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## **The Differential Mediating Effect of Self-Efficacy in the Relationship Between Adaptive and Maladaptive Perfectionism and Burnout among Physicians in Kuwait**

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## التأثير التفاضلي الوسيط للكفاءة الذاتية في العلاقة بين الكمالية التكيفية وغير التكيفية والاحترق الوظيفي لدى الأطباء في الكويت

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### ملخص

**هدف الدراسة:** هدفت هذه الدراسة إلى تعرف الدور المحوري للكفاءة الذاتية كوسيط في العلاقة بين الكمالية التكيفية وغير التكيفية، والاحترق الوظيفي لدى الأطباء في الكويت في أثناء جائحة كوفيد-19. **المنهجية:** اعتمدت هذه الدراسة على المنهج الارتباطي باستخدام نمذجة المعادلة البنائية (SEM). واستعانت الدراسة بعينة متاحة من الأطباء (ن=353، راوحت أعمارهم بين 23 و60 عاماً، م = 38.81، ع = 7.32). وقد تم تطبيق ثلاثة مقاييس إلكترونيًا، وهي: مقياس السعي نحو الكمال المختصر (SAPS)، ومقياس الاحتراق الوظيفي - النسخة الخاصة بالخدمات الإنسانية للعاملين في القطاع الطبي [MBI-HSS (MP)]، ومقياس الكفاءة الذاتية العام (GSE). **النتائج:** أشارت النتائج وفقًا لتحليل مسار الوساطة إلى أن الكفاءة الذاتية المدركة تؤدي دورًا محوريًا في التمييز بين الكمالية التكيفية وغير التكيفية، مما يؤثر في العلاقة غير المباشرة بين الكمالية والاحتراق الوظيفي. وبالتالي ساندت هذه النتائج الفرضية المقترحة وأكدت تأثير الكمالية والكفاءة الذاتية في الاحتراق الوظيفي بين الأطباء. **الخلاصة:** خلصت الدراسة إلى أن الكمالية غير التكيفية ترتبط بشكل كبير، بزيادة أعراض الاحتراق الوظيفي، فضلًا عن أن الكمالية التكيفية قد تخفف من حدة أعراض الاحتراق الوظيفي من خلال الكفاءة الذاتية المدركة، كونها تعمل كآلية للتقييم المعرفي الإيجابي. **المصطلحات الرئيسية:** الكفاءة الذاتية، الكمالية، الاحتراق الوظيفي، الأطباء.

# The Differential Mediating Effect of Self-Efficacy in the Relationship Between Adaptive and Maladaptive Perfectionism and Burnout among Physicians in Kuwait<sup>1</sup>

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## Abstract

**Objective:** The study aimed to explore the pivotal role of perceived self-efficacy as a mediator in the relationship between adaptive and maladaptive perfectionism and burnout among physicians in Kuwait during the COVID-19 pandemic. **Method:** This study employed a correlational design using Structural Equation Modeling (SEM). Three measures, namely the Short Almost Perfect Scale (SAPS), the Maslach Burnout Inventory (MBI-HSS (MP)), and the General Self-Efficacy Scale (GSE) were administered online to a convenience sample of physicians ( $N=353$ , age range 23-60  $M=38.81$ ,  $SD=7.32$ ). **Results:** The mediation path analysis highlighted the pivotal role of perceived self-efficacy in distinguishing between adaptive and maladaptive perfectionism, influencing the indirect relationship between perfectionism and burnout. These findings supported the proposed hypothesis and reiterated the significant impact of perfectionism and self-efficacy on physician burnout. **Conclusions:** The study found that maladaptive perfectionism was significantly associated with heightened symptoms of burnout. Furthermore, adaptive perfectionism mitigated vulnerability to burnout symptoms through the pathway of perceived self-efficacy, functioning as a positive cognitive appraisal mechanism.

**Keywords:** Self-Efficacy, Perfectionism, Burnout, Physicians.

<sup>1</sup> The data showcased in this paper originated from the master's thesis of the lead author and has been reanalyzed through an entirely distinct data analysis process.

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## Introduction

Perfectionism is a complex trait that can be beneficial in certain situations, but it can also have negative consequences when taken to an extreme. For example, while perfectionism can be associated with effective work performance in challenging jobs, research suggests that individuals high in maladaptive perfectionism are more susceptible to burnout due to their tendency to set unrealistic goals and experience frequent stress (Chang, 2012; Gnilka et al., 2017; Hewitt et al., 2003). This can be particularly concerning in the medical field, as burnout among physicians can compromise their ability to provide quality care to patients (Faragher et al., 2005).

