

Examining the role of co-worker support and occupational outcome expectancy on career regret

International
Journal of
Organizational
Analysis

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Received 12 August 2024
Revised 16 December 2024
9 February 2025
Accepted 15 February 2025

Abstract

Purpose – This paper aims to explore the mechanisms that explain the effects of physicians who feel supported by their co-workers on their professional outcome expectations and their ability to be more successful in their chosen career, in the context of Social Cognitive Career Theory (SCCT).

Design/methodology/approach – The population of the study is physicians working in hospitals in Ankara. There are 37 hospitals under the Ministry of Health in the province. A total of 5,092 physicians work in these hospitals. In this study in which questionnaire technique was used, data were collected from 400 physicians by convenience sampling method. The data obtained were analysed by means of AMOS 22.0 and SPSS 26.0 package programs.

Findings – As a result of the regression analyses, it was determined that physicians' professional outcome expectancy had a positive and significant effect on career regret. In addition, it was determined that the perceived co-worker support variable did not have a moderating role effect in the relationship between physicians' professional outcome expectancy and career regret.

Research limitations/implications – In this study, the moderating role of co-worker support in the effect of physicians' professional outcome expectations on career regrets is examined. Therefore, the sampling frame is limited to physicians.

Practical implications – Based on the fact that professional outcome expectation and co-worker support are very important variables for individuals with career regret, it emphasises that management activities carried out in health institutions should be carried out in a way that supports the career development of employees.

Originality/value – The tasks that physicians perform include many challenging elements. Therefore, the support they receive from their co-workers is critically important.

Keywords Perceived co-worker support, Career decision regret, Vocational outcome expectation

Paper type Research paper

Data availability: The data that support the findings of this study are available from the corresponding author upon request.

Statement of Support and Acknowledgements: No support was utilised within the scope of the research. The researcher thank the participants is in the process of being implemented.

Conflict Statement: No conflict of interest.



Introduction

Following organisational strategies that aim to support the professional development of healthcare professionals is of great importance for the management and success of healthcare organisations (Dyrbye *et al.*, 2020). In this context, in this study, the role of co-worker support and occupational outcome expectancy on career regret was examined within the framework of Social Cognitive Career Theory (SCCT). SCCT emphasises the importance of individual characteristics such as interest, ability and qualifications in the process of career development. This model states that dynamic characteristics such as self-perception, future expectation and behaviour and situation-specific and environmental issues such as economic barriers and social support are also very important at this stage (Lent *et al.*, 2005). In terms of physicians in particular, individual characteristics and organisational factors are seen among the predictors of burnout and career choice regret (Dyrbye *et al.*, 2018). In addition, there is a limited number of studies in the literature on physicians' career regret (Budjanovcanin *et al.*, 2019; Sierra *et al.*, 2019). Considering the potential of career regret to bring important consequences, this situation needs to be examined systematically (Verbruggen and De Vos, 2020). Therefore, with this research, in which career regret is revealed through a preventive variable such as co-worker support, career regret for physicians is addressed from a new perspective.

Outcome expectancy includes the beliefs that a person has about the outcome of a particular situation (Bandura, 1997). In addition, it includes the expectations about the results to be achieved as a result of the work to be done and the question "What will I get as a result of doing this?" (Lent *et al.*, 2002). Since outcome expectancy has an important role in individuals' initiation and discontinuation of a behaviour, in the development of their interests, and in determining their choice and performance goals, it is accepted as one of the key concepts in SCCT (Lent *et al.*, 2005). In addition, occupational outcome expectancy has an important place in outcome expectancy (Hsu *et al.*, 2019a; Budjanovcanin and Woodrow, 2022). Vocational outcome expectancy is the beliefs about the long-term consequences of the success to be achieved as a result of making certain educational or career decisions (Betz and Voyten, 1997). Lent and Savickas (1994) argue that occupational outcome expectancy is used in conjunction with traditional occupational value categories such as helping, earning or autonomy. When occupational outcome expectancy is viewed from this perspective, it is thought to be individuals' beliefs about the degree to which the outcome of pursuing certain careers allows them to live the occupational values they prioritise. Career choice is very important for people's lives in social and economic terms (Hsu *et al.*, 2019a; Ephrem and Murimbika, 2023).

Career decision has a great impact on career continuation and fulfilment of occupational outcome expectations. The complexity of career decision-making is influenced by the multiplicity of factors that significantly affect this process (Seçer and Çınar, 2011). Previous studies have shown that the career decision-making process affects many variables such as socio-economic and cultural factors, academic achievement, values and positive views about the profession (Ulaş and Özdemir, 2018). The fact that individuals do not experience regret about their career decisions enables them to adapt themselves better to their working environment and creates career adaptability (Dong *et al.*, 2020). Employees may regret decisions about their careers, and the choice made about the career path is a decision that has far-reaching consequences as well as being relatively difficult to undo (Budjanovcanin and Woodrow, 2022). The difficulty of reversing a career decision was addressed in the research conducted by Bachmann *et al.* (2020) and it was revealed that the rate of occupational change of employees in Europe is limited to 3%. Career regret is the result of a disappointing decision about a career that does not achieve what is desired (Brehaut *et al.*, 2003). However, career is the most important life role of each individual (Erdurcan and Kıldök, 2017). The co-worker who has an effect on career decision also has an effect on career regret. In addition,

the support of co-workers can have a unique quality to help an individual manage stress and tension in the workplace (Beehr *et al.*, 2000; Gillen *et al.*, 2002). The concept of co-worker support is different from organisational and managerial support and is more closely related to employee-related variables (Ng and Sorenson, 2008).

In the Turkish higher education system, to be able to choose a medical faculty, it is necessary to rank in the top 50,000 in the central examination. However, when the entrance scores of medical faculties are analysed according to the years, it is seen that it is not enough to rank in the top 50,000 and higher success is required. Students who achieve high success in the university entrance exam have the opportunity to choose professions other than medicine. In this period, students may prefer medical faculties that are considered valuable by the society and have a job guarantee at graduation, without taking into account their own abilities and expectations, under the influence of many factors. However, this issue may turn into regret during the education process or while practising the profession. In addition, physicians work together with other departments and health personnel (nurses, patient carers, etc.) and it is known that their support is effective on their success. Especially with the COVID-19 outbreak, it was considered important whether a career regret occurred in physicians and whether the support they received from their co-workers had an effect on this situation. In addition, discovering the mechanisms explaining the effects of co-worker support on the professional outcome expectation of physicians and the effects of these variables on the careers of physicians constitutes the main perspective of this research.

2. Conceptual framework

2.1 Professional result expectation

Expectancy is the level of belief that behaviour will be appreciated if it is performed in certain situations (Gerrig *et al.*, 2016). Vocational outcome expectancy is accepted as long-term beliefs gained as a result of deciding on a profession or as a result of training for a particular profession (Fouad and Guillen, 2006). SCCT together with self-efficacy, defends the expectation of which positive results will be obtained as a result of a behaviour. If the individual believes that he/she will achieve positive results as a result of the behaviour, the motivation level to perform the behaviour increases, while if not, he/she avoids taking action (Durmuş *et al.*, 2019). Therefore, the concept of expectation is effective on the motivation level of the individual (Santrock, 2018). On the other hand, occupational outcome expectancy is the belief that certain behaviours will produce certain results, and in this direction, it represents the individual's belief in the long-term results of success such as income, status, learning new skills as part of the career (Gürpınar *et al.*, 2021). In addition, occupational outcome expectancy is closely related to the concepts of self-efficacy and career interest in the context of SCCT. In this context, career interest and self-efficacy are among the important predictors of occupational outcome expectancy (Lent *et al.*, 2017; Chang *et al.*, 2018; Nabizadeh *et al.*, 2019). Ma and Shea (2021) emphasised in their study that support from peers and social friends is related to vocational outcome expectancy. Similarly, different studies have tried to explain the relationship between occupational outcome expectancy and peer and social friend support at different levels. Rogers *et al.* (2008) showed that individual characteristics and peer support are indirectly related to career choice process.

Occupational outcome expectancy has a multifaceted effect on individuals' lives. Occupational outcome expectancy positively affects life satisfaction and contributes to increasing the quality of life as well as increasing employee productivity (Uçak and Yıldırım, 2023). Similarly, high occupational outcome expectancy positively affects individuals' problem solving skills (Odacı and Yıldız, 2023). Therefore, it is emphasised in the related literature that there is a close relationship between career decision-making and occupational

outcome expectations. On the other hand, it is emphasised that there is a positive relationship between career decision-making, occupational outcome expectancies and self-efficacy in general, just like in SCCT.

