



# Middle school students' career parental support and adolescent–parent career congruence: the mediating role of self-efficacy

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## Abstract

Social cognitive career theory accepts that an individual's career journey occurs through the interaction of multiple factors. The career development process includes internal or external factors' positive or negative effects. This study aims to examine the mediating role of career and talent development self-efficacy, which expresses the belief about a person's ability, in the relationship between two variables related to parents (adolescent–parent career adaptation—career-related parental support), which is an important factor in the career development of secondary school students. The model was tested with data collected from 652 secondary school students. The results showed that career and ability self-efficacy had a partial mediating role between career-related parental support and adolescent–parent career adjustment. Suggestions are presented to increase adolescent–parent harmony.

**Keywords** Career development · Self-efficacy · Parental influence

## Résumé

La théorie cognitive sociale de la carrière admet que le parcours professionnel d'un individu se produit par l'interaction de multiples facteurs. Le processus de développement de carrière comprend les effets positifs ou négatifs de facteurs internes ou externes. Cette étude visait à examiner le rôle médiateur de l'auto-efficacité dans le développement de carrière et de talent, qui exprime la croyance en la capacité d'une personne, dans la relation entre deux variables liées aux parents (adaptation de carrière adolescent–parent - soutien parental lié à la carrière), qui est un facteur important dans le développement de carrière des élèves du secondaire. Le modèle a été tes-

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té avec des données recueillies auprès de 652 élèves du secondaire. Les résultats ont montré que l'auto-efficacité de carrière et de capacité avait un rôle médiateur partiel entre le soutien parental lié à la carrière et l'ajustement de carrière adolescent-parent. Des suggestions sont présentées pour augmenter l'harmonie adolescent-parent.

### **Zusammenfassung**

Die sozial-kognitive Karrieretheorie geht davon aus, dass die berufliche Laufbahn eines Individuums durch die Interaktion mehrerer Faktoren erfolgt. Der Prozess der beruflichen Entwicklung beinhaltet positive oder negative Auswirkungen interner oder externer Faktoren. Diese Studie zielte darauf ab, die vermittelnde Rolle der Selbstwirksamkeit in Bezug auf Karriere und Talententwicklung zu untersuchen, die den Glauben an die Fähigkeiten einer Person ausdrückt, in der Beziehung zwischen zwei Variablen, die mit den Eltern zusammenhängen (Anpassung von Jugendlichen und Eltern an die Karriere - Unterstützung der Eltern in Bezug auf die Karriere), die ein wichtiger Faktor in der beruflichen Entwicklung von Mittelschülern ist. Das Modell wurde mit Daten von 652 Mittelschülern getestet. Die Ergebnisse zeigten, dass die Selbstwirksamkeit in Bezug auf Karriere und Fähigkeiten eine teilweise vermittelnde Rolle zwischen der Unterstützung der Eltern in Bezug auf die Karriere und der Anpassung von Jugendlichen und Eltern an die Karriere hatte. Vorschläge zur Erhöhung der Harmonie zwischen Jugendlichen und Eltern werden vorgestellt.

### **Resumen**

La teoría cognitiva social de la carrera acepta que el viaje profesional de un individuo ocurre a través de la interacción de múltiples factores. El proceso de desarrollo de la carrera incluye efectos positivos o negativos de factores internos o externos. Este estudio tuvo como objetivo examinar el papel mediador de la autoeficacia en el desarrollo de la carrera y el talento, que expresa la creencia sobre la capacidad de una persona, en la relación entre dos variables relacionadas con los padres (adaptación de carrera adolescente-padre - apoyo parental relacionado con la carrera), que es un factor importante en el desarrollo de la carrera de los estudiantes de secundaria. El modelo fue probado con datos recogidos de 652 estudiantes de secundaria. Los resultados mostraron que la autoeficacia de la carrera y la habilidad tuvo un papel mediador parcial entre el apoyo parental relacionado con la carrera y el ajuste de carrera adolescente-padre. Se presentan sugerencias para aumentar la armonía entre adolescentes y padres.

### **Introduction**

According to social cognitive theory, people are the product of a dynamic interaction between many environmental and internal factors (Bandura, 1986). Social cognitive career theory suggests that an individual's career journey occurs through the interaction of many career elements (Lent et al., 1994). This theory recognizes that personal (e.g., personality and gender) and contextual variables [e.g., socioeconomic status (SES) and education] shape learning experiences

(Sawitri and Creed, 2022). Contextual action theory also underlines that a career is involved in and affected by others, for example, interactions between people who are important to each other and conversations about the future between adolescents and their families and between adolescents and their friends. Long-term careers depend on more extensive networks of others, including institutions and social contracts (Domene et al., 2014). In this context, one of the important elements is the family, which is the first place children begin to make sense of the business world. Peers and teachers who enter the child's life in the following years are also included in this career development process (Bacanlı et al., 2018).