On the other hand, job burnout is a psychological response to chronic work stress. It is characterized by emotional exhaustion, cynicism towards work, and reduced efficacy (Maslach & Leiter, 1997). Elevated levels of burnout among physicians, as previous studies findings suggest, pose significant challenges to healthcare systems, as they can lead to decreased productivity, increased medical errors, and higher staff turnover (Al-Sareai et al., 2013; Halbesleben, 2006; Matlon, 2014).

The COVID-19 pandemic has further exacerbated these challenges. Medical professionals working on the front lines have faced unprecedented workloads, stress, and anxiety, alongside the constant threat of infection. This unique set of stressors has significantly increased their risk of developing psychological problems, such as anxiety, depression, and post-traumatic stress disorder (PTSD) (Bidzan et al., 2020; Vagni et al., 2020; Wang et al., 2020).

In the context of these challenges, perceived self-efficacy, or an individual's belief in their ability to successfully perform a task, becomes particularly important (Bandura, 1977). Research suggests that individuals with high perceived self-efficacy are better equipped to cope with stress, manage challenges, and maintain positive mental health (Bandura, 1994). Individuals with high self-efficacy can effectively deal with complex tasks and see them as challenges that require control and commitment rather than threats to be avoided. Moreover, in times of crisis and failure, they instantly find ways to enhance their effectiveness and reduce stress and depressive feelings. In addition, individuals with high perceived self-efficacy demonstrated higher levels of performance, achievement, and better coping with stressors (Ahn

& Kim, 2006; Wang et al., 2020), significantly influencing their emotions, thoughts, behaviors, and motivation (Bandura, 1994).

Low self-efficacy, however, is associated with anxiety, low self-confidence, stress, fatigue, and feelings of helplessness (Bidzan et al., 2020; Hou et al., 2020; Lugo et al., 2021). Consequently, individuals with low self-efficacy tend to focus on their limitations and are prone to anxiety, depression, and burnout (Wang et al., 2020). In addition, they have limited abilities to deal with complex tasks and perceive them as personal threats, focusing on flaws, obstacles, and unfavorable outcomes rather than on successful performance. On the contrary, high self-efficacy contributes to a positive and successful confrontation with challenges and difficulties during difficult circumstances (Skaalvik & Skaalvik, 2010).

Nevertheless, it is essential to acknowledge that moderate levels of self-efficacy enhance job performance. Meanwhile, extremism of self-efficacy can lead to personal and professional difficulties because of unrealistic expectations and potentially hinder performance (Chang et al., 2016). This highlights the potential for self-efficacy interventions to play a crucial role in supporting the well-being of physicians, especially during demanding times like the pandemic. The findings of this study emphasize the importance of maintaining a balanced level of self-efficacy, as both low and high levels can have detrimental effects on physicians' well-being. Therefore, understanding the complex interplay between these factors is crucial. Still, it opens possibilities for developing effective interventions to promote physician well-being and optimize healthcare delivery.

### **An Integrated Model of the Intermediate Role of Self-Efficacy**

Psychologists have long hypothesized that an individual's personality significantly influences their interpretations and reactions to environmental stimuli. Personality traits are fundamental in how people perceive, code, analyze, interpret, understand, and evaluate the information they receive from their surroundings (Badawy & Mohamad, 2015). This vulnerability often manifests in self-criticism, a focus on weaknesses, and an exaggerated evaluation of personal outcomes. Consequently, individuals may experience burnout due to excessive self-focus and negative self-evaluation (Stoeber & Otto, 2006). In contrast, healthy (adaptive) perfectionists are characterized by positive personality traits, such as higher levels of self-confidence, achievement, and satisfaction, when compared to unhealthy (maladaptive) perfectionists (Gnilka et al., 2017).

Perfectionism and stress are intricately linked to burnout, especially among medical professionals who consider and represent an essential societal role. Burnout is associated with persistent stressors for extended periods (Robakowska et al., 2018). Dunkley et al. (2000) found that individuals with higher levels of perfectionism (maladaptive) were more negatively affected by daily stressors, experiencing higher levels of anxiety, dissatisfaction, and lower levels of social well-being than those with low perfectionism (adaptive). On the other hand, individuals with high burnout tend to have excessive expectations and a great desire for perfectionism in performing tasks (Balevre et al., 2012). Healthcare providers working in COVID-19 sections reported significantly higher stress, anxiety, and burnout than in other sections of the hospital, with the fear of infection being a significant factor influencing readiness to provide care (Vagni et al., 2020).

