

# Examining the Mediating Role of Entrepreneurial Intention in the Relationship Between General Self-Efficacy and Career Stress Among Pharmacy Students

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*Examining the Mediating Role of Entrepreneurial Intention in the Relationship Between General Self-Efficacy and Career Stress Among Pharmacy Students*

*Eczacılık Öğrencilerinde Genel Öz Yeterlilik ve Kariyer Stresi Arasındaki İlişkide Girişimcilik Niyetinin Aracı Rolünün İncelenmesi*

## SUMMARY

This study examined the relationships among general self-efficacy, entrepreneurial intention, and career stress among pharmacy students and tested whether entrepreneurial intention mediated the relationship between general self-efficacy and career stress. The study was conducted with 282 students enrolled in the Faculty of Pharmacy at Erzincan Binali Yıldırım University. The data were analyzed using Pearson correlation analysis and Hayes' PROCESS macro (Model 4). The results showed that general self-efficacy was positively and significantly associated with entrepreneurial intention ( $r = .46, p < .001$ ) and negatively and significantly associated with career stress ( $r = -.39, p < .001$ ). Entrepreneurial intention was also negatively and significantly associated with career stress ( $r = -.41, p < .001$ ). According to the mediation analysis, the total effect of general self-efficacy on career stress was significant and negative ( $B = -.3868, p < .001$ ). When entrepreneurial intention was included in the model, the direct effect of general self-efficacy on career stress decreased but remained significant ( $B = -.2567, p = .001$ ). In addition, the indirect effect of general self-efficacy on career stress through entrepreneurial intention was significant ( $B = -.1301, 95\% \text{ bootstrap CI } [-.2175, -.0664]$ ). The findings suggest that entrepreneurial intention partially mediates the relationship between general self-efficacy and career stress. In this context, students with higher levels of general self-efficacy appear to have stronger entrepreneurial intentions, which may, in turn, be associated with lower levels of career stress.

**Keywords:** Self-efficacy, entrepreneurial intention, occupational stress, pharmacy students, career development, higher education in health professions

## ÖZ

Bu çalışma, eczacılık öğrencilerinin genel öz-yeterlilik düzeyleri, girişimcilik niyetleri ve kariyer stresleri arasındaki ilişkileri incelemek ve girişimcilik niyetinin genel öz-yeterlilik ile kariyer stresi arasındaki ilişkideki aracı rolünü değerlendirmek amacıyla yürütülmüştür. Araştırma, Erzincan Binali Yıldırım Üniversitesi Eczacılık Fakültesinde öğrenim gören 282 öğrenci ile gerçekleştirilmiştir. Veriler Pearson korelasyon analizi ve Hayes PROCESS Macro Model 4 kullanılarak analiz edilmiştir. Bulgular, genel öz-yeterliliğin girişimcilik niyetiyle pozitif ve anlamlı ( $r = 0,46, p < 0,001$ ), kariyer stresine ise negatif ve anlamlı düzeyde ilişkili olduğunu göstermiştir ( $r = -0,39, p < 0,001$ ). Ayrıca girişimcilik niyeti ile kariyer stresi arasında da negatif ve anlamlı bir ilişki bulunmuştur ( $r = -0,41, p < 0,001$ ). Aracılık analizi sonuçlarına göre, genel öz-yeterliliğin kariyer stresi üzerindeki toplam etkisi anlamlı ve negatif bulunmuştur ( $B = -0,3868, p < 0,001$ ). Girişimcilik niyeti modele dahil edildiğinde, genel öz-yeterliliğin kariyer stresi üzerindeki doğrudan etkisi azalmış ancak anlamlılığını korumuştur ( $B = -0,2567, p = 0,001$ ). Ayrıca genel öz-yeterliliğin kariyer stresi üzerindeki dolaylı etkisinin girişimcilik niyeti üzerinden anlamlı olduğu belirlenmiştir ( $B = -0,1301, 95\% \text{ bootstrap GA } [-0,2175, -0,0664]$ ). Bulgular, girişimcilik niyetinin genel öz-yeterlilik ile kariyer stresi arasındaki ilişkide kısmi aracı rol oynadığını göstermektedir. Sonuç olarak, öz-yeterliliği yüksek öğrencilerin daha güçlü girişimcilik yönelimine sahip oldukları ve bunun kariyer stresinin azalmasına katkı sağladığı söylenebilir.