Parents have an important place in career development, as in many other matters. Characteristics of the family can affect the child's career development positively or negatively. For example, it is seen that the socioeconomic level of the family is related to the career adaptation of the adolescent (Zheng et al., 2023), and as the socioeconomic level of the family increases, students' career decision-making difficulties decrease (Bacanlı et al., 2013). Adolescents' interests, skills, and values are influenced by their parents and reflected in their career choices (Dik and Duffy, 2009). Parents also influence their children's careers regarding their desire, support, or compliance with their children's careers. Research reveals that parents' career expectations predict adolescents' later career expectations and plans (Sawitri et al., 2014) and that family approval regarding the chosen profession affects career choice (Ulaş et al., 2017). Of course, the reflections of these factors may not always be positive (Duru and Söner, 2024). Conflicts about career choice also occur between adolescents and parents (Zimmer-Gembeck et al., 2011). However, meeting the adolescent's career needs with the support of his parents can positively affect his career journey. The study's results may help determine the topics and skills to focus on in studies on career development to increase perceived adolescent–parent harmony.

Social cognitive career theory suggests that personal and contextual variables influence the development of self-efficacy and outcome expectations (Sawitri and Creed, 2022). As a contextual variable, career compatibility with parents is important in determining students' self-efficacy, future expectations, and career goals (Sawitri et al., 2014). Career and talent development self-efficacy, a specific domain of self-efficacy, is the individual's capacity to identify their abilities and believe that further effort will strengthen them (Zhang and Yuen, 2022). It is a concept that also expresses confidence in applying life skills, such as developing one's abilities, acquiring and applying positive work habits, and researching career opportunities (Nalipay and Alfonso, 2018). This belief and trust can be positively reflected in one's perceptions, expectations, or relationships with others. For example, the Zhang and Yuen (2022) study shows a relationship between career and talent development self-efficacy and commitment to parents and teachers. This study attempted to determine the role of career and talent development self-efficacy as a personal variable in the relationship between two contextual variables—career-related parental support and adolescent–parent career adjustment. The expectation is to contribute to identifying personal and contextual factors to focus on in efforts to increase adolescent–parent adjustment. Savickas et al. (2009) underline that career guidance should have a distinctly preventive

role and that acting through early preventive alliances and collaborations is necessary. Considering the negative impact of adolescent–parent incompatibility on career development (Leung et al., 2011; Sawitri et al., 2013), the study results are expected to support prevention studies. Despite the abundance of studies on adolescent–parent career adaptation in the literature, the role of self-efficacy in career and talent development in its relationship with career-related parental support has yet to be examined. This study examined the mediating role of career and talent self-efficacy in the effect of secondary school students' career-related parental support on adolescent–parent career adaptation.

### Career-related parent support

Poverty, unemployment, insecurity, and underemployment are becoming characteristic of the context, even in the richest countries. Therefore, today's parents support their children's professional development in much more complex societies (Soresi et al., 2014).

SCCT emphasizes that family and other social factors contribute to an individual's academic and career performance at different stages and in different ways (Wang et al., 2022). Studies show that career decision-making competence is related to family influence (Aşık and Akgül, 2022), and that family influence in career choice predicts career decision-making difficulties (Dursun and Kara, 2019). Similarly, studies reveal that family support is important in career development (Metheny and McWhirter, 2013) and has an increasing effect on career adaptability (Taş and Özmen, 2019). Similarly, studies have shown that parental attitudes predict the child's career development (Kutlu and Apaydın, 2019) and that adolescents with parents who adopt supportive but noninterventive parental behaviors exhibit higher levels of career adaptation than adolescents with parents who adopt negative parental behaviors show (Liang et al., 2023). Adolescents who perceive their parents as “unsupportive but not permissive” have a higher level of career indecision and lower career adaptability than adolescents who perceive their parents as “supportive but not intrusive, ambivalent, and controlling” (Zhou et al., 2020).

According to career construction theory, individuals create a career path by interacting with others in various roles and situations, such as family and school (Savickas, 2012). In this context, support and advice from parents can play an important role in adolescents' professional identity formation and career adaptation development (Zhang et al., 2021). Parental support is a variable that affects adolescents' career development (Ginevra et al., 2015) and positively predicts career preparation (Šimunović, 2023).

Career-related parental support is a social resource that influences individual career development. It refers to parental support for adolescents' educational and vocational development in four areas: verbal encouragement, emotional support, career-related modeling, and instrumental assistance (Turner et al., 2003). Studies have shown that career-related parental support is associated with adolescents' career adaptation (Liang et al., 2020; Zeng et al., 2023), career maturity (Chen et al., 2023; Lim and You, 2019), perceptions of career and educational obstacles,

and coping with obstacles (Raque-Bogdan et al., 2013) reveals that they are related. From a practical perspective, helping parents support their children's career projects represents a key strategy for achieving preventive goals in career education (Soresi et al., 2014).

### Adolescent–parent career congruence

Due to parental influence on career development, it is necessary to consider the perceptions of adolescents in terms of their compatibility with their parents regarding their careers in studies on career development. Harmony, in general terms, is the mutual relationship formed as a result of the mutual interaction of the individual and the environment. (Bronfenbrenner, 1986). Being compatible with their parents on career issues reflects the harmony between adolescents and their families regarding careers (Sawitri et al., 2013). Sawitri et al., (2013) based the adolescent–parent career compatibility scale on Kristof's (1996) model to measure compatibility as perceived compatibility between adolescents and their parents (adolescents perceive that their parents meet their needs for career exploration, career planning, goal setting, and that their parents are satisfied with their career progress). Moreover, similarity (adolescents perceive that they have similar or matching career interests, values, plans, and goals with their parents) is considered compatibility. For an individual's career development, complementary and similar adaptations must develop together (Hou et al., 2012). Developing these adaptive abilities together is important in overcoming the difficulties faced by the individual (Rossier et al., 2012).