Burnout is associated with self-efficacy, control orientation, and self-concept. It refers to an individual's internal pressure to perform at their best despite facing external obstacles and conditions that reduce self-efficacy, thus increasing vulnerability to burnout (Collin et al., 2020; Koonce, 2014). Increasing self-efficacy is a protective factor for burnout since it is closely related to individual accomplishments (Bandura, 1977). Self-efficacy contributes to developing and forming behaviors characteristic of personality traits (Bandura, 2012), indicating an individual's confidence in their ability to engage in social interactions, develop friendships, and maintain personal relationships.

Adaptive perfectionism, by setting high personal standards, can be a powerful motivator. It is associated with desirable behaviors such as increased productivity, success orientation, conscientiousness, and motivation for achievement, setting it apart from non-adaptive perfectionism (Matlon, 2014; Zhang et al., 2007). As the rate of adaptive perfectionism decreases, the sense of competence and the ability to accomplish required tasks may also reduce (Deuling & Burns, 2017). While these characteristics can enhance job performance, they can also lead to personal and professional difficulties (Rice & Liu, 2020). However, high self-efficacy among perfectionists can help accurately evaluate situations and effectively cope with problems, contributing to emotional stability under stress and increasing self-control (Bidzan et al., 2020). This highlights the potential benefits of self-efficacy and adaptive perfectionism in managing stress and burnout among healthcare providers.

In addition to the pressures related to the nature of the COVID-19 pandemic, frontline physicians dealt directly with the strict and changing government regulations according to the changing nature and conditions of the disease, eventually creating additional burdens. Furthermore, limited social support, insufficient information about the virus, and concerns over the inadequacy of early preventive measures for infection control led to a significant rise in stress, depression, psychological distress, and anxiety among medical staff (Bidzan et al., 2020; Collin et al., 2020; Xiong et al., 2020). Healthcare providers assigned to COVID-19 units reported substantially higher levels of stress, anxiety, and burnout compared to those in other hospital departments. A major factor affecting their willingness to provide care was the fear of infection, given the contagious and potentially fatal nature of the disease (Vagni et al., 2020).

By reviewing the previous studies on the structural equation model of the current study variables, we found that only two studies directly aligned with our research. The first study, conducted by Matlon (2014), examined the relationships between maladaptive versus adaptive perfectionism, stress, self-efficacy, and burnout among licensed clinical psychologists (n=82). Although the results didn't entirely match expectations, they provided valuable insights. Maladaptive perfectionism was not significantly correlated with overall burnout, and there was no significant correlation between maladaptive perfectionism and decreased feelings of self-efficacy. Ultimately, self-efficacy, maladaptive perfectionism, and adaptive perfectionism did not significantly predict overall burnout, thereby questioning some established assumptions.

The second study, conducted by Yu et al. (2016), examined the mediating role of academic self-efficacy in the relationship between socially prescribed perfectionism and academic burnout among medical school students (n= 244) in Korea. The results revealed a significant positive correlation between socially prescribed perfectionism and academic burnout and a negative correlation between academic self-efficacy and academic burnout. Furthermore, socially prescribed perfectionism and academic self-efficacy accounted for 54% of the predictive power for academic burnout. Moreover, academic self-efficacy partially mediated the relationship between socially prescribed perfectionism and academic burnout.

Additionally, several studies have examined other intermediate variables, such as mediators or moderators. For example, Chang (2012) studied the relationship between maladaptive perfectionism and burnout and assessed the mediating effect of emotion-focused coping among nurses ( $n=314$ ) in Taiwan. The results demonstrated that emotion-focused coping fully mediated the relationship between maladaptive perfectionism and burnout. Furthermore, Gniska et al. (2017) found that coping resources mediated the relationships between perfectionism and burnout among consulting employees ( $n=235$ ) in the Netherlands. Chung (2016) supported the mediation role of adaptive coping strategies in the relationship between adaptive and maladaptive perfectionism, burnout, and fatigue. Nonetheless, the moderation role of coping strategy in these relationships was not supported. Similarly, Badawy and Mohamad (2015) found no moderating effect of religious coping in the relationship between perfectionism and burnout among physicians ( $n=210$ ) in Cairo. Robakowska et al. (2018) demonstrated that a low level of maladaptive perfectionism among medical laboratory scientists ( $n=166$ ) was a significant predictor of an elevated level of exhaustion. Furthermore, Spagnoli et al. (2021) showed that perfectionistic concerns predicted dimensions of burnout, while they were not associated with perfectionistic strivings. Chang et al. (2016) found that friendship in the workplace weakened the positive relationship between unhealthy perfectionism and burnout among the team sets ( $n=112$ ) in Taiwan. Additionally, Cabell (2021) indicated that high standards and avoidant coping explained 16% of the variance in work-related burnout among ( $n=69$ ) residential employees in the United States. Alzubairi (2017) identified burnout as a significant predictor of maladaptive perfectionism by 89% of the participants.