2.2 *The concept of co-worker support*

Co-worker support has the ability to make a work environment enjoyable or unbearable to spend time in. Supportive friendships are known to be an important source of self-esteem beyond one's spouse and family relationships and have an impact on well-being (Kuykendall *et al.*, 2015; Powell *et al.*, 2019). As Hodson (1997) convincingly argues, social relationships in the workplace can make a significant contribution to employees' job satisfaction, productivity and well-being. The revitalisation derived from the perceived value of co-worker support plays an important role in reducing the negative feelings that employees have about the functions performed in their organisations (De Clercq *et al.*, 2020).

When the issue is considered from a professional point of view, the expert knowledge shared by co-worker creates a sense of trust in employees, enabling them to complete their knowledge gaps and complete their work tasks successfully (Park *et al.*, 2016). In addition, co-worker support positively affects job satisfaction and has a positive effect on the work environment. Co-workers alleviate the workload with the psycho-social support they provide (López *et al.*, 2019). Therefore, co-worker support refers to co-workers who help each other in their tasks when necessary by sharing knowledge and expertise and providing encouragement and support (Zhou and George, 2001). Thanks to this affirmation, supportive friendships have a positive impact on employee well-being and thus career development (Craig and Kuykendall, 2019). Co-worker support also has important effects outside the workplace. Positive social relationships have been found to be linked to physical and mental health (Kaul and Lakey, 2003). The working environment of individuals is considered to be very important in determining their level of job stress and how they can meet the demands of the job. In addition to organisational support, work-based support, such as co-worker support, may direct the relationship between antecedent variables and employee outcomes differently (Yang *et al.*, 2020). At this point, it is possible to state that co-worker support is important to increase the effect on greater engagement in work as well as reducing job stress. On the other hand, relationships with co-worker facilitate individuals and organisations to provide valuable psychosocial resources to support co-worker (Guo *et al.*, 2019).

Workplace friendships include voluntary and informal social relationships in work environments, guided by social norms and socio-emotional goals (Pillemer and Rothbard, 2018). As an important part of professional life, the support offered within the framework of friendships and friendships that employees have established with each other contributes to the development of a sense of belonging in the workplace (Methot *et al.*, 2017). Therefore, co-worker support is the willingness of employees to provide work-related assistance to their colleagues to help them fulfil their service-based tasks (Susskind *et al.*, 2003). Co-workers influence the working environment, and this influence affects employees' attitudes at work. Co-worker support is an important source of employee support in service organisations (Susskind *et al.*, 2003; Kale, 2015). On the other hand, in a qualitative sense, although organisational and managerial support is governed by authority rankings, co-worker support is voluntary (Chiaburu and Harrison, 2008). Researchers typically pay less attention to examining the role of co-worker support than managerial support in work attitudes (Ng and Sorenson, 2008).

2.3 *Career regret*

During career choice, the individual chooses a certain job and lifestyle for himself/herself, tries to prove himself/herself successfully in this way and determines his/her future life in

this way (Çakır, 2004; Sarkaya and Khorshid, 2009). Career choice is an issue that should be emphasised in the lifelong career planning of the individual because if the career choice of the individual is not made in accordance with his/her life preferences, the possible consequences of the lifelong life of the individual will directly affect the life of the individual (Öztemel, 2012). The fact that the feeling of regret that individuals feel due to their career decisions is a strong and negative emotion brings along many negativities related to working life (Le and Ho, 2020). For this reason, the right career choice can prevent or reduce the rate of future regrets regarding career choice in advance. The individual is successful, productive and happy in the profession he/she chooses in line with his/her abilities, interests and wishes; on the other hand, he/she may be unsuccessful, inefficient and unhappy when he/she makes random choices without taking into account his/her characteristics. For this reason, the ideal is to make a career choice in accordance with the individual's interests and abilities (Sarkaya and Khorshid, 2009). Çakır (2004) stated that when it is time to put a career choice into practice, some individuals may be indecisive due to lack of information about their professions, pressure from other respected people and some dysfunctional thoughts, or they may make wrong decisions at the point of career choice in case of lack of information about their demographic characteristics. When the issue is considered from the point of view of physicians, physicians have heavy workloads since they work long hours in general. This may increase the risk of burnout and career choice regret (Miranda-Ackerman *et al.*, 2019). The negative effects of this risk have been revealed in many studies (Zhou *et al.*, 2017; Yue *et al.*, 2011; Wang *et al.*, 2017). Career regret reveals a state of discomfort related to career choice. Studies have shown that career regret has multifaceted effects on the individual's life and these effects include burnout syndrome, decreased job satisfaction and well-being and job separation, which are among the variables that significantly affect the quality of life (Santra and Giri, 2017; Köse, 2019; Doğanülkü and Kirdök, 2021).

3. Hypothesis development

3.1 Vocational outcome expectation–career regret

Social cognitive career theory (SCCT), derived from Bandura's social cognitive theory, is widely used in the career field (Juntunen *et al.*, 2019). In addition to being based on the individual and contextual variables, SCCT argues that the individual and the environment are in constant change. However, the theory is mainly concerned with the roles of three social cognitive mechanisms related to career development. These are self-efficacy beliefs, outcome expectations and personal goals. Self-efficacy beliefs refer to "people's judgements about their ability to organise and execute the actions necessary to achieve specified types of performance" (Lent and Savickas, 1994; Lent *et al.*, 2005). The concept of outcome expectancy is a belief about the consequences of behaviour (Lent *et al.*, 2002). Studies have revealed that career regret is almost common among medical doctors (Zhou *et al.*, 2017; Wang *et al.*, 2017). Zhou *et al.* (2017), in their study on medical doctors working in China, found that 58.1% of the physicians participating in the study evaluated that they regretted being a doctor. Similarly, Yue *et al.* (2011) found that 62% of medical students regretted their choice to study medicine. In the related literature, it has been revealed that experiencing burnout, working overtime and having a higher academic degree are among the important predictors of career regret (Wang *et al.*, 2017; Dyrbye *et al.*, 2020). From this point of view, *H1* was designed as follows to test the effect of physicians' outcome expectations towards their profession on career regret:

- H1*. Physicians' professional outcome expectations positively and significantly affect their career regret.

3.2 Occupational outcome expectation – perceived co-worker support – career regret

Along with self-efficacy beliefs and outcome expectations, SCCT takes into account other aspects of people and their environment that may have an impact on their interests. Each person has certain affordances from the environment that help to shape or direct career development (Vondracek *et al.*, 2014). In SCCT, these contextual affordances are categorised into two general types depending on when they arise in the selection process. The first type includes background influences (e.g., cultural and gender role socialisation, types of career role models available) that help shape self-efficacy, outcome expectations and interests. The second type includes environmental influences that come into play during the active stages of choice making (e.g. emotional or financial support to pursue a particular option). In the relevance model of SCCT the effects of contextual variables on self-efficacy and outcome expectations are taken into account. According to SCCT, career interests are more likely to translate into goals when people encounter strong environmental support for their preferred career paths (Lent *et al.*, 2005). Co-worker support refers to co-workers who help each other in their tasks when necessary by sharing knowledge and expertise and providing encouragement and support (Zhou and George, 2001). In an environment where co-worker support is high, employees can discuss their ideas more openly and honestly and their job satisfaction increases (Fass *et al.*, 2007). Co-worker support can be beneficial for the well-being of employees (Sloan, 2012). While co-worker support can affect a meaningful experience for employees, negative relationships with others can make work life unbearable (Chamberlain and Hodson, 2010). Studies have found that employee support built around friendships between employees leads to an increase in employee well-being (Hsu *et al.*, 2019b; Zhang *et al.*, 2022), as well as organisational benefits such as a more effective corporate functioning (Berman *et al.*, 2002) with positive effects on collaboration, creativity and innovation (Lu *et al.*, 2017). Sierra *et al.* (2019) found that career regret is related to working hours, salary, work-life balance, burnout and career satisfaction in their study in which they compared physicians who experienced career regret and those who did not. It was also concluded that co-worker support is an effective source of support, especially when the subject is emotional, and as a result, it may affect work stress (Albar-Marín and García-Ramírez, 2005). In addition, studies have revealed that friends have the potential to provide more support than family (Montpetit *et al.*, 2017; Powell *et al.*, 2019). From this point of view, H_2 was designed as follows to test the role of perceived co-worker support on the effect of physicians' outcome expectations towards their profession on career regret:

H2. Perceived co-worker support has a moderating role in the effect of physicians' professional outcome expectations on career regret.

4. Methodology

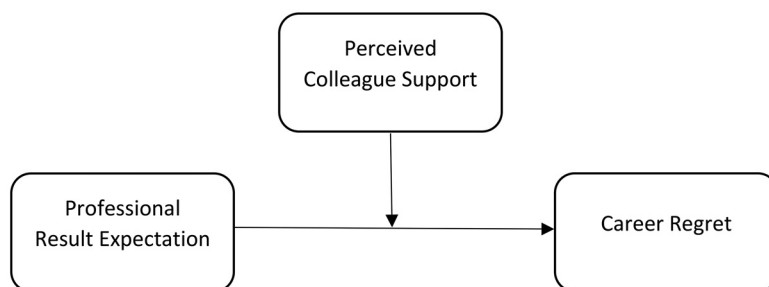
In this section, the aim and importance of the research, research model, population and sample, data collection tools and data analysis are given.