Adolescent–parent career congruence significantly predicts adolescents' self-esteem (Yıldırım et al., 2021) and is important in career exploration behaviors (Sawitri and Dewi, 2015; Sawitri et al., 2015). Çelik (2019) revealed that this adaptation determines career exploration and school attachment. Similarly, Fantinelli et al. (2023) found that career exploration and decision-making were associated with adolescent–parent career fit. The authors underline that individual and contextual factor play an important role in adolescents' well-being and their intentions for their future. Parent–child aspiration concordance is associated with later academic achievement and test anxiety (Lee et al., 2022). Adolescent–parent career fit provides a psychological advantage that makes it easier to fulfill career development tasks, acquire the necessary knowledge and skills to cope with stress, and be prepared (Yousefi et al., 2011).

Parents' career expectations, values, and support are practical in the career choice process of adolescents. It is easier for students who make career choices in line with their parents' expectations to make appropriate career choices (Sawitri et al., 2014). Studies have shown that adolescent–parent career fit is related to adolescents' career decision-making self-efficacy and desires (Sawitri and Creed, 2017), self-efficacy, outcome expectations, and job search preparation behaviors (Sawitri and Creed, 2022), and employability development (Sulistiobudi and Kadiyono, 2023) shows that it is. Adolescent parent career adaptation has an impact on career orientations. Adolescents whose career orientation is compatible with their parents are more likely to be more self-confident in choosing a career after graduation (Suryadi et al.,

2020). These studies reveal that career compatibility between adolescents and parents has an important role in the career development of adolescents.

### **Career and talent development self-efficacy**

In general terms, self-efficacy is people's belief that they can perform their target behaviors (Bandura, 1986). According to Bandura (1999), self-efficacy includes the difficulty individuals face in achieving their goals, the effort made, the social support received, and the knowledge and skills used when evaluating these. Again, according to Bandura (1986), it is not enough for individuals to be successful in their lives; their perception of their abilities is also important. As it is known, the messages of others are a source that affects the individual's competence expectation. For secondary school students at the beginning of adolescence, their parents play an important role in forming their perceptions of themselves. For example, parental attachment and academic self-efficacy are interrelated in adolescents (Datu and Yuen, 2020).

Although studies on career and talent development self-efficacy are limited, a similar situation exists in the context of career development. Social support positively predicts career development through career beliefs and career self-efficacy (Chan, 2020). Parents, teachers, school, and peers are important in developing students' career and talent self-efficacy (Yuen et al., 2010). Primary school students' parental social connectedness is associated with their career and talent development self-efficacy (Zhang and Yuen, 2022).

Career and talent development self-efficacy enables individuals to realize their potential, increase their quality of life, and positively contribute (Yuen et al., 2010). Self-efficacy is also important in career development, particularly in one's academic and career interests, choice, performance, goals, and outcome expectations (Fan et al., 2013; Lent et al., 2000). Career and talent development self-efficacy has three components: (1) developing one's abilities (talent development), (2) acquiring and practicing positive work habits (work habits and values), and (3) exploring career opportunities (career exploration). In this context, career and talent development self-efficacy can be defined as the belief that helps an individual use the specific abilities required to work in a certain field, strengthen their abilities, and achieve career goals with these abilities (Yuen et al., 2010). Parents and parental support can be an important source of career and talent development self-efficacy, just as they are of self-efficacy. This may provide information on which skills to focus on in studies to increase perceived harmony with parents in career development.

### **Parental support, career and talent development self-efficacy, and adolescent-parent career congruence**

Adolescents want to improve their knowledge and skills in certain areas. Career and talent development, which aids in developing this knowledge and skills, has recently led to conceptualizing self-efficacy in this area (Yuen et al., 2010). Self-efficacy is generally defined as the belief that a person can manage himself, consistently focus

on his goal, willingness to take initiative, and personal belief in coping with all kinds of problems (Hua, 2002). Hou et al. (2014) determined that the high self-efficacy of individuals regarding their careers also positively affects career adaptability. Career and talent development self-efficacy provides lifelong support for individuals to realize their potential, improve their quality of life, and positively contribute to society (Yuen et al., 2010). Career and talent development self-efficacy is associated with adaptability (Datu et al., 2017). At the same time, career and talent development self-efficacy also affects the individual's motivation and satisfaction with the career field (Komarraju et al., 2014).

As primary sources of social support, parents influence young people's career-related self-efficacy and outcome expectations, as well as the development of career interests, intentions, and goals (Kenny and Medvide, 2013). A study found that adolescents who described their parents as "agreeable–highly supportive" and "agreeable–averagely supportive" had higher career decision-making self-efficacy levels than those in the "extremely maladaptive–ambivalent" group. This shows that adolescents significantly affect career decision-making and self-efficacy gains (Liang et al., 2022). Adolescents' perception of their parents' support predicts career choices through career self-efficacy (Ginevra et al., 2015). Similarly, parental career adaptability and parental career expectations predict self-efficacy and career exploration (Sawitri et al., 2014). Parental career-related behaviors and adolescent–parent career fit are associated with career decision-making self-efficacy (Li et al., 2023).