Additionally, PTSD symptoms partially mediated the effect of self-efficacy on fatigue. It was also found that negative coping moderated both the direct effect of self-efficacy on fatigue and the mediating effect of PTSD symptoms among ( $n=528$ ) non-frontline healthcare workers (HCWs) in China (Hou et al., 2020). Pellerone (2021) found that self-efficacy mediates the relationship between burnout (personal achievement) and the socio-emotional factor in a group of ( $n=374$ ) Italian teachers during the COVID-19 pandemic. Similarly, Hafiz (2020) investigated the role of problem-solving skills as a moderator in the relationship between work stressors and psychological burnout among ( $n=50$ ) doctors in Egypt.

The results showed that problem-solving skills moderate the relationship between work stressors and burnout. Likewise, Wang et al. (2020) reported a partial mediating role of pandemic-related knowledge in the relationship between social support and self-efficacy. However, self-efficacy plays a complete mediating role in the relationship between social support and mental health. Additionally, the risk level moderated the relationship between self-efficacy and mental health during the COVID-19 pandemic (Wang et al., 2020).

Al-Gharib (2014) indicated that self-efficacy was the most variable in predicting teachers' burnout. Cho et al. (2021) revealed that higher psychological well-being was predicted by lower stress and anxiety related to the viral pandemic, as well as high self-efficacy and resilience. However, they found no significant pathway from stress and anxiety to the viral pandemic through self-efficacy to psychological well-being or depression among teachers in South Korea. Similarly, Koonce (2014) indicated that equity sensitivity did not moderate the relationship between motivation and burnout, nor did it moderate the relationship between self-efficacy and burnout among (n= 90) mental health professionals in the United States.

Finally, Zheng et al. (2020) conducted a cross-sectional study investigating hospice care self-efficacy among (n= 281) clinical medical staff working in COVID-19 isolation wards in China. The results showed that the variables of self-competence in death-related work, positive aspects of caregiving, and simplified coping styles explained 58.7% of the variation in hospice care self-efficacy. Therefore, educating and training medical staff to improve self-efficacy towards COVID-19 pressures is highly recommended, effectively dealing with the harmful effects of the pandemic by taking adequate measures to promote mental health and providing safer environments in the face of infection transmission (Zheng et al., 2020).

### **Purpose of the Study**

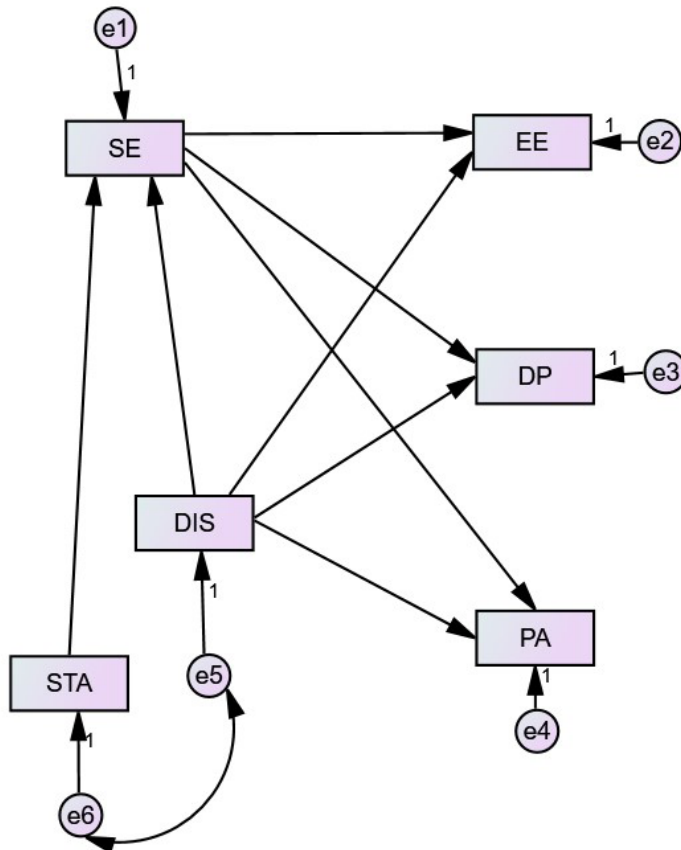
The current study aimed to explore the pivotal role of perceived self-efficacy as a mediator in the relationship between adaptive and maladaptive perfectionism and burnout among physicians in Kuwait during the COVID-19 pandemic. Specifically, the study seeks to evaluate the following hypothesis:

**H: Self-efficacy has a significant indirect effect on the relationship between perfectionism and burnout among healthcare professionals during the COVID-19 pandemic.**

Therefore, Figure 1 illustrates and indicates the direct and indirect effects of self-efficacy as a mediator between adaptive and maladaptive perfectionism (predictor) and burnout (outcome).

**Figure 1**

*The Direct and Indirect Effects of Self-Efficacy as a Mediator Between Adaptive, Maladaptive Perfectionism, and Burnout*



*Note.* SE= Self Efficacy, STA= Standards, DIS= Discrepancy, EE= Emotional Exhaustion, DP= Depersonalization, PA= Personal Accomplishment

The COVID-19 pandemic has placed immense pressure on healthcare professionals, leading to an increased risk of burnout. Burnout is characterized by emotional exhaustion, cynicism, and a reduced sense of accomplishment.

While adaptive perfectionism involves striving for excellence allowing for flexibility and self-compassion, maladaptive perfectionism is characterized by unrealistic expectations, fear of failure, and intense self-criticism. We hypothesized that perceived self-efficacy might buffer the adverse effects of perfectionism on burnout. The current study proposes a differential effect of perceived self-efficacy for the two types of perfectionism. Hence, the study proposes the following research question:

**Q: Does self-efficacy play an indirect differential role in the relationship between perfectionism and burnout among healthcare professionals during the COVID-19 pandemic in the Adaptive and maladaptive perfectionism groups?**

Understanding the specific roles of adaptive and maladaptive perfectionism and the potential mediating effect of perceived self-efficacy can provide valuable insights for developing targeted interventions, which could help healthcare professionals manage stress and prevent burnout during challenging times.

## Method

### *Participants*

This study employed correlational design; after obtaining official approval from the Ministry of Health, an online survey questionnaire using an original version of QuestionPro software was distributed to medical professionals in Kuwait using personal contacts and social media accounts (e.g., Twitter, Instagram, and WhatsApp), during the period from September 2020 to May 2021. Although 407 participants signed informed consent and voluntarily participated in the study, a few cases ( $n=54$ ) were later excluded for not meeting the inclusion criteria (i.e., not living in Kuwait, non-physicians, technicians, pharmacists, and non-perfectionists<sup>(1)</sup>); therefore, the final number of participants was  $N=353$ . Table 1 displays the demographic characteristics of the participants.

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(1) Participants who scored lower than 14 on both subscales (Standards and Discrepancy) were considered non-perfectionists and were thereby excluded from the final analysis (Slaney et al., 2001).

**Table 1***Participants Demographic Characteristics*

| Variable                    | N   | %    | Variable                   | N   | %    |
|-----------------------------|-----|------|----------------------------|-----|------|
| <b>Sex</b>                  |     |      | <b>Nationality</b>         |     |      |
| Male                        | 218 | 61.8 | Kuwaiti                    | 288 | 81.6 |
| Female                      | 135 | 38.2 | Other                      | 65  | 18.4 |
| <b>Years Practicing</b>     |     |      | <b>Monthly Income</b>      |     |      |
| Less than 5 years           | 41  | 11.6 | Less than 2000 KWD         | 47  | 13.3 |
| 5 - 10 years                | 82  | 23.2 | 2000 - 3000 KWD            | 76  | 21.5 |
| 11 - 15 years               | 102 | 28.9 | 3001 - 4000 KWD            | 68  | 19.3 |
| More than 15 years          | 128 | 36.3 | More than 4000 KWD         | 162 | 45.9 |
| <b>Marital Status</b>       |     |      | <b>Are you currently a</b> |     |      |
| Single                      | 60  | 17   | Non-Smoker                 | 253 | 71.7 |
| Married                     | 266 | 75.4 | Daily Smoker               | 33  | 9.3  |
| Divorced/Widowed            | 27  | 7.6  | Occasional Smoker          | 40  | 11.3 |
| <b>Perfectionists Group</b> |     |      |                            |     |      |
| Adaptive                    | 133 | 37.7 | Heavy Smoker               | 9   | 2.5  |
| Maladaptive                 | 220 | 62.3 | Former Smoker              | 18  | 5.1  |