4.1 Research model

The research model regarding the variables of career outcome expectancy, co-worker support and career regrets is shown in Figure 1. Accordingly, career regrets (dependent variable), co-worker support (moderating variable) and career outcome expectancy (independent variable) were structured as the research model.

4.2 Objective and importance of the research

The main purpose of this study is to examine the role of co-worker support and professional outcome expectancy on career regret. The original aspect of this study is that the level of



Source(s): Own Elaboration

Figure 1. Research model

career regret of physicians with low levels of professional outcome expectancy and co-worker support was determined in the light of the findings obtained. In addition, it is not known whether occupational outcome expectancy and co-worker support are simultaneously related to career choice regret. On the other hand, it is inevitable that physicians who experience career regret may decrease their performance or turn to different professions. This situation poses significant risks for the management and organisation of health services in countries with high population density such as Turkey. In this respect, it is of great importance to examine the variables of professional outcome expectancy, co-worker support and career regret and to make recommendations.

4.3 Population and sample

The population of the study is the physicians in Ankara Province. There are 37 hospitals belonging to the Ministry of Health in the province. A total of 5,092 physicians work in these hospitals. According to the findings of Ankara Medical Chamber, the number of private hospitals in Ankara is 27 and the total number of physicians working in the private sector is 1,755 and there are 890 physicians working in private practice. In total, there are 7,737 physicians working in Ankara. The sample size to represent the scope of the research and the population was determined as 384. Questionnaires were sent to 445 physicians in total and 423 of them were returned. Of these, 15 were not included in the study due to sloppy filling and 8 were incomplete. As a result, the hypotheses of the study were tested with 400 of these physicians.

4.4 Research approach and data collection

SPSS 26.0 software was used in the statistical analysis of the data obtained within the scope of the research. AMOS 22.0 package programmes were used to test the structural equation model developed within the scope of the research. Normality tests, difference tests and Pearson correlation analysis were used for the relationship between variables. Pearson correlation analysis was used to investigate the relationships between occupational outcome expectations, career regret and perceived co-worker support. Just before the effect and relationship analyses, detailed information about the scales is presented in this section.

4.4.1 Professional Result Expectation Scale. Professional Result Expectation Scale (McWhirter *et al.*, 2000) was adapted into Turkish by Işık (2010) and used in the validity study. The Cronbach's alpha internal consistency coefficient of the scale consisting of five items and one dimension was found to be 0.87. This value is comparable to the coefficients

ranging between 0.72–0.92 obtained in other studies (Gushue, 2006; McWhirter *et al.*, 2000; Metheny *et al.*, 2008; Reynolds and Constantine, 2007; Wettersten *et al.*, 2005) and shows that the scale is acceptable reliable. In addition, item-total score correlations are in an acceptable range between 0.40–0.70. The reliability of the scale was assessed with the Test Repetition Method, which involves administering the scale to a sample group of seventy-two university students twice with seven weeks between each administration. This method aims to evaluate the consistency of the scores over time, similar to the reliability study conducted for the original form (Işık, 2010). Pearson product-moment correlation coefficient was calculated to assess the reliability of the Turkish version of the MSBI. The value obtained was 0.74 ($p < 0.01$), which is higher than the value found by McWhirter *et al.* (2000), who found a correlation coefficient of 0.59 for an application conducted nine weeks apart. This constitutes an important evidence for the reliability of the Turkish form of this scale. In the analyses conducted to examine the suitability of the vocational outcome expectancy scale data for factor analysis, the KMO Barlett test result for the scale is 0.757. Cronbach's alpha coefficient is calculated as 0.806 within the scope of our study. The Cronbach's alpha value factor loads of the scale consisting of five items and one factor were found to be between 0.727 and 0.839. In the confirmatory factor analysis (CFA) conducted for the expectation of professional results $\chi^2/df = 3,393 < 5$, $0,85 < GFI = 0,860$, $0,90 \leq AGFI = 0,921$, $0,90 \leq CFI = 0,960$, $RMSEA = 0,062 < 0,08$ According to the fit values, the model shows excellent fit to the data. Therefore, the validity of the one-factor structure revealed by the exploratory factor analysis was confirmed by the confirmatory factor analysis.

4.4.2 Career Regret Scale. The "Career Regret Scale" used in the research was developed by Erdurcan and Kırdök (2017). The Cronbach's alpha coefficient for the scale adapted from Kalaycı (2006) was calculated as 0.91 by Erdurcan and Kırdök (2017). According to Kalaycı (2006), Cronbach's alpha values between 0.80 and 1.00 are indicators of high reliability. The factor loadings of the scale consisting of five items and one factor were calculated between 0.50 and 0.93. According to the confirmatory factor analyses, the model was found to have good fit values. In the analyses conducted to examine the suitability of the career regret scale data for factor analysis, the KMO Barlett test result for the scale was 0.805. Cronbach's alpha coefficient is calculated as 0.815 within the scope of our study. The Cronbach's alpha value factor loads of the scale consisting of five items and one factor were found to be between 0.720 and 0.795. In the confirmatory factor analysis (CFA) conducted for the career regret variable $\chi^2/df = 4,128 < 5$, $0,85 < GFI = 0,895$, $0,90 \leq AGFI = 0,987$, $0,90 \leq CFI = 0,968$, $RMSEA = 0,047 < 0,08$ fit values, the model shows excellent fit to the data. Therefore, the validity of the one-factor structure revealed by the exploratory factor analysis was confirmed by the confirmatory factor analysis.

4.4.3 Perceived Co-worker Support Scale. The Perceived Co-worker Support Scale by Giray and Şahin (2012) consists of items derived from various scales that are conceptually related to the concept of perceived co-worker support. The components of the scale are taken from different scales that are not fully related to each other. The questions in the scale developed from different scales were translated into Turkish by Giray and Şahin (2012) and validity and reliability tests were conducted. The Cronbach's alpha internal consistency coefficient of the perceived organisational support scale was found to be 0.94 after removing items 13, 29 and 34 whose factor loadings were below 0.40. The Cronbach's alpha reliability coefficient of the 12-item scale is 0.93. In addition, the internal consistency coefficients of the 11-item manager support scale and the nine-item co-workers scale are 0.94 and 0.90, respectively. In the analyses conducted to examine the suitability of the perceived co-worker support scale data for factor analysis, the KMO Barlett test result for the scale is 0.720. Cronbach's alpha coefficient is calculated as 0.786 within the scope of our study. The Cronbach's alpha value factor loads of the scale consisting of five items and one factor are

between 0.706 and 0.784. In the confirmatory factor analysis (CFA) conducted for perceived work support $\chi^2/df = 3,478 < 5$, $0,85 < GFI = 0,905$, $0,90 \leq AGFI = 0,976$, $0,90 \leq CFI = 0,973$, $RMSEA = 0,057 < 0,08$ According to the fit values, the model shows excellent fit to the data. Therefore, the validity of the one-factor structure revealed by the exploratory factor analysis was confirmed by confirmatory factor analysis.

5. Findings

5.1 Findings related to descriptive statistics

Descriptive statistics of the demographic information of the research participants are given in [Table 1](#). The study included 400 participants. The number of participants aged 24–30 was 111 (27.8%), 31–40 was 171 (42.8%), 41–50 was 83 (20.8%) and 51 and over was 35 (8.8%). The number of male participants was 268 (67.0%) and the number of female participants was 132 (33.0%). Dr Lecturer. Prof., Assoc. or Prof. participants were 254 (63.5%), the number of specialist participants was 111 (27.8%) and the number of practitioner participants was 35 (8.8%). The number of participants who stated that they had a medium income was 123 (30.8%), the number of participants who stated that they had a high income was 166 (41.5%) and the number of participants who stated that they had a very high income was 111 (27.8%). The number of participants who stated that they had no children was 29 (7.3%), the number of participants who stated that they had 1 child was 256 (64.0%) and the number of participants who stated that they had 2 or more children was 115 (28.8%). Descriptive statistics of physicians' professional outcome expectancy, career regret and perceived co-worker support are given in [Table 2](#). According to [Table 2](#), the minimum value of the answers given to the professional outcome expectancy scale is 1 and the maximum value is 5. The mean score of the scale is 3.1260 and the standard deviation is

Table 1. Descriptive statistics

Demographic informations	f	%
<i>Age</i>		
24–30	111	27.8
31–40	171	42.8
41–50	83	20.8
51 and (+)	35	8.8
<i>Gender</i>		
Male	268	67.0
Female	132	33.0
<i>Education level</i>		
Associate Professor or Professor	254	63.5
Expert	111	27.8
Practitioner	35	8.8
<i>Income levels</i>		
Middle (7,500–10,000TL)	123	30.8
High (10,001–15,000TL)	166	41.5
Very high	111	27.8
<i>Number of children</i>		
No	29	7.3
1	256	64.0
2 and 2 (+)	115	28.8

Source(s): Own elaboration

0.86452. Participants' professional outcome expectations are at medium level. The minimum value of the answers given to the career regret scale is 1 and the maximum value is 5. The mean score of the scale is 3.3520 and the standard deviation is 0.86543. Participants' career regret is at a moderate level. The minimum value of the answers given to the perceived co-worker support scale is 1 and the maximum value is 4.89. The mean score of the scale is 3.0492 and the standard deviation is 0.72395. The participants' perceived co-worker support is at a medium level.