Parents can encourage and provide emotional support to their children by being suitable models for family communication. The support parents provide within the family is one of the important variables affecting career development and choice in collectivist countries (Oettingen and Zosuls, 2006). Sawitri and Creed (2017) revealed that horizontal and vertical collectivism are related to perceived adolescent–parent career fit. Although not the direct subject of this study, Turkey is a collectivist country (Dinn and Harris, 2011). In this context, the support that the adolescent perceives from their parents and career compatibility with their parents may be more important in career development than an adolescent in a non-collectivist society. Perceived compatibility with parents may be a more important variable for career development, as they place more excellent value on trusting and obeying parents. Studies on the subject reveal that parental support is related to career and talent development self-efficacy, and career and talent development self-efficacy is related to adolescent–parent career harmony. Therefore, we determined whether career and talent development self-efficacy mediate between these two variables.

## The present study

This study was conducted with secondary school students in the sixth, seventh, and eighth grades. Adolescence is an important developmental period in which different career theorists make educational efforts and determine career goals (Ginzberg, 1984; Gottfredson, 1981; Super, 1990). According to Super (1990), during

adolescence, the individual's parents, whom he defines as role models and especially his close circle, critically impact his career development. Studies in literature show that parental support, career and talent development self-efficacy, and adolescent–parent career harmony are interrelated. Adolescents' harmony with their parents regarding their career future can also reduce the career choice difficulties they may experience in the future. For this reason, the study aims to test parental support and self-efficacy with a structural equation model to understand adolescent–parent career adaptation. This designed model will provide scientific evidence for determining some variables affecting adolescent–parent career adaptation and conducting studies on this point. The study examined the mediating effect of career and talent self-efficacy in predicting career adaptation of adolescents' career-related parental support, and answers were sought to the following questions.

1. Does career-related parental support predict adolescent–parent career adjustment and career and talent development self-efficacy?
2. Does self-efficacy mediate the relationship between adolescents' parental support and adolescent–parent career adaptation?

## Method

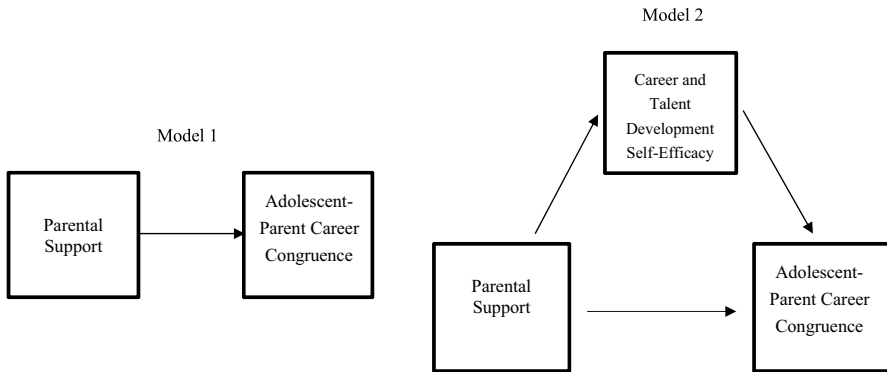
### Research models

The study used a relational survey model to examine the mediating role of career and talent development self-efficacy in career-related parental support and adolescent–parent career congruence. There were two models in the study. The relational screening model aims to determine the presence or degree of covariance between two or more variables (Karasar, 2023). Model 1 explored the predictive role of parental support on adolescent–parent career congruence. Model 2 examined the mediator role of career and talent development self-efficacy in the relationship between parent support and adolescent–parent career congruence. The models are shown in Figure 1.

### Participants and procedures

The city where the study was conducted is the country's most populous and most developed city. Seven secondary schools provide religious education in the region where the data were collected, and 23 secondary schools offer secular education. A total of 685 people from both school types were reached, and after 33 outliers were removed from the data set, analyses were conducted with 652 people. Demographic information of the participants is presented in Table 1.

The study procedures were designed according to the provisions of the Declaration of Helsinki regarding research on human participants. Informed consent was prepared to inform participants about the research and ethical issues, and data



**Figure 1** The research models

were collected from those who agreed. In addition, since the study was conducted with children under 18, the necessary legal permissions were obtained from the administration of the region where the schools are located. Informational messages were sent to parents through school administrators, and the children of volunteer parents were asked to fill out the forms. Data were collected via an online, anonymous questionnaire survey during distance education due to the pandemic.

## Measures

### Personal information form

Participants were asked to answer the items related to gender, school type, age, grade level, and education status.

### Career-Related Parent Support Scale (CRPSS)

The instrument was developed by Turner et al. (2003) to determine middle school students' career-related parent support perceptions, and it was adapted to Turkish by Güneş (2015). Turner et al. (2003) developed the tool according to social cognitive career and competence theories. At scale, instrumental assistance (e.g., my parents teach me things I could one day use in my profession), career-related modeling (e.g., my parents talk to me about their professions), verbal encouragement (e.g., my parents reward me when I do my homework well), and emotional support (e.g., my parents praise me when I learn skills related to my future profession) and 27 items. The confirmatory factor analysis results showed that the fit values were within acceptable ranges ( $\chi^2/\text{degrees of freedom-df}$  of 2.461, root mean square error (RMSEA) of 0.058, standardized root mean error (SRMR) of 0.052, and adjustment goodness of fit index (AGFI) of 0.981). In the adaptation study, the Cronbach alpha coefficient was .93 for all items in the scale; it was 0.81 for instrumental assistance subdimension, 0.87 for career-related modeling,