Note. N= 353

As shown in Table 1, the participants' ages ranged from 23 to 60 ( $M=38.81$   $SD=7.32$ ). Most participants were male (61.8%), married (75.4%), and non-smokers (71.1%). Nearly two-third (62.3%) of the participants were classified as maladaptive perfectionists.

### **Measures**

#### **Demographic Questionnaire**

This questionnaire was designed to gather primary data, including age, sex, nationality, marital status, years of experience, and monthly income.

#### **Short Almost Perfect Scale (SAPS)**

SAPS comprises two subscales: Standards (perfectionistic strivings; high personal performance expectations) and Discrepancy (perfectionistic

concerns; the perceived gap between personal standards and one's evaluation of having met those standards). Each sub-scale consists of four items; the scores on these scales range from 4 to 28 points. Responses were based on a seven-point Likert scale. A high score on both subscales indicates an elevated level of maladaptive perfectionism, while a high Standards score and a low Discrepancy score indicate adaptive perfectionism (Rice et al., 2014). Rice et al. (2014) provided substantial evidence for the Confirmatory Factor Analyses (CFA) and criterion-related validity of SAPS scores; additionally, the Cronbach coefficients for the subscales ranged from .85 to .87 for Standards and .84 to .87 for Discrepancy.

We examined the validity of the SAPS using: (a) Exploratory Factor Analysis (EFA)<sup>(2)</sup>, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .757, above the commonly recommended value of .60, and Bartlett's test of sphericity was significant ( $\chi^2 = 884.565$  with  $p < .001$ ). Moreover, initial eigenvalues indicated that the two factors explained 26.70% of the first factor (Standards) and 22.28% of the second factor (Discrepancy) of the variance, respectively, and overall explained 48.98% of the total variance; (b) Criterion-related validity -after dividing the participants into two groups (adaptive and maladaptive perfectionism), the non-perfectionists were removed. The results showed significant differences between the adaptive and maladaptive perfectionist groups. Thus, Discrepancy was higher among the maladaptive perfectionist group ( $p < .001$ ). However, there were no significant differences between the adaptive and maladaptive perfectionists' groups in Standards; (c) Convergent validity of the measures was adopted in the pilot study sample using the Rosenberg Self-Esteem Scale (RSES). The results displayed a significant correlation between SAPS and RSES. Standards subscale ( $r = .34$ ,  $p < .05$ ) was positively correlated with RSES, while Discrepancy subscale ( $r = -.48$ ,  $p < .01$ ) was negatively associated with RSES (for details see: Ghanim, 2022). Reliability coefficients of SAPS were computed using Cronbach's alpha, and results showed acceptable levels for both subscales Standards and Discrepancy ( $\alpha = .79$ ,  $.75$ , respectively) [See Table 2].

Cut scores were applied to classify physicians as adaptive or maladaptive to distinguish between diverse levels of perfectionism among

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(2) We examined the psychometric properties of the measures using a pilot study, except for the Exploratory Factor Analysis (EFA).

participants. Accordingly, individuals were categorized as perfectionists if they scored high ( $\geq 14$ ) on the Standards subscale. In contrast, those with low scores on this subscale were considered non-perfectionists and were thereby excluded from further analysis. It is worth mentioning that the Discrepancy subscale played a crucial role in distinguishing between the adaptive and maladaptive groups in the current study (Rice et al., 2014; Slaney et al., 2001).

### **Maslach Burnout Inventory MBI-HSS (MP)**

The MBI-HSS (MP) was developed by Maslach and Jackson (1997) and it includes 22 items rated on a seven-point scale. It consists of three sub-dimensions: (a) Emotional Exhaustion (EE), which assesses feelings of being emotionally overextended and exhausted by one's work, and higher scores on this scale correspond to experiencing significant burnout (9 items); (b) Depersonalization (DP), which measures a cruel and impersonal response toward one's service, care, or treatment recipients, and higher scores on this scale correspond to experiencing greater degrees of burnout (5 items); (c) Personal Accomplishment (PA), which assesses feelings of competence and achievement in one's work with people, and lower scores on this scale correspond to undergoing significant burnout (8 items). Responses to MBI-HSS (MP) items should not be combined to form a single "burnout" score (Maslach et al., 1996-2018, p.16). Elevated levels of burnout are determined by the high scores on both dimensions of Emotional Exhaustion and Depersonalization, with a low score on the Personal Accomplishment sub-scale. Maslach et al. (1996-2018) provided substantial evidence for the convergent and discriminant validity of MBI scores; furthermore, the Cronbach coefficients for the subscales were .90 for EE, .79 for DP, and .71 for PA.