5.2 Findings related to correlation

Correlation values of physicians' professional outcome expectancy, career regret and perceived co-worker support variables are given in Table 3. The correlation coefficient is between 0 and 1 and interpreted according to certain ranges. Generally, if the correlation coefficient is between 0 and 0.25, we can talk about a very weak relationship. Correlation coefficients between 0.26–0.49 express a weak relationship. 0.50–0.69 expresses a medium relationship, 0.70–0.89 expresses a high relationship, while values above 0.90 express a high relationship.

As seen in Table 3, there is a positive correlation between occupational outcome expectancy and career regret. Similarly, there is a positive correlation between occupational outcome expectancy and perceived co-worker support. Similarly, there is a positive and moderate correlation between career regret and perceived co-worker support. As can be seen from Table 3, there is a significant relationship between all variables. The fact that these data are significant shows that the prerequisites for the regulatory role effect study have been met. After this stage, regulatory role effect analyses, which is the main purpose of the study, were conducted.

Figure 2 shows the model of examining the moderating role effect of perceived co-worker support variable in the relationship between professional outcome expectancy and career regret. H2 hypothesis is "Perceived co-worker support has a moderating role in the effect of physicians' professional outcome expectancy on career regret". Structural Equation Model

Table 2. Descriptive statistics of physicians' professional outcome expectancy, career regret and perceived colleague support

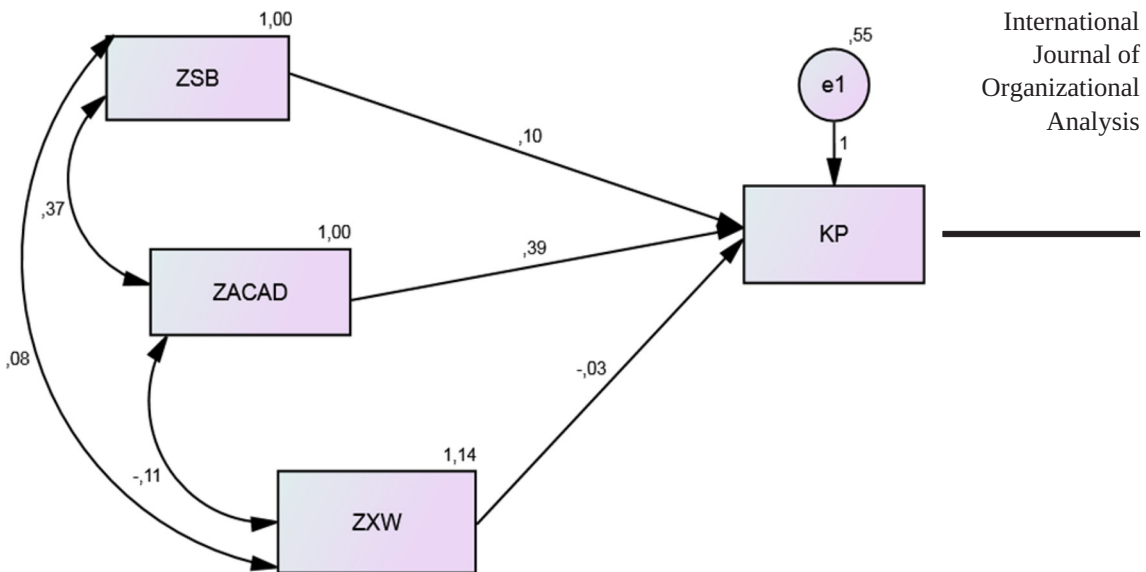
Variables	N	Minimum	Maximum	Mean
Professional result expectation	400	1.00	5.00	3.1260
Career regret	400	1.00	5.00	3.3520
Perceived colleague support	400	1.00	4.89	3.0492

Source(s): Own elaboration

Table 3. Correlation values of physicians' professional outcome expectancy, career regret and perceived colleague support variables

Variables	Professional result expectation	Career regret	Perceived colleague support
Professional result expectation	(0.80)		
Career regret	0.281**	(0.81)	
Perceived colleague support	0.374**	0.502**	(0.78)

Source(s): Own elaboration



Source(s): Own Elaboration

Figure 2. Model examining the regulatory role of perceived colleague support variable in the relationship between occupational outcome expectancy and career regret ($n = 400$)

was used to test the hypothesis. The programmes that can be used for testing the Structural Equation Model are AMOS, Lisrel and SmartPLS. SmartPLS is based on partial least squares, while Lisrel and Amos are based on covariance. SmartPLS can be used if the sample is small, and all of them can be used if the sample is large. SmartPLS can be used to predict results using the model, Lisrel and AMOS can be used to validate a theoretical model with data. If the data are normally distributed, Lisrel and AMOS can be used, if not, SmartPLS can be used (Wong, 2013). AMOS 22.0 programme was used because the sample in our study was large and the variables were normally distributed. The results of the Structural Equation Model obtained from the AMOS programme are shown below.

The model to examine the moderator effect of perceived co-worker support variable on the effect of career regret and occupational outcome expectancy is given in Figure 2. To determine the moderator effect within the scope of the research, a moderator effect analysis was conducted

Table 4. Explanation of the effects of physicians' professional outcome expectancy, career regret and perceived colleague support

Variables	β	P
Career regret ← (ZSB) Professional result expectation	0.098	0.015
Career regret ← (ZACAD) Perceived colleague support	0.394	***
Career regret ← (ZSB)X(ZACAD)=ZXW	-0.029	0.407

Source(s): Own elaboration

in which occupational outcome expectancy was accepted as the independent variable, career regret as the dependent variable and co-worker support as the moderator variable. Prior to this stage, the dependent variable and the independent variable were standardised (z score) and the interaction term was created by multiplying the independent variable occupational outcome expectancy and the moderator variable perceived co-worker support. The results obtained from the analyses conducted in this context are shown in [Table 4](#).

According to [Table 4](#), it is seen that occupational outcome expectancy and perceived co-workers' support have a significant positive effect on career regret. However, the interaction term formed by the product of professional outcome expectancy and perceived co-workers' support variables was found to have no significant effect on career regret. Therefore, based on the results obtained, perceived co-worker support does not have a moderating effect on the effect of professional outcome expectancy on career regret.

5.3 What it contribute?

There is a positive correlation between physicians' professional outcome expectancy and perceived co-worker support. There is a positive and moderate correlation between career regret and perceived co-worker support. As physicians' career regret increases, the support they receive from their co-workers increases. As can be seen, it can be concluded that there is solidarity among physicians. Physicians increase their co-worker support to their physician friends whose career regret increases.

6. Discussion

The career choices and career regrets of doctors who completed medical school and chose the profession of medicine are not only important for their future careers, but also affect the future health systems of the countries in question ([Imran et al., 2018](#)). In addition, understanding the dynamics underlying physicians' career decisions and knowing the psychological elements that will support physicians throughout their career process can play a key role in preventing physicians' career regrets ([Bisi-Onyemaechi et al., 2018](#)).

As a result of the analyses conducted within the scope of the research, it was determined that the professional outcome expectations of the physicians participating in the study were at a moderate level. In other words, their outcome expectations from their profession were not very high. Physicians' career regret was similarly at a moderate level. Physicians who did not have high professional outcome expectations also had a moderate level of career regret. Physicians' perceived co-worker support was also at a moderate level. When viewed holistically, the results obtained were in line with [Tian et al. \(2019\)](#) and [Dyrbye et al. \(2018\)](#), contrary to the results obtained in the studies conducted by, it is shown that physicians do not experience serious career regret because they do not have a very high professional outcome expectation. [Tian et al. \(2019\)](#) found in their research that 46.6% of physicians experienced career choice regret. [Dyrbye et al. \(2018\)](#) determined that career regret is a common situation among physicians in the USA. In addition, it is seen that they do not receive serious support in terms of co-worker support. Lower levels of career regret can be explained by career choice legitimacy, avoidance of regret and satisfactory attitude ([Ephrem and Murimbika, 2023](#)). [Barthauer et al. \(2019\)](#) emphasised the importance of organisational support in preventing career regret and sustaining the career with career satisfaction. In this context, it is possible to state that increasing the social relationships that physicians will establish with each other within the scope of organisational support will support them in providing friendship support to each other.

