882.2014.00055.x

Sampson, J. P., Lenz, J. G., Reardon, R. C. and Peterson, G. W. (1999). A Cognitive Information Processing Approach To Employment Problem Solving And Decision Making. *The Career Development Quarterly*, 48(1), 3-18. https://doi.org/10.1002/j.2161-0045.1999.tb00271.x

Sampson, J. P., Peterson, G. W., Reardon, R. C. and Lenz, J. G. (2000). Using readiness assessment to improve career services: A cognitive information-processing approach. *The Career Development Quarterly*, 49(2), 146-174. https://doi.org/10.1002/j.2161-0045.2000.tb00556.x

Sampson, J.P., Reardon, R.C., Peterson, G.W. and Lenz, J.G. (2004). "Career Counselling Services" Brooks/Cole,

Santos, P. J., Ferreira, J. A., and Gonçalves, C. M. (2014). Indecisiveness and career indecision: A test of a theoretical model. Journal of Vocational Behavior, 85(1), 106-114. https://doi.org/10.1016/j.jvb.2014.05.004

Sarıkaya, T and Khorshid, L. (2009). Investigation of the factors affecting the career choice of university students: Vocational choice of university students. *Turkish Journal of Educational Sciences*, 7(2), 393-423.

Super, D. E. (1983). Assessment in career guidance: Toward truly developmental counseling. *Personnel & Guidance Journal*, 61(9). https://doi.org/10.1111/j.2164-4918.1983.tb00099.x

Şeker, G., and Kaya, A. (2019). Testing the effectiveness of vocational decision-making programme on the vocational indecision levels of tenth grade students. *Gazi University Gazi Faculty of Education Journal*, 39(1), 457-476.

Turan, Ü. and Kayıkçı, K. (2019). The role of school counselling services in the career choice of senior high school students. *E-International Journal of Educational Research,* 10(1).15-33. https://doi.org/10.19160/ijer.514256

Turan, M. E., and Çelik, E. (2023). The effect of a career adaptability psycho-educational programme on coping with career indecision and career adaptability: A pilot study. Counselling and Psychotherapy Research, 23, 709–717. https://doi.org/10.1002/capr.12607

Tuzcuoğlu, S. (2000). The relationship between self-concept and professional self-concept with years of education. M.Ü. *Atatürk Faculty of Education Journal of Educational Sciences*, (12), 267-280

Yeşilyaprak,B.(Ed).(2018). *Vocational guidance and career counselling.* Pegem Academy Publishing.

Zorbaz, S., Mutlu, T., Korkut Owen, F. and Arıcı Şahin, F. (2020). The effectiveness of psycho-education programme based on career sailing model in increasing career adaptability and optimism. Kastamonu *Education Journal*, 28(5), 2100-2111. https://doi.org/10.24106/kefdergi.693258