We examined the validity of the MBI using: (a) EFA; the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .889 -after deleting item 14 and moving item 16 to the DP factor-, above the commonly recommended value of .60, and Bartlett's test of sphericity was significant ( $\chi^2 = 3.005E3$  with  $p < .001$ ). Moreover, initial eigenvalues indicated that the three factors explained 16.6% of the first factor (EE), 10.75% of the second factor (DP) of the variance, and 9.89% of the third factor (PA), respectively, and overall explained 37.24% of the total variance; (b) Criterion-related validity showed significant differences between

the adaptive and maladaptive perfectionist groups. Thus, Emotional Exhaustion and Depersonalization were higher among the maladaptive perfectionist group ( $p < .001$ ). While Personal Accomplishment was higher among the adaptive perfectionist group ( $p < .001$ ); and (c) Convergent validity was adopted in the pilot study sample and displayed a significant correlation between MBI and RSES. As a result, Emotional Exhaustion ( $r = -.31, p < .05$ ) and Depersonalization ( $r = -.46, p < .01$ ) were negatively correlated with RSES, while Personal Accomplishment ( $r = .29, p < .05$ ) was positively correlated with RSES (for details see: Ghanim, 2022). The reliability coefficients of MBI-HSS (MP) showed acceptable levels for all subscales EE, DP, and PA ( $\alpha = .89, .70$ , and  $.73$ , respectively) [See Table 2].

### **General Self-Efficacy Scale (GSE)**

The GSE was developed by Jerusalem and Schwarzer in 1979, and it includes ten items with four points on the Likert scale. The GSE scale was adapted to 26 languages. The score ranges from 10 to 40; higher scores indicate greater self-efficacy. The scale is unidimensional (Schwarzer & Jerusalem, 1995). Schwarzer and Jerusalem (1995) provided substantial evidence for the Criterion-related validity of GSE scores; moreover, the Cronbach coefficients for the scale ranged from .76 to .90.

The Validity of the GSE was examined using: (a) EFA, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .870, above the commonly recommended value of .60, and Bartlett's test of sphericity was significant ( $\chi^2 = 1.080E3$  with  $p < .001$ ). Moreover, initial eigenvalues indicated that the factor explained 31.52% of the total variance; (b) Criterion-related indicated significant differences between the adaptive and maladaptive perfectionist groups. Thus, general self-efficacy was higher among the adaptive perfectionist group ( $p < .001$ ); and (c) Convergent validity was adopted in the pilot study sample and displayed a significant and positive correlation between GSE ( $r = .53, p < .01$ ) and RSES (for details see: Ghanim, 2022). The reliability coefficient of GSE was ( $\alpha = .84$ ) [See Table 2].

### **Statistical Analyses**

Data was analyzed using SPSS software (version 23) and AMOS software (version 24). A sensitivity analysis was conducted using M-plus software (version 8) to determine the required sample size. The statistical

analysis revealed that a sample size of 350 was sufficient for detecting a medium effect size (0.4) of the moderation effect ( $\alpha = .05$ , power = .80). A bootstrapping method ( $n = 1000$ ) was employed to estimate the confidence interval and significance of the mediation.

### Ethics and Informed Consent

Permission was obtained from The Mind Garden for remote online use of the Maslach Burnout Inventory MBI-HSS (MP). Participants were requested to read and sign the online informed consent form. Voluntary participation and the right to stop and withdraw from the study at any time were emphasized. Furthermore, the confidentiality of the information was assured that it will be used solely for research purposes. Due to the nature of work during the pandemic, a feature of saving data and the ability to return and complete it later has been provided.

### Results

Table 2 displays the total sample's correlation coefficients among the study variables.