Cultural and social values affect physicians' future career paths through their professional interactions ([Bittaye et al., 2012](#)). In this regard, it is of great importance to follow

organisational strategies that aim to support physicians' ongoing professional development. Based on this, it is possible to say that physicians' professional outcome expectations should be increased to increase their peer support. Physicians with low professional outcome expectations are not expected to show peer support. It is understood from the results obtained in the analyses that the variable of perceived co-worker support does not have a moderating role in the relationship between physicians' professional outcome expectations and career regret.

7. Conclusions

In this study, the regulatory role of colleague support in the effect of physicians' professional outcome expectancy on career regret is examined. According to the results of the analyses, there is a positive correlation between physicians' professional outcome expectancy and career regret. In other words, as the professional outcome expectancy of physicians increases, career regret increases. Similarly, there is a positive correlation between physicians' professional outcome expectancy and perceived colleague support. Therefore, as physicians' professional outcome expectancy increases, perceived colleague support increases. There is a positive correlation between career regret and perceived colleague support. In addition, the results show that the career regret, perceived colleague support and professional outcome expectations of the physicians participating in the study are not very high and are at a moderate level.

7.1 Theoretical implications

This article contributes to social cognitive career theory and self-efficacy theories from the perspective of medical doctors. The concept of expectation emphasised in both theories reveals academic and practical implications on co-worker support and career regret for careers, which constitute a significant part of individuals' lives. Although the research variables have been examined individually or in pairs in the relevant literature, no significant theoretical contribution has been made to understand the relationship between co-worker support and career regret of doctors, since no study has been conducted on medical doctors to date.

7.2 Practical implications

The feeling of regret that individuals feel about their career decisions brings with it many negativities related to work life (Le and Ho, 2020). On the other hand, workplace friendships are considered as voluntary relationships in work environments, guided by social norms and socio-emotional goals. (Pillemer and Rothbard, 2018) . In addition, the friendships and mutual support that employees establish with each other contribute to the development of a sense of belonging in the workplace (Methot *et al.*, 2017). Therefore, professional outcome expectations have a multifaceted effect on individuals' lives. The positive relationship between professional outcome expectations and life satisfaction directly affects the individual's quality of life (Uçak and Yıldırım, 2023). In this context, professional chambers or professional associations can support the development of work friendship and solidarity through regulatory social activities and programs for medical doctors. Participation in these activities serves to create professional support networks and develop support mechanisms.

7.3 Limitations and future research

The most important limitation of this study is that it was conducted only on physicians serving in the medical field. Therefore, it can be claimed that a specific sample consisting of physicians is a limitation of this study. However, it is recommended that future studies be conducted to answer the question of whether the findings can be generalised by comparing

them specifically to other samples, namely those working in other sectors. However, it is recommended that in-depth or longitudinal studies be conducted using qualitative methods that include not only physicians but also managers working in the health sector.

References

- Albar-Marin, M.J. and Garcia-Ramirez, M. (2005), "Social support and emotional exhaustion among hospital nursing staff", *The European Journal of Psychiatry*, Vol. 19 No. 2, pp. 96-106.
- Bachmann, R., Bechara, P. and Vonnahme, C. (2020), "Occupational mobility in Europe: extent, determinants and consequences", *De Economist*, Vol. 168 No. 1, pp. 79-108, doi: [10.1007/s10645-019-09355-9](https://doi.org/10.1007/s10645-019-09355-9).
- Bandura, A. (1997), *Self-Efficacy: The Exercise of Control*, W.H. Freeman, New York, NY, NY.
- Barthauer, L., Kaucher, P., Spurk, D. and Kauffeld, A. (2019), "Burnout and career (Un) sustainability: looking into the blackbox of burnout triggered career turnover intentions", *Journal of Vocational Behavior*, Vol. 117, p. 103334, doi: [10.1016/j.jvb.2019.103334](https://doi.org/10.1016/j.jvb.2019.103334).
- Beehr, T.A., Jex, M., Stacy, B.A. and Murray, M.A. (2000), "Work stressors and coworker support As predictors of individual strain and job performance", *Journal of Organizational Behavior*, Vol. 21 No. 4, pp. 391-405, doi: [10.1002/\(SICI\)1099-1379\(200006\)21:4<391::AID-JOB15>3.0.CO;2-9](https://doi.org/10.1002/(SICI)1099-1379(200006)21:4<391::AID-JOB15>3.0.CO;2-9).
- Berman, E.M., West, J.P. and Richter, M.N. Jr., (2002), "Workplace relations: friendship patterns and consequences (according to managers)", *Public Administration Review*, Vol. 62 No. 2, pp. 217-230.
- Betz, N.E. and Vuyten, K.K. (1997), "Efficacy and outcome expectations influence career exploration and decidedness", *The Career Development Quarterly*, Vol. 46 No. 2, pp. 179-189, doi: [10.1002/j.2161-0045.1997.tb01004.x](https://doi.org/10.1002/j.2161-0045.1997.tb01004.x).
- Bisi-Onyemaechi, A., Okwesili, I., Odetunde, O.C., Onyemaechi, N., Okwara, B. and Omoke, N. (2018), "Specialty choices: patterns and determinants among medical undergraduates in Enugu southeast Nigeria", *Nigerian Journal of Clinical Practice*, Vol. 20 No. 11, p. 1474, doi: [10.4103/njcp.njcp_382_16](https://doi.org/10.4103/njcp.njcp_382_16).
- Bittaye, M., Odukogbe, A.T.A., Nyan, O., Jallow, B. and Omigbodun, A.O. (2012), "Medical students' choices of specialty in the Gambia: the need for career counseling", *BMC Medical Education*, Vol. 12 No. 1, p. 72, doi: [10.1186/1472-6920-12-72](https://doi.org/10.1186/1472-6920-12-72).
- Brehaut, J.C., O'Connor, A.M., Wood, T.J., Hack, T.F., Siminoff, L., Gordon, E. and Feldman-Stewart, D. (2003), "Validation of a decision regret scale", *Medical Decision Making*, Vol. 23 No. 4, pp. 281-292, doi: [10.1177/0272989X032560](https://doi.org/10.1177/0272989X032560).
- Budjanovcanin, A., Rodrigues, R. and Guest, D. (2019), "A career with a heart: exploring occupational regret", *Journal of Managerial Psychology*, Vol. 34 No. 3, pp. 156-169, doi: [10.1108/JMP-02-2018-0105](https://doi.org/10.1108/JMP-02-2018-0105).
- Budjanovcanin, A. and Woodrow, C. (2022), "Regretting your occupation constructively: A qualitative study of career choice and occupational regret", *Journal of Vocational Behavior*, Vol. 136, p. 103743, doi: [10.1016/j.jvb.2022.103743](https://doi.org/10.1016/j.jvb.2022.103743).
- Çakır, M.A. (2004), "Development of vocational decision inventory", *Ankara University Journal of Faculty of Educational Sciences*, Vol. 37 No. 2, pp. 1-14.
- Chamberlain, L.J. and Hodson, R. (2010), "Toxic work environments: what helps and what hurts", *Sociological Perspectives*, Vol. 53 No. 4, pp. 455-478, doi: [10.1525/sop.2010.53.4.455](https://doi.org/10.1525/sop.2010.53.4.455).
- Chang, H.Y., Friesner, D., Chu, T.L., Huang, T.L., Liao, Y.N. and Teng, C.I. (2018), "The impact of burnout on self- efficacy, outcome expectations, career interest and nurse turnover", *Journal of Advanced Nursing*, Vol. 74 No. 11, pp. 2555-2565, doi: [10.1111/jan.13776](https://doi.org/10.1111/jan.13776).