**Table 1** Demographic information

| Demographic features             | Group    |      |
|----------------------------------|----------|------|
|                                  | <i>n</i> | %    |
| Gender                           |          |      |
| Female                           | 426      | 65.3 |
| Male                             | 226      | 34.7 |
| Age (years)                      |          |      |
| 11                               | 119      | 18.3 |
| 12                               | 215      | 33   |
| 13                               | 221      | 33.8 |
| 14                               | 86       | 13.2 |
| 15                               | 11       | 1.7  |
| <i>Grade level</i>               |          |      |
| Sixth grade                      | 334      | 51.3 |
| Seventh grade                    | 221      | 33.8 |
| Eighth grade                     | 97       | 14.9 |
| School type                      |          |      |
| Middle school                    | 515      | 79   |
| Imam Hatip middle school         | 137      | 21   |
| <i>Father's education status</i> |          |      |
| Illiterate                       | 16       | 2.5  |
| Primary school                   | 328      | 50.3 |
| Middle school                    | 153      | 23.5 |
| High school                      | 119      | 18.3 |
| University                       | 36       | 5.5  |
| <i>Mother's education status</i> |          |      |
| Illiterate                       | 71       | 10.9 |
| Primary school                   | 374      | 57.4 |
| Middle school                    | 109      | 16.7 |
| High school                      | 76       | 11.7 |
| University                       | 22       | 3.4  |

0.82 for verbal encouragement, and 0.83 for emotional support subdimension. The test–retest reliability coefficient of the scale was 0.90, 0.87 for instrumental assistance, 0.96 for career-related modeling, 0.90 for verbal encouragement, and 0.90 for the emotional support subdimension. For the current study, Cronbach's alpha internal consistency coefficient was 0.97 for all items, 0.91 for instrumental assistance, 0.90 for career-related modeling, 0.91 for verbal encouragement, and 0.94 for emotional support sub-dimension.

### Career and Talent Development Self-Efficacy Scale

The Career and Talent Development Self-Efficacy Scale was developed by Yuen et al. (2010) to describe middle school students' self-efficacy perceptions for career

and talent. The scale was adapted to Turkish by Yıldız (2015). There were 18 items and three subdimensions in the original scale. However, four items were removed in the Turkish adaptation study. Hence, there were 14 items and two subdimensions (e.g., discovering my abilities in academic subjects fulfilling the given tasks by working systematically) in the Turkish version, and Cronbach's alpha internal consistency coefficient was measured 0.91. The test–retest reliability coefficient was 0.62. In the adaptation studies, item-total correlations ranged between 0.51 and 0.70. “The Career Decision-making Self-Efficacy Scale” by Bozgeyikli (2004) was used for the Turkish adaptation studies. A significant relationship was found between them (0.61). The Cronbach's alpha internal consistency coefficient of the adapted scale was 0.85.

### **Adolescent–Parent Career Congruence Scale**

It was a six-point Likert-type scale developed by Sawitri et al., (2013) to measure the fit between parents and their adolescent children's career expectations. High scores showed a high level of congruence between adolescents and parents. It was adapted to Turkish by Bacanlı et al. (2018). According to the analysis results in the Turkish sample, the goodness of fit index was within the acceptable ranges ( $\chi^2/df$  of 3.062; Goodnes of Fit Index (GFI) of 0.953; Comparative Fit Index (CFI) of 0.918; AGFI of 0.927; Tucker-Lewis Index (TLI) of 0.895; RMSEA of 0.065). The scale had 11 items (e.g., my parents support me in my career plans, my parents and I have similar career interests), 7 related to complementary fit and 4 related to supplementary fit. In the Turkish adaptation studies, the internal consistency coefficient was 82 for the total score, 0.73 for the supplementary fit subdimension, and 0.77 for the complementary fit subdimension. In this study, Cronbach's alpha internal consistency coefficient was measured at 0.87, and it was 0.86 for the complementary fit and 0.71 for the supplementary fit subdimension.

### **Process**

The study was conducted following the Declaration of Helsinki for research involving humans. Informed consent was prepared to inform the participants about the research and ethical issues, and data were collected from those who consented to participate. Since the study was conducted on children under 18, the necessary legal permissions were obtained from the district governorship. The school principals sent text messages to inform parents about the study, and the children of the volunteer parents were asked to fill in the forms. The data were collected using Google Forms due to distance education.

### **Data analysis**

The extreme values were checked before the data analysis. The Mahalanobis distances were calculated, and 33 extreme values were removed from the data set. The skewness and kurtosis values between  $-1.5$  and  $+1.5$  indicate a normal data

distribution (Tabachnick and Fidell, 2013). Pearson correlation analysis revealed the relationships between variables, and structural equation modeling was used for mediation analysis. A total of 5000 bootstrap replications were performed to determine the bootstrap coefficient and confidence intervals, and it was concluded that the lower and upper confidence intervals were not zero (Preacher and Hayes, 2008). The descriptive statistics and correlation analysis were performed using the SPSS 25.0 program, and the AMOS 20.0 program was used for structural equation modeling. In the model,  $\chi^2/df$ , RMSEA, CFI, and SRMR values were examined as goodness of fit (Hu and Bentler, 1998; Kline, 2016; Marsh et al., 2006; Schumacker, and Lomax, 2010; Wang, and Wang, 2012; Yılmaz and Çelik, 2005).

## Findings

### Descriptive statistics and correlation values

The descriptive statistics of career-related parental support, adolescent–parent career congruence, career and talent development self-efficacy, and the Pearson correlation analysis results are presented in Table 2.