**Anahtar Kelimeler:** Öz-yeterlilik, girişimcilik niyeti, kariyer stresi, eczacılık öğrencileri, kariyer gelişimi, yükseköğretim ve sağlık eğitimi

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## INTRODUCTION

Career stress has been defined as the pressure and anxiety experienced by individuals while determining their professional paths and developing their careers (Özgül, 2023). In a study on fourth-year health sciences students, it was observed that the vast majority feared unemployment in their first job after graduation, which contributed significantly to their career stress (Özcan, İşçi, & Tarım, 2023). Similarly, recent Chinese research found that perceived stress among university students was common and that nearly half of the respondents experienced intense stress (Liu, Li, & Cao, 2024). Beyond career-specific concerns, higher levels of perceived stress and depression have also been associated with poorer quality of life among pharmacy students (Blebil, Dujaili, Mohammed, Cheong, & Hoo, 2021). These findings further suggest that the university years are highly important for young individuals in shaping their professional paths.

Entrepreneurial intention, which reflects the intentional plan and will of individuals for the start-up of a new company in the future, has been found to be one of the most influential predictors of entrepreneurial behavior (Ajzen, 1991; Krueger, Reilly, & Carsrud, 2000; Şeşen & Basım, 2012). A study conducted among fourth-year pharmacy students found that entrepreneurial intention was the primary career objective for most participants (Dao et al., 2024). Entrepreneurial intention has been found to be largely motivated by job market uncertainty and the perceived attractiveness of being one's own boss (Fashami et al., 2021; Scahill & D'Souza, 2022).

Individuals' career plans and stress levels are determined not only by external factors such as economic conditions but also by psychological processes. Self-efficacy refers to an individual's belief in their ability to successfully carry out the actions required to achieve a specific goal (Bandura, 1986). Students with high self-efficacy tend to have lower stress levels because they are confident in their ability to cope with academic challenges (Liu et al., 2024). Research

in entrepreneurship suggests that individuals with higher self-efficacy are more likely to engage in entrepreneurial activities and pursue entrepreneurial goals more persistently (Ahmed, 2022).

Social Cognitive Career Theory provides a theoretical framework for explaining how individuals' self-efficacy beliefs, outcome expectations, and personal goals shape the development of their career interests, choices, and behaviors (Lent, Brown, & Hackett, 1994). The theory places particular emphasis on self-efficacy beliefs in determining whether individuals perceive particular career options as attainable and persist in pursuing them (Bandura, 1986; Lent et al., 1994). Within this framework, entrepreneurial intention may be considered a career-related goal that reflects an individual's willingness and plan to pursue an entrepreneurial career path in the future (Ajzen, 1991; Krueger et al., 2000). Students with stronger self-efficacy beliefs may perceive entrepreneurial career options as more attainable and develop stronger entrepreneurial intent; having a more clearly defined career goal may be associated with a greater sense of control over their professional future and lower career stress (Torun, Çakar & Budak, 2021; Zajacova, Lynch, & Espenshade, 2005). Based on this theoretical rationale, entrepreneurial intention can be considered a potential mediating mechanism explaining the relationship between general self-efficacy and career stress.

When planning their post-graduation careers, pharmacy students may consider conventional employment options, such as hospital pharmacy, as well as entrepreneurial career paths, such as establishing their own pharmacy (Fashami et al., 2021). In Türkiye, the increasing number of pharmacy faculties and expanding student quotas have raised concerns about the growing number of graduates and the adequacy of available employment opportunities for newly qualified pharmacists (Bulut & Bilgener, 2021; Kırpık & İlcektay, 2020). This situation may contribute to greater uncertainty and anxiety among pharmacy students when planning their professional futures (Kim, Oh, & Rajaguru, 2022).

Previous studies have shown that fear of career uncertainty may be negatively associated with entrepreneurial intention, whereas personal psychological resources may help individuals cope with such uncertainty (Newman, Obschonka, Schwarz, Cohen, & Nielsen, 2019; Ukil & Almashayekhi, 2024; Zajacova et al., 2005). Although the negative relationship between general self-efficacy and stress is well established, limited research has examined whether entrepreneurial intention mediates the relationship between general self-efficacy and career stress, particularly among pharmacy students (Liu et al., 2024; Zajacova et al., 2005).