-
- Chiaburu, D.S. and Harrison, D.A. (2008), "Do peers make the place? Conceptual synthesis and Meta-Analysis of coworker effects on perceptions, attitudes, OCBs, and performance", *Journal of Applied Psychology*, Vol. 93 No. 5, p. 1082.
- Craig, L. and Kuykendall, L. (2019), "Examining the role of friendship for employee well-being", *Journal of Vocational Behavior*, Vol. 115, p. 103313, doi: [10.1016/j.jvb.2019.06.001](https://doi.org/10.1016/j.jvb.2019.06.001).
- De Clercq, D., Haq, I.U. and Azeem, M.U. (2020), "The relationship between workplace incivility and depersonalization towards co-workers: roles of job-related anxiety, gender, and education", *Journal of Management and Organization*, Vol. 26 No. 2, pp. 219-240.
- Doğanülkü, H.A. and Kırdök, O. (2021), "The moderating role of career decision regret in the effect of career adaptability on burnout", *International Journal of Progressive Education*, Vol. 17 No. 2, pp. 319-330, doi: [10.29329/ijpe.2020.332.20](https://doi.org/10.29329/ijpe.2020.332.20).
- Dong, B., Zheng, B. and Wang, Z. (2020), "Career adaptability and turnover intention: a dual-mediation model", *The Career Development Quarterly*, Vol. 68 No. 2, pp. 145-157, doi: [10.1002/cdq.12219](https://doi.org/10.1002/cdq.12219).
- Durmuş, A.F., Otlu, F. and Ozkan, O. (2019), "Social cognitive career theory and students' goal of being a certified public accountant: İnönü university application", *Gaziantep University Journal of Social Sciences*, Vol. 18 No. 4, pp. 1381-1398, doi: [10.21547/jss.464775](https://doi.org/10.21547/jss.464775).
- Dyrbye, L.N., Burke, S.E., Hardeman, R.R., Herrin, J., Wittlin, N.M., Yeazel, M. and Van Ryn, M. (2018), "Association of clinical specialty with symptoms of burnout and career choice regret among US resident physicians", *JAMA*, Vol. 320 No. 11, pp. 1114-1130, doi: [10.1001/jama.2018.12615](https://doi.org/10.1001/jama.2018.12615).
- Dyrbye, L., West, C., Johnson, P., Cipriano, P., Peterson, C., Beatty, D. and Shanafelt, T. (2020), "An investigation of career choice regret among American nurses", *AJN The American Journal of Nursing*, Vol. 120 No. 4, pp. 24-33, doi: [10.1097/01.NAJ.0000660020.17156.ae](https://doi.org/10.1097/01.NAJ.0000660020.17156.ae).
- Ephrem, A.N. and Murimbika, M. (2023), "I wish I had a paid job or a business: a moderated effect of entrepreneurial potential on career choice regret", *Career Development International*, Vol. 28 No. 5, pp. 518-535, doi: [10.1108/CDI-09-2022-0249](https://doi.org/10.1108/CDI-09-2022-0249).
- Erdurcan, S. and Kırdök, O. (2017), "Professional decision regret scale: adaptation, validity and reliability study", *Mersin University Journal of the Faculty of Education*, Vol. 13 No. 3, pp. 1140-1150, doi: [10.17860/mersinefd.330880](https://doi.org/10.17860/mersinefd.330880).
- Fass, R.D., Bishop, J.W. and Glissmeyer, M. (2007), "Perceived co-worker support and task interdependence in law enforcement", available at: www.swdsi.org/swdsi07/2007_proceedings/papers/535.pdf
- Fouad, N.A. and Guillen, A. (2006), "Outcome expectations: Looking to the past and potential future", *Journal of Career Assessment*, Vol. 14 No. 1, pp. 130-142, doi: [10.1177/106907270528137](https://doi.org/10.1177/106907270528137).
- Gerrig, R.J., Philip, G. and Zimbardo, G. (2016), "Psychologie", *PS Psychologie*, Pearson Higher Education, München.
- Gillen, M., Baltz, D., Gassel, M., Kirsch, L. and Vaccaro, D. (2002), "Perceived safety climate, job demands, and co-worker support among union and nonunion injured construction workers", *Journal Safety Resistant*, Vol. 33 No. 1, pp. 33-51, doi: [10.1016/S0022-4375\(02\)00002-6](https://doi.org/10.1016/S0022-4375(02)00002-6).
- Giray, M.D. and Şahin, D.N. (2012), "Perceived organisational, manager and co-worker support scales: validity and reliability study", *Turkish Psychological Writings*, Vol. 15 No. 30, pp. 1-9.
- Guo, M., Liu, S., Chu, F., Ye, L. and Zhang, Q. (2019), "Supervisory and coworker support for safety: buffers between job insecurity and safety performance of high-speed railway drivers in China", *Safety Science*, Vol. 117, pp. 290-298, doi: [10.1016/j.ssci.2019.04.017](https://doi.org/10.1016/j.ssci.2019.04.017).
- Gürpınar, A.C., Emül, B. and Siyez, D. (2021), "Career competence expectancy and professional outcome expectancy in prospective teachers: the mediating role of career stress", *IBAD Journal of Social Sciences*, Vol. 10, pp. 220-237.
- Gushue, G.V. (2006), "The relationship of ethnic identity, career decision-making self-efficacy and outcome expectations among Latino/a high school students", *Journal of Vocational Behavior*, Vol. 68 No. 1, pp. 85-95, doi: [10.1016/j.jvb.2005.03.002](https://doi.org/10.1016/j.jvb.2005.03.002).

- Hodson, R. (1997), "Group relations at work", *Work and Occupations*, Vol. 24 No. 4, pp. 426-452, doi: [10.1177/0730888497024004003](https://doi.org/10.1177/0730888497024004003).
- Hsu, F.S., Liu, Y.A. and Tsaur, S.H. (2019b), "The impact of workplace bullying on hotel employees' well-being: do organizational justice and friendship matter?", *International Journal of Contemporary Hospitality Management*, Vol. 31 No. 4, pp. 1702-1719, doi: [10.1108/IJCHM-04-2018-0330](https://doi.org/10.1108/IJCHM-04-2018-0330).
- Hsu, D.K., Shinnar, R.S. and Anderson, S.E. (2019a), "I wish I had a regular job: an exploratory study of entrepreneurial regret", *Journal of Business Research*, Vol. 96, pp. 217-227, doi: [10.1016/j.jbusres.2018.11.006](https://doi.org/10.1016/j.jbusres.2018.11.006).
- Imran, S., Kholā, N., Nadia, K., Riasat Al, N., Kausar Aftab, K. and Farhan Muhammad, Q. (2018), "Reasons for choosing specialty after graduation among students of a private medical college in Pakistan", *Pakistan Journal of Public Health*, Vol. 7 No. 2, pp. 90-94, available at: www.pjph.org/index.php/pjph/article/view/41/30
- Işık, E. (2010), "The effect of a group intervention based on social cognitive career theory on university students' career decision competence and vocational outcome expectancy levels", Unpublished Doctoral Dissertation, Adana: Çukurova University.
- Juntunen, C.L., Motl, T.C. and Rozzi, M. (2019), "Major career theories: International and developmental perspectives", *International Handbook Of Career Guidance*, Springer, Cham, pp. 45-72.
- Kalaycı, Ş. (2006), "Factor analysis", in Kalaycı, Ş. (Ed.), *SPSS Applied Multivariate Statistical Techniques*, Asil Publication Distribution, Ankara.
- Kale, E. (2015), "The effects of leader support and co-worker support on job performance: the mediating role of job satisfaction and life satisfaction", *International Journal of Economic and Administrative Studies*, Vol. 7 No. 14, pp. 103-120.
- Kaul, M. and Lakey, B. (2003), "Where is the support in perceived support? The role of generic relationship satisfaction and enacted support in perceived support's relation to low distress", *Journal of Social and Clinical Psychology*, Vol. 22 No. 1, pp. 59-78, doi: [10.1521/jscp.22.1.59.22761](https://doi.org/10.1521/jscp.22.1.59.22761).
- Köse, A. (2019), "Career decision regret as a predictor: do teachers and administrators regret due to their career choice?", *World Journal of Education*, Vol. 9 No. 1, pp. 38-55, doi: [10.5430/wje.v9n1p38](https://doi.org/10.5430/wje.v9n1p38).
- Kuykendall, L., Tay, L. and Ng, V. (2015), "Leisure engagement and subjective well-being: a meta-analysis", *Psychological Bulletin*, Vol. 141 No. 2, pp. 364-403, doi: [10.1037/a0038508](https://doi.org/10.1037/a0038508).
- Le, A.N.H. and Ho, H.X. (2020), "The behavioral consequences of regret, anger, and frustration in service settings", *Journal of Global Marketing*, Vol. 33 No. 2, pp. 84-102, doi: [10.1080/08911762.2019.1628330](https://doi.org/10.1080/08911762.2019.1628330).
- Lent, R.W. and Savickas, M.L. (1994), "Postscript: is convergence a viable agenda for career psychology?", in Brooks, L., Savickas, M.L.W.R. (Ed.). *Convergence in Career Development Theories: Implications for Science and Practice*, Wiley, London, pp. 259-271.
- Lent, R.W., Brown, S.D., Sheu, H.-B., Schmidt, J., Brenner, B.R., Gloster, C.S., Wilkins, G., Schmidt, L.C., Lyons, H. and Treistman, D. (2005), "Social cognitive predictors of academic interests and goals in engineering: utility for women and students at historically black universities", *Journal of Counseling Psychology*, Vol. 52 No. 1, pp. 84-92.
- Lent, R.W., Steven, D.B., Talleyrand, R., McPartland, E.B., Davis, T., Chopra, S.B., Alexander, M.B., Suthakaran, V. and Chai, C.M. (2002), "Career choice barriers, supports, and coping strategies: college students' experiences", *Journal of Vocational Behavior*, Vol. 60 No. 1, pp. 61-72, doi: [10.1006/jvbe.2001.1814](https://doi.org/10.1006/jvbe.2001.1814).
- Lent, R.W., Ireland, G.W., Penn, L.T., Morris, T.R. and Sappington, R. (2017), "Sources of self-efficacy and outcome expectations for career exploration and decision-making: a test of the social cognitive model of career self-management", *Journal of Vocational Behavior*, Vol. 99, pp. 107-117, doi: [10.1016/j.jvb.2017.01.002](https://doi.org/10.1016/j.jvb.2017.01.002).