According to Table 2, there was a moderate positive correlation between career-related parental support and adolescent–parent career congruence ( $r = 0.349$ ,  $p < .01$ ) and a slightly positive and significant correlation between career-related parental support and career and talent development self-efficacy ( $r = 0.124$ ,  $p < .01$ ). In other words, a high level of career-related parent support improved adolescent–parent career congruence and career and talent development self-efficacy. There was also a positive and significant correlation between adolescent–parent career congruence and career and talent development self-efficacy ( $r = 0.421$ ,  $p < 0.01$ ). As adolescent–parent career congruence increased, career and talent development self-efficacy improved.

**Table 2** Descriptive statistics and correlation values

|   | 1       | 2       | 3      |
|---|---------|---------|--------|
| Career-related parental support             | 1       | 1       |        |
| Adolescent–parent career congruence         | 0.349** |         |        |
| Career and talent development self-efficacy | 0.124** | 0.421** | 1      |
| Mean  | 94.22   | 42.76   | 71.06  |
| Standard deviation                          | 27.87   | 7.58    | 9.82   |
| Kurtosis value                              | −0.918  | −0.442  | −0.714 |
| Skewness value                              | −0.040  | 0.191   | −0.086 |

\*\* $p < 0.01$

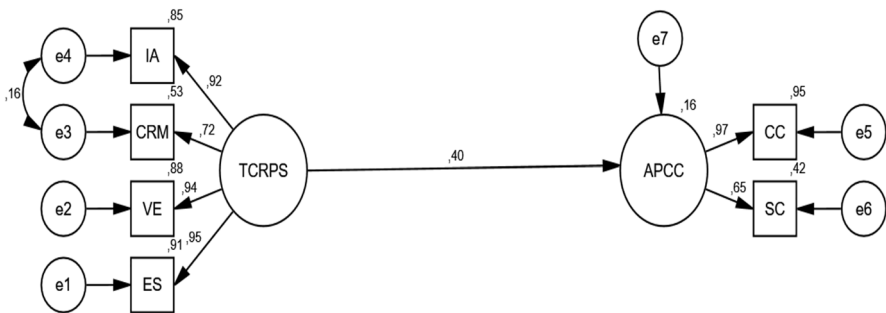
**Model 1: The relationship between career-related parental support and adolescent–parent congruence**

After examining the correlational relationships between career-related parental support, career and talent development self-efficacy, adolescent–parent career congruence, and the total score and subdimensions, a path analysis was used in model 1 to estimate the predictive power of career-related parent support on adolescent–parent career congruence. Analysis results are shown in Fig. 2.

No modification was made in the analysis. The analysis results showed that the model did not fit well ( $\chi^2$ /standard deviation (s.d.) of 5.337, RMSEA of 0.082, CFI of 0.99, SRMR of 0.02). When the modification indices were examined, and covariance was drawn between instrumental assistance (IA) and career-related modeling (CRM), the values were within the desired ranges, which indicated a good fit of the model ( $\chi^2$ /s.d. of 4.41, RMSEA of 0.07, CFI of 0.99, SRMR of 0.02). Career-related parental support predicted the adolescent–parent career congruence at a 0.25 level.

**Model 2: The mediating role of career and talent development self-efficacy in the relationship between career-related parental support and adolescent–parent career congruence**

The mediating role of career and talent development self-efficacy in the relationship between career-related parent support and adolescent–parent career congruence can be seen in model 2. Mediation model analysis was performed following the procedures created by Baron and Kenny (1986). According to this format, there should be a significant relationship between career and talent development self-efficacy (i.e., the mediator variable) and career-related parental support (i.e., the independent variable). In addition, when the independent variable, career-related parental support, was controlled, it was found that career and talent development self-efficacy, the mediator variable, significantly predicted adolescent–parent career congruence, the

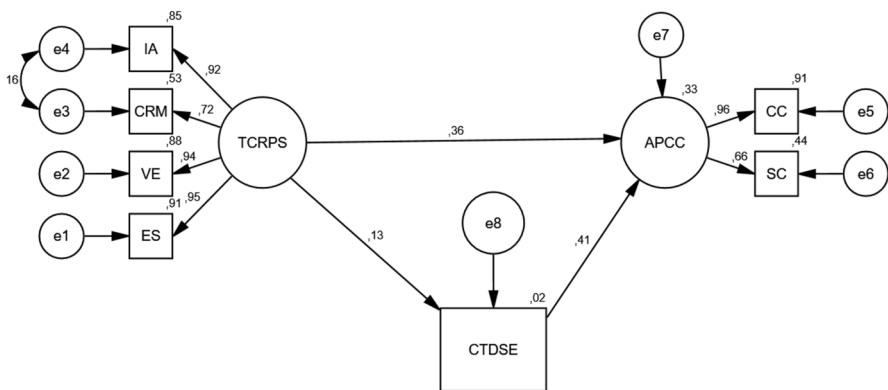


**Figure 2** Model 1: the predictive power of career-related parental support on adolescent–parent career congruence. *TCRPS* The Career-Related Parent Support, *VE* verbal encouragement, *ES* emotional support; *CRM* career-related modelling, *IA* instrumental assistance, *APCC* adolescent–parent career congruence, *CC* complementary congruence, *SC* supplementary congruence

dependent variable. Then, the effect of the mediator variable was controlled to determine the mediating role in the model. It was found that there was slight relationship between career-related parental support and adolescent–parent career congruence. Model 2 was tested accordingly, and the results are shown in Fig. 3.