The primary aim of this study is to examine the relationships among general self-efficacy, entrepreneurial intention, and career stress in pharmacy students, and to test the mediating role of entrepreneurial intention in the pathway from self-efficacy to career stress. For this purpose, the following hypotheses were formed.

H1: Students' general self-efficacy is negatively associated with career stress.

H2: Students' general self-efficacy is positively associated with entrepreneurial intention.

H3: Students' entrepreneurial intention is negatively associated with career stress.

H4: Entrepreneurial intention mediates the relationship between general self-efficacy and career stress.

## MATERIALS AND METHODS

### Research design and model

This study was conducted using a correlational design within a quantitative research framework. In this design, the independent variable was General Self-Efficacy, the dependent variable was career stress, and the mediating variable was entrepreneurial intention.

### Ethical approval

Prior to data collection, participants were informed about the study and provided written informed consent. Participation was voluntary, and no personally

identifiable data were collected. The study was approved by the Erzincan Binali Yildirim University Health and Sports Sciences Human Research Ethics Committee (Approval No. 05/13; May 31, 2024) and conducted in line with the Declaration of Helsinki.

### Population and sample

The population of this study consisted of all first-, second-, third-, fourth-, and fifth-year undergraduate students enrolled in the Faculty of Pharmacy at Erzincan Binali Yildirim University during the fall semester of the 2024–2025 academic year.

### Sample size

The sample size of the study was calculated according to Cochran's (1977) formula. A 95% confidence level, a 5% margin of error, and  $p = 0.50$  were accepted. Since the study population consisted of 512 students, a finite population correction was applied, and the minimum sample size was calculated as 220. Data were collected using convenience sampling through face-to-face questionnaires, and after excluding 5 incomplete forms, the analyses were conducted with 282 participants a period at the end of the sentence.

### Data collection instruments

In addition to questions addressing participants' demographic characteristics, three measurement instruments were used to assess general self-efficacy, entrepreneurial intention, and career stress. These instruments were selected because their Turkish validity and reliability had previously been established and they had been used in similar study samples. Detailed information regarding each measurement instrument is provided below.

### General self-efficacy scale

The General Self-Efficacy Scale, originally developed by Schwarzer and Jerusalem (1995), was used to measure participants' self-efficacy. The scale includes 10 items rated on a 4-point Likert scale, with higher scores indicating greater self-efficacy. Its Turkish validity and reliability study was conducted by Aypay

(2010), who reported a Cronbach's alpha of .83 (Aypay, 2010; Schwarzer & Jerusalem, 1995). A confirmatory factor analysis was conducted for the General Self-Efficacy Scale. The two-factor model demonstrated acceptable fit to the data ( $\chi^2 = 88.40$ ,  $df = 34$ ,  $p < .001$ ; RMSEA = .075;  $\chi^2/df = 2.60$ ; CFI = .928; NNFI = .912; SRMR = .061). In the present study, Cronbach's alpha for the total scale was .82.

### Entrepreneurial intention scale

Entrepreneurial intention was measured using the scale developed by Liñán and Chen (2009). In the Turkish adaptation, Şeşen and Basım (2012) used the instrument as a single-factor, 6-item scale. Items are rated on a 7-point Likert scale, with higher scores indicating stronger entrepreneurial intention. The reported Cronbach's alpha for the Turkish version was .80. A confirmatory factor analysis was conducted for the Entrepreneurial Intention Scale. The single-factor model demonstrated acceptable fit to the data ( $\chi^2 = 22.50$ ,  $df = 9$ ,  $p = .007$ ; RMSEA = .073;  $\chi^2/df = 2.50$ ; CFI = .918; NNFI = .905; SRMR = .052). In the present study, Cronbach's alpha was .78.

### Career stress scale

Career stress was assessed using the scale developed by Choi et al. (2011) and adapted into Turkish by Özden and Sertel-Berk (2017). The scale includes 20 items rated on a 5-point Likert scale, with higher scores indicating higher career stress. The Turkish version showed high reliability (Cronbach's  $\alpha = .94$ ). In this study, total scores were used to reflect overall career stress, and the questionnaire also included items on demographic characteristics. A confirmatory factor analysis was conducted for the Career Stress Scale. The three-factor model demonstrated acceptable fit to the data ( $\chi^2 = 384.10$ ,  $df = 167$ ,  $p < .001$ ; RMSEA = .068;  $\chi^2/df = 2.30$ ; CFI = .923; NNFI = .911;

SRMR = .066). In the present study, Cronbach's alpha for the total scale was .80. Total summed scores were used to represent overall career stress in the correlation and mediation analyses.