-
- López, A., Neves, P. and Cunha, M. (2019), "A high-growth firm contingency test of the formalization-performance relationship", *Journal of Small Business Management*, Vol. 57 No. sup2, pp. 374-396, doi: [10.1111/jsbm.12480](https://doi.org/10.1111/jsbm.12480).
- Lu, J.G., Hafenbrack, A.C., Eastwick, P.W., Wang, D.J., Maddux, W.W. and Galinsky, A.D. (2017), "Going out' of the box: close intercultural friendships and romantic relationships spark creativity, workplace innovation, and entrepreneurship", *Journal of Applied Psychology*, Vol. 102 No. 7, p. 1091, doi: [10.1037/apl0000212](https://doi.org/10.1037/apl0000212).
- McWhirter, E.H., Crothers, M. and Rasheed, S. (2000), "The effects of high school career education on social-cognitive variables", *Journal of Counseling Psychology*, Vol. 47 No. 3, pp. 330-341.
- Ma, P.W.W. and Shea, M. (2021), "First-generation college students' perceived barriers and career outcome expectations: exploring contextual and cognitive factors", *Journal of Career Development*, Vol. 48 No. 2, pp. 91-104, doi: [10.1177/0894845319827650](https://doi.org/10.1177/0894845319827650).
- Metheny, J., McWhirter, E.H. and O'Neil, M.E. (2008), "Measuring perceived teacher support and its influence on adolescent career development", *Journal of Career Assessment*, Vol. 16 No. 2, pp. 218-237, doi: [10.1177/1069072707313198](https://doi.org/10.1177/1069072707313198).
- Method, J.R., Melwani, S. and Rothman, N.B. (2017), "The space between us: a social-functional emotions view of ambivalent and indifferent workplace relationships", *Journal of Management*, Vol. 43 No. 6, pp. 1789-1819, doi: [10.1177/0149206316685853](https://doi.org/10.1177/0149206316685853).
- Miranda-Ackerman, R.C., Barbosa-Camacho, F.J., Sander-Möller, M.J., BuenrostroJiménez, A.D., Mares-País, R., Cortes-Flores, A.O., et al. (2019), "Burnout syndrome prevalence during internship in public and private hospitals: a survey study in Mexico", *Medical Education Online*, Vol. 24 No. 1, p. 1593785, doi: [10.1080/10872981.2019.1593785](https://doi.org/10.1080/10872981.2019.1593785).
- Montpetit, M.A., Nelson, N.A. and Tiberio, S.S. (2017), "Daily interactions and affect in older adulthood: Family, friends, and perceived support", *Journal of Happiness Studies*, Vol. 18 No. 2, pp. 373-388, doi: [10.1007/s10902-016-9730-4](https://doi.org/10.1007/s10902-016-9730-4).
- Nabizadeh, S., Hajian, S., Sheikhan, Z. and Rafei, F. (2019), "Prediction of academic achievement based on learning strategies and outcome expectations among medical students", *BMC Medical Education*, Vol. 19 No. 1, pp. 1-11, doi: [10.1186/s12909-019-1527-9](https://doi.org/10.1186/s12909-019-1527-9).
- Ng, T.W.H. and Sorenson, K.L. (2008), "Toward a further understanding of the relationships between perceptions of support and work attitudes", *Group and Organization Management*, Vol. 33 No. 3, pp. 243-268, doi: [10.1177/1059601107313307](https://doi.org/10.1177/1059601107313307).
- Odacı, G. and Yıldız, S. (2023), "Examining the relationship between female students' career expectations and attitudes towards the culinary profession: a study on gastronomy and culinary arts students", *Tourism and Recreation*, Vol. 5 No. 2, pp. 186-193, doi: [10.53601/tourismandrecreation.1388152](https://doi.org/10.53601/tourismandrecreation.1388152).
- Öztemel, K. (2012), "The relationship between career indecision and vocational decision making Self-Efficacy and locus of control", *GEFAD*, Vol. 32 No. 2, pp. 459-477.
- Park, J.H., Newman, A., Zhang, L., Wu, C. and Hooke, A. (2016), "Mentoring functions and turnover intention: the mediating role of perceived organizational support", *The International Journal of Human Resource Management*, Vol. 27 No. 11, pp. 1173-1191, doi: [10.1080/09585192.2015.1062038](https://doi.org/10.1080/09585192.2015.1062038).
- Pillemer, J. and Rothbard, N.P. (2018), "Friends without benefits: understanding the dark sides of workplace friendship", *Academy of Management Review*, Vol. 43 No. 4, pp. 635-660, doi: [10.5465/amr.2016.0309](https://doi.org/10.5465/amr.2016.0309).
- Powell, G.N., Greenhaus, J.H., Allen, T.D. and Johnson, R.E. (2019), "Introduction to special topic forum: Advancing and expanding work-life theory from multiple perspectives", *Academy of Management Review*, Vol. 44 No. 1, pp. 54-71, doi: [10.5465/amr.2018.0310](https://doi.org/10.5465/amr.2018.0310).
- Reynolds, A.L. and Constantine, M.G. (2007), "Cultural adjustment difficulties and career development of international college students", *Journal of Career Assessment*, Vol. 15 No. 3, pp. 338-350, doi: [10.1177/1069072707301218](https://doi.org/10.1177/1069072707301218).

- Rogers, M.E., Creed, P.A. and Ve Ve Glendon, A.I. (2008), "The role of personality in adolescent career planning and exploration: a social cognitive perspective", *Journal of Vocational Behavior*, Vol. 73 No. 1, pp. 132-142, doi: [10.1016/j.jvb.2008.02.002](https://doi.org/10.1016/j.jvb.2008.02.002).
- Santra, S. and Giri, V.N. (2017), "Impact of career regret on career outcomes of information technology (IT) professionals in India", *American Society of Business and Behavioral Sciences Proceedings*, Vol. 24 No. 1, pp. 481-497.
- Santröck, J.W. (2018), *Educational Psychology*, 6th ed., McGraw-Hill, New York, NY.
- Sarıkaya, T. and Khorshid, L. (2009), "Investigation of the factors affecting the occupational choice of university students: vocational choice of university students", *Turkish Journal of Educational Sciences*, Vol. 7 No. 2, pp. 393-423.
- Seçer, B. and Çınar, E. (2011), "Individualism and new career orientations", *Journal of Management and Economics*, Vol. 18 No. 2, pp. 49-62.
- Sierra, T., Rodriguez, M.D. and Forbes, J. (2019), *Career Regret: An Analysis of Physician Assistants*, MedEdPublish, Vol. 8.
- Sloan, M.M. (2012), "Unfair treatment in the workplace and worker well-being: the role of coworker support in a service work environment", *Work and Occupations*, Vol. 39 No. 1, pp. 3-34, doi: [10.1177/0730888411406555](https://doi.org/10.1177/0730888411406555).
- Susskind, A.M., Kacmar, K.M. and Borchgrevink, C.P. (2003), "Customer service providers' attitudes relating to customer service and customer satisfaction in the Customer-Server exchange (CSX)", *Journal of Applied Psychology*, Vol. 88 No. 1, pp. 179-187.
- Tian, L., Pu, J., Liu, Y., Zhong, X., Gui, S., Song, X., Xu, S., et al. (2019), "Relationship between burnout and career choice regret among Chinese neurology postgraduates", *BMC Medical Education*, Vol. 19 No. 1, pp. 1-10, doi: [10.1186/s12909-019-1601-3](https://doi.org/10.1186/s12909-019-1601-3).
- Ulaş, Ö. and Özdemir, S. (2018), "Predictors of perceived career barriers in senior university students", *Hacettepe University Journal of Faculty of Education*, Vol. 33 No. 3, pp. 672-688.
- Verbruggen, M. and De Vos, A. (2020), "When people don't realize their career desires: toward a theory of career inaction", *Academy of Management Review*, Vol. 45 No. 2, pp. 376-394, doi: [10.5465/amr.2017.0196](https://doi.org/10.5465/amr.2017.0196).
- Vondracek, F., Ford, D. and Porfeli, E. (2014), *A Living Systems Theory of Vocational Behavior and Development*, Sense Publishers.
- Wang, M.C., Harrison, R., Macintyre, R., Travaglia, J. and Balasooriya, C. (2017), "Burnout in medical students: a systematic review of experiences in Chinese medical schools", *BMC Medical Education*, Vol. 17 No. 1, pp. 1-11, doi: [10.1186/s12909-017-1064-3](https://doi.org/10.1186/s12909-017-1064-3).
- Wettersten, K.B., Guilmino, A., Herrick, C.G., Hunter, P.J., Kim, G.Y., Jagow, D. and Ve McCormick, J. (2005), "Predicting educational and vocational attitudes among rural high school students", *Journal of Counseling Psychology*, Vol. 52 No. 4, pp. 658-663.
- Wong, L.H. (2013), "Analysis of students' after-school mobile-assisted artifact creation processes in a seamless language learning environment", *Educational Technology and Society*, Vol. 16 No. 2, pp. 198-211.
- Yang, W., Hao, Q. and Song, H. (2020), "Linking supervisor support to innovation implementation behavior via commitment: the moderating role of coworker support", *Journal of Managerial Psychology*, Vol. 35 No. 3, pp. 129-141, doi: [10.1108/JMP-04-2018-0171](https://doi.org/10.1108/JMP-04-2018-0171).
- Yue, Z.H., Sun, L.Z., Liu, M.N., Yu, M.X. and Jiang, X.Y. (2011), "Investigation and thinking about career satisfaction of medical students", *Chin J Modern Drug Application*, Vol. 5 No. 14, pp. 132-134.
- Zhang, Y., Sun, J.M., Shaffer, M.A. and Lin, C.H. (2022), "High commitment work systems and employee well-being: the roles of workplace friendship and task interdependence", *Human Resource Management*, Vol. 61 No. 4, pp. 399-421, doi: [10.1002/hrm.22093](https://doi.org/10.1002/hrm.22093).