Both models’ test results were analyzed and revealed that career-related parental support significantly predicted adolescent–parent career congruence in model 1 ( $\beta = 0.40, p < 0.001$ ). In model 2, career-related parental support predicted career and talent development self-efficacy ( $\beta = 0.13, p < .001$ ), and career and talent development self-efficacy significantly predicted the adolescent–parent career congruence ( $\beta = 0.41, p < 0.001$ ).

In model 2, the mediating effect of career and talent development self-efficacy in the relationship between career-related parental support and adolescent–parent career congruence was examined, and it was seen that the standardized regression coefficient of parental support decreased from  $\beta = 0.40$  to  $\beta = 0.36$  ( $p < .001$ ). Besides, when the fit indexes of model 2 in Fig. 3 were examined, it was found that the index values were close and showed perfect fit ( $\chi^2/s.d.$  of 2.989, RMSEA of 0.055, CFI of 0.99, SRMR of 0.02). When Figs. 2 and 3 were compared, it was seen that the relationship between career-related parental support and adolescent–parent career congruence decreased due to the inclusion of career and talent development self-efficacy in the model. Although the beta values decreased, both variables did not lose predictive power. Accordingly, career-related parental support directly affected adolescent–parent career congruence and indirectly affected career and talent development self-efficacy. In this sense, it can be inferred that career and talent development self-efficacy partially mediated the relationship between career-related parental support and adolescent–parent career congruence. After describing the mediating role, the bootstrap confidence interval was measured to estimate the effect level. As seen in Table 3, the lower and upper limits of bootstrap exceeded



**Figure 3** Model 2: mediator role of career and talent development self-efficacy in the relationship between career-related parental support and adolescent–parent career congruence. *TCRPS* The Career-Related Parent Support, *VE* verbal encouragement, *ES* emotional support, *CRM* career-related modelling, *IA* instrumental assistance, *APCC* adolescent–parent career congruence, *CC* complementary congruence, *SC* supplementary congruence, *CTDSE* career and talent development self-efficacy

**Table 3** Regression and variance values in model 1 and model 2

| Regression values                         | Standard              |                |       |        |          | Bias (%95)  |             |
|---|-----------------------|----------------|-------|--------|----------|-------------|-------------|
|   | B <sub>1</sub>        | B <sub>2</sub> | SE    | C.R.   | <i>p</i> | Lower limit | Upper limit |
| CTDSE ← TCRPS                             | 0.126                 | 0.160          | 0.050 | 3.176  | < 0.001  |             |             |
| APCC ← CTDSE                              | 0.410                 | 0.193          | 0.016 | 11.892 | < .001   |             |             |
| APCC ← TCRPS (direct effect)              | 0.356                 | 0.213          | 0.021 | 10.045 | < 0.001  |             |             |
| APCC ← TCRPS (total effect)               | 0.403                 | 0.245          | 0.023 | 10.555 | < 0.001  |             |             |
| CTDSE ← TCRPS ← APCC<br>(indirect effect) | 0.031                 | 0.052          |       |        |          | 0.012       | 0.054       |
| Explained variance                        | <i>R</i> <sup>2</sup> |                |       |        |          |             |             |
| CTDSE                                     | 02                    |                |       |        |          |             |             |
| APCC                                      | 33                    |                |       |        |          |             |             |

Note: Tcrps = The Career-Related Parent Support; Ve = Verbal Encouragement; Es = Emotional Support; Crm = Career-Related Modelling; Ia = Instrumental Assistance; Apcc = Adolescent-Parent Career Congruence; Cc = Complementary Congruence; Sc = Supplementary Congruence; Ctdse = Career And Talent Development Self-Efficacy

zero (Gürbüz, 2019; Preacher and Hayes, 2008) and career and talent development self-efficacy have a mediating effect [ $\beta = 0.033$ , 95% Confidence Interval (CI): 0.012, 0.054].

## Discussion

According to the results of the study, parental support is a variable that predicts adolescent–parent career adaptation. No studies on perceived parental support and adolescent–parent career compatibility in secondary school students have been found in literature. However, the results of studies mainly conducted with university students showed that there is a positive relationship between parental support and adolescent–parent career adaptation support this finding of the study (Guan et al., 2015, 2016; Parola and Marcionetti, 2021; Taş and Özmen, 2019). Today, Turkish society is still where close family and relative relationships and even neighborly relations are primarily valued and appreciated (Dinn and Harris, 2011). Hofstede et al. (2010) emphasize that parental support in collectivist cultures is important in career adaptation. In collectivistic cultures, parents can influence career choices to help their children. This may cause individuals to change their career choices due to family pressure, even if they are mature enough to make career choices (Pişkin, 2002). The middle school period is when the child is just gaining emotional independence and taking new steps toward becoming an individual. It is a period when the adolescent is just starting. In this period, parents still have a significant influence on the adolescent. Therefore, adolescents who perceive high family support regarding their careers may perceive themselves to be more compatible with their families regarding their careers. This finding is thought to be due to the cultural and developmental characteristics of the studied group.