### Data analysis

Prior to analysis, the data were screened for missing values, entry errors, and outliers. Descriptive statistics were computed for all variables. Skewness and kurtosis values indicated acceptable normality, so parametric tests were applied. Scale reliability was assessed using Cronbach's alpha, and Pearson correlation analysis was used to examine the relationships among the variables. Confirmatory factor analyses were conducted using IBM SPSS AMOS. Model fit was evaluated using  $\chi^2$ , RMSEA, CFI, NNFI (TLI), and SRMR. Values of RMSEA and SRMR  $\leq .08$  and CFI and NNFI  $\geq .90$  were considered acceptable. In addition, Hayes' PROCESS macro (Model 4, version 4.2) was used to test the mediating role of entrepreneurial intention (Hayes, 2017). Indirect effects were estimated using 5,000 bootstrap resamples and 95% bootstrap confidence intervals. Total scores of general self-efficacy, entrepreneurial intention, and career stress were used in the analyses.

### RESULTS AND DISCUSSION

Table 1 presents the demographic profile of the participants. Of the 282 students included in the study, 65% were female, and 35% were male. A total of 70.2% reported that they had chosen the pharmacy program willingly, and 57.1% indicated prior work experience. The proportion of students with family members engaged in trade was 37.9%. With respect to academic performance, the most common grade point average range was between 2.51 and 3.00 (31.6%), and only 11.3% of the participants had attended an entrepreneurship course or training.

**Table 1.** Demographic characteristics of the participants

| Variable                         | Category  | n   | %    |
|----------------------------------|-----------|-----|------|
| Gender                           | Male      | 99  | 35.0 |
|                                  | Female    | 183 | 65.0 |
| Family Involvement in Trade      | Yes       | 107 | 37.9 |
|                                  | No        | 175 | 62.1 |
| Entrepreneurship Course/Training | Yes       | 32  | 11.3 |
|                                  | No        | 250 | 88.7 |
| Grade Point Average              | 1.50–2.00 | 22  | 7.8  |
|                                  | 2.01–2.50 | 61  | 21.6 |
|                                  | 2.51–3.00 | 89  | 31.6 |
|                                  | 3.01–3.50 | 84  | 29.8 |
|                                  | 3.51–4.00 | 26  | 9.2  |
| Program Chosen Voluntarily       | Yes       | 198 | 70.2 |
|                                  | No        | 84  | 29.8 |
| Work Experience                  | Yes       | 161 | 57.1 |
|                                  | No        | 121 | 42.9 |

Descriptive statistics and reliability coefficients for the study variables are presented in Table 2. The mean scores were 27.91 (SD = 4.36) for general self-efficacy, 23.97 (SD = 5.34) for entrepreneurial intention, and 55.13 (SD = 15.14) for career stress. The Cronbach's

alpha values ranged from .78 to .82, suggesting that all scales demonstrated acceptable reliability in the present sample. All descriptive statistics were calculated using the total summed scores of the respective scales.

**Table 2.** Descriptive statistics and reliability coefficients of the scales

| Scale                     | No. of Items | Possible Score Range | Mean  | Standard Deviation | Cronbach's $\alpha$ |
|---------------------------|--------------|----------------------|-------|--------------------|---------------------|
| General Self-Efficacy     | 10           | 10–40                | 27.91 | 4.36               | .82                 |
| Entrepreneurial Intention | 6            | 6–42                 | 23.97 | 5.34               | .78                 |
| Career Stress             | 20           | 20–100               | 55.13 | 15.14              | .80                 |

Confirmatory factor analyses were conducted to evaluate the construct validity of the measurement instruments in the present sample. As presented in Table 3, the correlated two-factor model of the Gen-

eral Self-Efficacy Scale, the single-factor model of the Entrepreneurial Intention Scale, and the correlated three-factor model of the Career Stress Scale demonstrated acceptable fit to the data.