Zhou, J. and George, J.M. (2001), "When job dissatisfaction leads to creativity: encouraging the expression of voice", *Academy of Management Journal*, Vol. 44 No. 4, pp. 682-696, doi: [10.5465/3069410](https://doi.org/10.5465/3069410).

Zhou, X.Y., Pu, J.C., Zhong, X.N., Zhu, D., Yin, D.H., Yang, L.N., et al (2017), "Burnout, psychological morbidity, job stress, and job satisfaction in Chinese neurologists", *Neurology*, Vol. 88 No. 18, pp. 1727-1735, doi: [10.1212/WNL.0000000000003883](https://doi.org/10.1212/WNL.0000000000003883).

Further reading

Al-Fouzan, R., Al-Ajlan, S., Marwan, Y. and Al-Saleh, M. (2012), "Factors affecting future specialty choice among medical students In Kuwait", *Medical Education Online*, Vol. 17 No. 1, p. 19587, doi: [10.3402/meo.v17i0.19587](https://doi.org/10.3402/meo.v17i0.19587).

Bandura, A. (1986), "Fearful expectations and avoidant actions as co-effects of perceived self-inefficacy", *American Psychologist*, Vol. 41 No. 12, pp. 1389-1391, doi: [10.1037/0003-066X.41.12.1389](https://doi.org/10.1037/0003-066X.41.12.1389).

Cobb, S. (1976), "Social support as a moderator of life stress", *Psychosomatic Medicine*, Vol. 38 No. 5, pp. 300-314.

Constantine, M.G., Wallace, B.C. and Ve Kindaichi, M.M. (2005), "Examining contextual factors in the career decision status of African American adolescents", *Journal of Career Assessment*, Vol. 13 No. 3, pp. 307-319, doi: [10.1177/1069072705274960](https://doi.org/10.1177/1069072705274960).

Eisenberger, R., Huntington, R., Hutchison, R. and Sowa, D. (1986), "Perceived organizational support", *Journal of Applied Psychology*, Vol. 71 No. 3, pp. 550-507.

Gürbüz, S. (2019), *Mediator, Moderator and Situational Effect Analyses in Social Sciences*, Seçkin Academic and Professional Publications.

Hackett, G. and Betz, N.E. (1981), "A self-efficacy approach to the career development of women", *Journal of Vocational Behavior*, Vol. 18 No. 3, pp. 330-339, doi: [10.1016/0001-8791\(81\)90019-1](https://doi.org/10.1016/0001-8791(81)90019-1).

Hayes, A.F. (2018), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*, 2nd ed., The Guilford Press, London.

Karasek, R.A., Triantis, K.P. and Chaudhry, S.S. (1982), "Coworker and supervisor support as moderators of associations between task characteristics and mental strain", *Journal of Organizational Behavior*, Vol. 3 No. 2, pp. 181-200, available at: www.jstor.org/stable/3000084

Kawamoto, R., Ninomiya, D., Kasai, Y., Kusunoki, T., Ohtsuka, N., Kumagi, T. and Abe, M. (2016), "Gender difference in preference of specialty as a career choice among Japanese medical students", *BMC Medical Education*, Vol. 16 No. 1, pp. 1-8, doi: [10.1186/s12909-016-0811-1](https://doi.org/10.1186/s12909-016-0811-1).

Ladd, D. and Henry, R. (2000), "Helping coworkers and helping the organization: the role of support perceptions, exchange ideology, and conscientiousness", *Journal of Applied Social Psychology*, Vol. 30 No. 10, pp. 2028-2049, doi: [10.1111/j.1559-1816.2000.tb02422.x](https://doi.org/10.1111/j.1559-1816.2000.tb02422.x).

Langford, C.P.H., Bowsler, J., Maloney, J.P. and Lillis, P.P. (1997), "Social support: a conceptual analysis", *Journal of Advanced Nursing*, Vol. 25 No. 1, pp. 95-100, doi: [10.1046/j.1365-2648.1997.1997025095.x](https://doi.org/10.1046/j.1365-2648.1997.1997025095.x).

Lent, R.W. and Brown, S.D. (1996), "Social cognitive approach to career development: an overview", *The Career Development Quarterly*, Vol. 44 No. 4, pp. 310-321, doi: [10.1002/j.2161-0045.1996.tb00448.x](https://doi.org/10.1002/j.2161-0045.1996.tb00448.x).

Lent, R.W., Brown, S.D., Schmidt, J., Brenner, B., Lyons, H. and Treistman, D. (2003), "Relation of contextual supports and barriers to choice behavior in engineering majors: Test of alternative social cognitive models", *Journal of Counseling Psychology*, Vol. 50 No. 4, pp. 458-465, doi: [10.1037/0022-0167.50.4.458](https://doi.org/10.1037/0022-0167.50.4.458).

Morra, D.J., Regehr, G. and Ginsburg, S. (2009), "Medical students, money, and career selection: Students' perception of financial factors and remuneration in family medicine", *Family Medicine*, Vol. 41 No. 2, pp. 105-110.

-
- Preacher, K.J., Rucker, D.D. and Hayes, A.F. (2007), "Addressing moderated mediation hypotheses: Theory, methods, and prescriptions", *Multivariate Behavioral Research*, Vol. 42 No. 1, pp. 185-227, doi: [10.1080/00273170701341316](https://doi.org/10.1080/00273170701341316).
- Richards, K.A.R., Hemphill, M.A. and Templin, T.J. (2018), "Personal and contextual factors related to teachers' experience with stress and burnout", *Teachers and Teaching*, Vol. 24 No. 7, pp. 768-787, doi: [10.1080/13540602.2018.1476337](https://doi.org/10.1080/13540602.2018.1476337).
- Tang, M., Fouad, N.A. and Ve Smith, P.L. (1999), "Asian Americans career choices: a path model to examine factors influencing their career choices", *Journal of Vocational Behavior*, Vol. 54 No. 1, pp. 142-157, doi: [10.1006/jvbe.1998.1651](https://doi.org/10.1006/jvbe.1998.1651).
- Thoits, P.A. (1982), "Conceptual, methodological, and theoretical problems in studying social support as a buffer against life stress", *Journal of Health and Social Behavior*, Vol. 23 No. 2, pp. 145-159, doi: [10.2307/2136511](https://doi.org/10.2307/2136511).
- Tolentino, L.R., Garcia, P.R.J.M., Restubog, L.D., Bordia, P. and Tang, R.L. (2013), "Validation of the career adapt-abilities scale and an examination of a model of career adaptation in the Philippine context", *Journal of Vocational Behavior*, Vol. 83 No. 3, pp. 410-418, doi: [10.1016/j.jvb.2013.06.013](https://doi.org/10.1016/j.jvb.2013.06.013).
- Weiss, K.I. (2000), "The social cognitive model of career choice: a cross cultural analysis", Unpublished doctoral dissertation, State University of New York, Buffalo.
- Zeelenberg, M., van Dijk, W.W., Van der Pligt, J., Manstead, A.S., Van Empelen, P. and Reinderman, D. (1998), "Emotional reactions to the outcomes of decisions: the role of counterfactual thought in the experience of regret and disappointment", *Organizational Behavior And Human Decision Processes*, Vol. 75 No. 2, pp. 117-141, doi: [10.1006/obhd.1998.2784](https://doi.org/10.1006/obhd.1998.2784).

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