Another study result is that adolescents' perceived parental support and career and talent development are variables that predict self-efficacy. Although no research directly examines the relationship between these two concepts in literature, Turan's (2013) research findings that perceived social support in adolescents predicts career and talent development self-efficacy support the study's results. Similarly, findings that perceived parental support predict self-efficacy (Çavuş, 2009; Liu et al., 2019; Mengi, 2011; Yendork and Somhlaba, 2015) and Xing and Rojewski's (2018) finding that family influence significantly affects career decision-making self-efficacy. It can be said that the result predicts in a way indirectly supports the research results. Parents' communication with their children affects their motivation, interest, and self-efficacy, as well as their career development and goals (Katz et al., 2018; Kuzgun, 2019; Lent et al., 2000). Parents who support their children through effective communication can be an important factor in their children's career development and choice (McCabe and Barnett, 2000). In this context, it can be said that perceiving high support from their parents regarding careers helps adolescents develop more positive beliefs about themselves, and these positive beliefs help them understand and monitor their self-confidence in managing career and talent development tasks.

According to the research results, career and talent development self-efficacy significantly predicts adolescent–parent career adaptation. Sidiropoulou-Dimakakou et al. (2015) found that there is a relationship between career self-efficacy and career adaptation in their study with university students, and Xu (2019) and Guan et al. (2013) found that self-efficacy predicts career adaptation in their research with university students. Additionally, Marcionetti and Rossier (2019) found that self-efficacy predicts career adaptation in their study with adolescents. The results indirectly support this conclusion of the research. In addition to these studies, findings in literature state that there is a positive significant relationship between career adaptability and career decision-making self-efficacy, and self-efficacy significantly predicts career adaptation also indirectly support the research results (Chui et al., 2020; Guan et al., 2016; Hou et al., 2014; Söner et al., 2024). Yuen et al. (2010) state that career and talent development self-efficacy is important for individuals to increase their quality of life and make a meaningful contribution to their society. Individuals with high self-efficacy regarding career and talent have high self-awareness and consider themselves competent in career choices (Solberg, 1998). It is thought that these individuals with high self-awareness perceive themselves to be more compatible with their parents regarding their careers, as they can tell their preferences more clearly to their parents and manage joint decision-making mechanisms with their parents.

Finally, the study found that career and talent development self-efficacy mediates between career-related parental support and adolescent–parent career adaptation. Adolescents who perceive career-related support from their parents perceive themselves to be more compatible with their parents regarding careers. This perception of fit increases with career and talent development self-efficacy. In literature, no study has examined the mediating role of career and talent development self-efficacy in the effect of career-oriented parental support on adolescent–parent career adaptation. The social support that the family provides to children and adolescents in their career development and choice is important (McCabe and Barnett, 2000).

Lent et al. (2000) perceived social support, specifically parental support, increases career-related outcome expectations and self-efficacy. Individuals with high career self-efficacy have high awareness. These adolescents, who believe they will achieve their career goals by using the skills necessary to work in a field, are more conscious of their career journey. They understand, monitor, and develop their self-belief regarding career and talent development. This may enable the adolescent to take more specific steps regarding his career and to give more explicit messages to his environment. Adolescents who give clear messages may think they are understood and approved by their environment and family. Therefore, they have a similar career understanding to their family and are compatible with their career.

## Implications

This study confirmed the mediating effect of career and talent development self-efficacy on the relationship between adolescents' parental support and adolescent–parent career adjustment. The results provide a theoretical basis for future studies on improving the adolescent–parent career adaptation of secondary school students. In line with the result that parental support for career development and career and talent development self-efficacy predict adolescents' career adaptation, it would be appropriate to include studies in which parents participate to increase secondary school students' perceived adolescent–parent career harmony. It would be helpful to organize informative studies and seminars/webinars for parents by psychological counselors in schools, emphasizing the importance of supporting their children effectively. Preparation and implementation of programs aimed at increasing parents' ability to help their children effectively will also improve communication between adolescents and parents about careers, allowing adolescents to perceive more excellent career compatibility with their parents. Studies aimed at raising awareness among students can be included in career development studies. Awareness activities can be prepared for students regarding parental support's importance and how it affects their career development. Additionally, studies can be included to help them understand and develop their self-beliefs about their careers.

## Limitations and future research

The data for this study were collected from sixth-, seventh-, and eighth-grade students who received distance education during the coronavirus disease 2019 (COVID-19) pandemic. For the data collected online, it was impossible to provide face-to-face explanations to students, the conditions under which students responded to the data collection tools were not regulated, and there was no opportunity to answer students' potential questions or address any problems they experienced during the response process. It is thought that online data collection for this age group is a limitation. There were also methodological limitations in the data collection and analysis process, including that the mediation effect size was low and that this

part of the correlation between CRPSS and APCC was due to overlapping content. Although adolescent–parent career congruence was studied, data were collected only from sixth, seventh, and eighth graders, i.e., individuals in the 12–14 age group. The study is limited only to adolescents in this age group.

## Conclusions

The results of this study show that in adolescents' perceptions of career compatibility with their parents, both perceived parental support and self-efficacy regarding careers and abilities should be emphasized. This study underlines that in career studies with adolescents, it is necessary to focus on how adolescents perceive parental support. In this context, awareness studies regarding adolescents' beliefs about career and talent development and how they perceive their parents' support regarding their careers can increase the impact of prevention and intervention studies.

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## Declarations

**Conflict of interest** The authors declare they have no conflict of interest.

**Ethical approval** The study was conducted following the Declaration of Helsinki for research involving humans.

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