**Table 3.** Confirmatory factor analysis results of the measurement instruments

| Scale and tested model                                             | $\chi^2$ (df) | RMSEA | CFI  | NNFI | SRMR | Evaluation     |
|--------------------------------------------------------------------|---------------|-------|------|------|------|----------------|
| General Self-Efficacy Scale – 10-item, correlated two-factor model | 88.40 (34)    | .075  | .928 | .912 | .061 | Acceptable fit |
| Entrepreneurial Intention Scale – 6-item, single-factor model      | 22.50 (9)     | .073  | .918 | .905 | .052 | Acceptable fit |
| Career Stress Scale – 20-item, correlated three-factor model       | 384.10 (167)  | .068  | .923 | .911 | .066 | Acceptable fit |

**Note.** RMSEA = Root Mean Square Error of Approximation; CFI = Comparative Fit Index; NNFI = Non-Normed Fit Index; SRMR = Standardized Root Mean Square Residual. Values of RMSEA and SRMR  $\leq$  .08 and CFI and NNFI  $\geq$  .90 were considered indicative of acceptable model fit.

Pearson correlation analysis was conducted to examine the bivariate relationships among the study

variables. The results are presented in Table 4.

**Table 4.** Correlations among study variables

| Variables                    | Mean  | Standard Deviation | 1        | 2        | 3 |
|------------------------------|-------|--------------------|----------|----------|---|
| 1. General Self Efficacy     | 27.91 | 4.36               | -        |          |   |
| 2. Entrepreneurial Intention | 23.97 | 5.34               | 0.46***  | -        |   |
| 3. Career Stress             | 55.13 | 15.14              | -0.39*** | -0.41*** | - |

**Note:** M = Mean, SD = Standard Deviation. \*\*\* $p < 0.001$ . N = 282

The relationships among the study variables were examined using Pearson correlation analysis, and the findings are shown in Table 4, general self-efficacy was significantly and positively correlated with entrepreneurial intention ( $r = .46$ ,  $p < .001$ ), supporting H2. Entrepreneurial intention was also significantly and negatively correlated with career stress ( $r = -.41$ ,  $p < .001$ ), supporting H3. In addition, general self-efficacy was significantly and negatively correlated with career stress ( $r = -.39$ ,  $p < .001$ ). These findings indicate that students with higher levels of general self-efficacy tended to report stronger entrepreneurial intention, whereas students with higher entrepreneurial intention tended to report lower career stress.

The positive relationship found in this study between general self-efficacy and entrepreneurial intention strongly aligns with previous literature. In particular, the study by Fashami et al. (2021) conducted with pharmacy students in Iran, showed that personal resources related to self-efficacy are significantly linked to intentions; in this respect, our current finding suggests that self-efficacy is an important psychological resource that fuels entrepreneurial orientation in the pharmacy student sample as well. Similarly, Wu et al. (2022) found that entrepreneurial self-efficacy is positively correlated with entrepreneurial intention among university students, and that this variable is one of the key mechanisms carrying the effect of entrepreneurship education. Doanh and Bernat's meta-analytic path analysis, offering a broader sample size and a more synthetic perspective, also demonstrated that entrepreneurial self-efficacy has a direct and powerful impact on entrepreneurial intention (Doanh & Ber-

nat, 2019). Al-Qadasi et al. (2023) found that self-efficacy was not only associated with entrepreneurial intention, but also played an important role in its development (Al-Qadasi, Zhang, Al-Awlaqi, Alshebami, & Aamer, 2023). Finally, Ndofirepi's research on university students also showed that entrepreneurial self-efficacy has a positive and significant direct effect on entrepreneurial goal intention (Ndofirepi, 2022). Taken together, these findings suggest that as self-efficacy increases, individuals are more likely to perceive entrepreneurship as a more attainable, manageable, and realistic career option, which in turn strengthens their entrepreneurial intention. Therefore, the support found for H2 in the present study is consistent both with the broader trend in the literature and with empirical evidence reported particularly in the context of higher education and pharmacy students.

The negative correlation found in this study between entrepreneurial intention and career stress is generally consistent with previous literature. In particular, the study conducted by Torun et al. (2021) with university students showed that students with entrepreneurial intention experienced lower levels of career stress; this finding directly supports the H3 result in the current research (Torun et al., 2021). Similarly, Tican's research on prospective teachers found a negative and significant relationship between entrepreneurial characteristics and total career stress scores. Although the construct used in this study was not directly "entrepreneurial intention" but a broader entrepreneurial inclination, it parallels the current finding in terms of the pattern in which career stress decreases as entrepreneurial orientation strengthens

(Tican, 2020). Furthermore, Timuroğlu and Yılmaz’s study with university students found a negative correlation between general stress levels and entrepreneurial intention, suggesting that entrepreneurial orientation may weaken as psychological pressure increases (Timuroğlu & Yılmaz, 2019).

More recent studies point to a similar pattern. Ukil and Almashayekhi reported that fear of career uncertainty had a significant and negative effect on entrepreneurial intention (Ukil & Almashayekhi, 2024). Similarly, Ömür and Seçgin reported a negative relationship between entrepreneurial intention and unemployment anxiety among students in the health sciences (Ömür & Seçgin, 2024). When all these findings are considered together, it can be said that students with high entrepreneurial intent tend to see their professional futures as more controllable, diverse, and achievable, which, in turn, can reduce career-related pressure, anxiety, and stress levels. Therefore, the support found for H3 in the present study is consistent both with the broader literature on univer-

sity students and with more recent findings concerning career uncertainty and unemployment anxiety.

To test H4, a mediation analysis was conducted using Hayes’ PROCESS Macro. As shown in Table 5, the total effect of general self-efficacy on career stress was negative and statistically significant ( $B = -0.3868$ ,  $SE = 0.0592$ ,  $t = -6.5338$ ,  $p < .001$ ). When entrepreneurial intention was included in the model, the direct effect of general self-efficacy on career stress remained significant ( $B = -0.2567$ ,  $SE = 0.0773$ ,  $t = -3.3208$ ,  $p = .001$ ). In addition, the indirect effect of general self-efficacy on career stress through entrepreneurial intention was also found to be significant ( $B = -0.1301$ , 95% bootstrap CI  $[-0.2175, -0.0664]$ ). Since the confidence interval did not include zero, entrepreneurial intention was found to mediate the relationship between general self-efficacy and career stress. Because the direct effect remained significant after the inclusion of the mediator, these findings indicate partial mediation.

**Table 5.** Results of the mediation analysis for the effect of general self-efficacy on career stress through entrepreneurial intention

| Effect Type                     | Path                                            | Estimate (B) | Standard Error | t       | p      | Result                          |
|---------------------------------|-------------------------------------------------|--------------|----------------|---------|--------|---------------------------------|
| Total Effect (without mediator) | GSE → Career Stress                             | -0.3868      | 0.0592         | -6.5338 | < .001 | Supported                       |
| Direct Effect (with mediator)   | GSE → Career Stress                             | -0.2567      | 0.0773         | -3.3208 | .001   | Supported                       |
| Indirect Effect (with mediator) | GSE → Entrepreneurial Intention → Career Stress | -0.1301      | —              | —       | —      | Significant (mediation present) |

95% bootstrap confidence interval for the indirect effect:  $[-0.2175, -0.0664]$   
**Note.** GSE = General Self-Efficacy. Mediation was tested using Hayes’ PROCESS Macro. The indirect effect was considered significant because the 95% bootstrap confidence interval did not include zero.

The finding in this study that general self-efficacy has a negative and significant effect on career stress is strongly consistent with previous literature. In particular, Akbaş Tuna’s research with university students showed that general self-efficacy has a significant and negative effect on career stress. This finding provides one of the closest pieces of evidence directly explaining why H1 was supported in the present study (Akbaş Tuna, 2026). Similarly, Kaya and Altıntaş’s structural modeling study on aviation students revealed that

self-efficacy has a direct and negative impact on career stress. This indicates that self-efficacy is closely related not only to general psychological well-being but also to the pressure and anxiety experienced in the context of one’s professional future (Kaya & Altıntaş, 2025).

At a more career-specific level, Uysal et al. (2023) reported a negative relationship between career decision self-efficacy and career stress among speech and language therapy students, suggesting that more domain-specific forms of self-efficacy may also serve a

protective function against career stress (Uysal, Çağlar, & Çıldır, 2023). Similarly, research examining the relationships between career decision-making self-efficacy, dysfunctional career thoughts, and career stress in university students shows that as self-efficacy increases, career stress decreases, and career adjustment forms an important mechanism in this process (Işık, 2010). Finally, in the study by Esen and İpçi, which evaluated career coaching practices, the observation that the increase in career decision self-efficacy was accompanied by a decrease in career stress levels suggests that interventions that strengthen self-efficacy can alleviate students' career-related pressures (Esen & İpçi, 2022). Taken together, these findings suggest that students with higher levels of self-efficacy perceive career-related uncertainties as more manageable, feel more confident in their career decision-making processes, and therefore experience lower levels of career stress. Accordingly, the support found for H1 in the present study is consistent with both the broader literature on general self-efficacy and research on more career-specific forms of self-efficacy.

This study's finding that entrepreneurial intention plays a partial mediating role in the relationship between general self-efficacy and career stress is consistent with previous literature. In particular, the research conducted by Torun et al. (2021) on university students directly demonstrated the mediating role of entrepreneurial intention in the relationship between basic self-evaluation and career stress. Therefore, this study provides the closest and strongest empirical support for our current findings (Torun et al., 2021). Furthermore, Gültekin reported that career decidedness partially mediated the relationship between hope and career stress. This finding is consistent with the underlying logic of the present model, suggesting that a positive psychological resource may alleviate career stress through a career-related orientation or commitment mechanism (Gültekin, 2022). Similarly, Zhu et al. have shown that positive self-evaluations can lead to more positive career outcomes through career-related intermediate processes. This finding

supports the logic of the present model by showing that a psychological resource can influence career-related outcomes through indirect mechanisms (Zhu, Zhang, Tu, & Zhang, 2021). Qiao and Hua's study showed that career adaptability mediated the effect of entrepreneurial self-efficacy—that is, individuals' belief in their ability to engage in entrepreneurial activities and successfully establish and manage their own business—on entrepreneurial intention. This finding further suggests that the pathway from self-efficacy to entrepreneurial intention may be strengthened through various career-related intermediary processes (Qiao & Hua, 2019).

Overall, these findings suggest that students with stronger self-efficacy tend to perceive entrepreneurship as a more attainable and manageable career path, which may help reduce career-related uncertainty, pressure, and stress. In this respect, the support found for H4 in the present study is in line with both directly comparable models and recent research emphasizing career-related mediating processes.

### Summary of hypothesis results

H1: Supported ( $r = -.39$ ,  $p < .001$ ).

H2: Supported ( $r = .46$ ,  $p < .001$ ).

H3: Supported ( $r = -.41$ ,  $p < .001$ ).

H4: Supported (indirect effect  $B = -.1301$ , 95% bootstrap CI  $[-.2175, -.0664]$ ).

### CONCLUSION

This study found that general self-efficacy among pharmacy students was positively associated with entrepreneurial intention and negatively associated with career stress. In addition, entrepreneurial intention was negatively associated with career stress. The mediation analysis showed that entrepreneurial intention partially mediated the relationship between general self-efficacy and career stress. This finding suggests that students with higher self-efficacy may perceive entrepreneurial career options as more attainable and that stronger entrepreneurial intention may be associated with lower career stress.

The fact that only 11.3% of participants reported having previously taken an entrepreneurship course or training suggests that pharmacy students may have had limited exposure to structured learning opportunities related to entrepreneurship. In light of this finding, it may be beneficial to consider courses or modules integrating areas such as entrepreneurship, business management, financial literacy, and career planning into pharmacy education programs. Furthermore, educational content that supports emotional intelligence, stress management, decision-making, and professional self-efficacy can contribute to preparing students for uncertain and competitive career environments. However, the impact of these educational suggestions needs to be evaluated in future longitudinal or intervention-based studies.

Overall, the findings suggest that entrepreneurial intention may represent one of the mechanisms linking higher general self-efficacy with lower career stress among pharmacy students. Accordingly, initiatives aimed at supporting self-efficacy, entrepreneurial career planning, and career-related coping skills may be relevant to pharmacy education and student support services.

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#### AUTHOR CONTRIBUTION STATEMENT

Conceptualization, study design, data collection, and writing of the manuscript (YÖ), Statistical analysis and contribution to the interpretation of the results (GH). All authors contributed to the development of the study, reviewed the manuscript, and approved the final version.

#### CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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