**Table 2**

*Cronbach Alpha and Pearson Correlations Among the Study Scales (N = 353)*

| Measures/<br>Variables | Number<br>of Items | $\alpha$ | 1      | 2       | 3       | 4       | 5      |
|------------------------|--------------------|----------|--------|---------|---------|---------|--------|
| <b>SAPS</b>            |                    |          |        |         |         |         |        |
| 1. Standards           | 4                  | .79      | --     |         |         |         |        |
| 2. Discrepancy         | 4                  | .75      | .113*  | --      |         |         |        |
| <b>MBI-HSS (MP)</b>    |                    |          |        |         |         |         |        |
| 3. EE                  | 9                  | .89      | .085   | .293**  | --      |         |        |
| 4. DP                  | 5                  | .70      | -.001  | .367**  | .615**  | --      |        |
| 5. PA                  | 8                  | .73      | .179** | -.239** | -.162** | -.251** | --     |
| 6. GSE                 | 10                 | .84      | .314** | -.184** | -.223** | -.183** | .348** |

*Note.* SAPS = Short Almost Perfect Scale, MBI = Maslach Burnout Inventory, EE = Emotional exhaustion, DP = Depersonalization, PA = Personal Accomplishment, GSE = General Self-Efficacy

\*\*  $p < .01$

$\alpha$ : Cronbach's alpha

The analysis revealed significant positive correlations between Standards and Discrepancy, leading to a predominant presence of maladaptive perfectionists among the participants ( $p < .05$ ). Conversely, positive correlations were found between Standards and Personal Accomplishment (PA). In contrast, no significant correlations were observed between Emotional Exhaustion (EE) and Depersonalization (DP). Moreover, significant positive correlations were identified between Discrepancy, EE, and DP, while a negative correlation was found with PA. Consequently, maladaptive perfectionism showed a positive association with burnout ( $p < .01$ ). Furthermore, the results indicated significant negative correlations between General Self-Efficacy (GSE), EE, and DP, while GSE positively correlated with PA. This suggests a negative relationship between burnout and self-efficacy ( $p < .01$ ). Table 3 further illustrates the correlation among the study variables for both adaptive and maladaptive perfectionism groups.

**Table 3**

*Pearson Correlations Among the Study Scales for Adaptive ( $N = 133$ , above diagonal) and Maladaptive ( $N = 220$ , above diagonal) Perfectionism Group*

| Measure             | 1      | 2      | 3      | 4      | 5       | 6       |
|---------------------|--------|--------|--------|--------|---------|---------|
| <b>SAPS</b>         |        |        |        |        |         |         |
| 1. Standards        | --     | -.001  | .092   | .041   | .040    | .125    |
| 2. Discrepancy      | .291** | --     | .121   | .152   | -.074   | -.181*  |
| <b>MBI-HSS (MP)</b> |        |        |        |        |         |         |
| 3. EE               | .089   | .233** | --     | .496** | -.164   | -.268** |
| 4. DP               | -.012  | .199** | .633** | --     | -.373** | -.157   |
| 5. PA               | .246** | -.057  | -.090  | -.114  | --      | .313**  |
| 6. GSE              | .410** | .035   | -.146* | -.107  | .308**  | --      |

*Note.* SAPS = Short Almost Perfect Scale, MBI = Maslach Burnout Inventory, EE = Emotional exhaustion, DP = Depersonalization, PA = Personal Accomplishment, GSE = General Self-Efficacy

\*  $p < .05$ , \*\*  $p < .01$

In the adaptive group, correlations between perfectionism and burnout tend to be weak and insignificant. However, in the maladaptive group, Standards significantly correlated with personal accomplishment, while Discrepancy

significantly correlated with emotional exhaustion and depersonalization. Moreover, Standards exhibited a significant correlation with self-efficacy in the maladaptive group, whereas Discrepancy showed a significant correlation with self-efficacy in the adaptive group. Regarding burnout, emotional exhaustion and personal accomplishments showed significant correlations with self-efficacy in both adaptive and maladaptive groups.

### Model Fit

Structural Equation Modeling (SEM) was conducted with 1000 bootstrapping resamples to evaluate the fit of the study's models (see Figure 1). Table 4 displays the goodness of fit results for the models examined in the current study.

**Table 4**

*Structural Equation Models' Goodness of Fit Summary*

| Model | $\chi^2$ | df | P    | CFI  | RMSEA | $\Delta\chi^2$ | $\Delta$ df | Sig? | $\Delta$ CFI | $\Delta$ RMSEA |
|-------|----------|----|------|------|-------|----------------|-------------|------|--------------|----------------|
| 1     | 11.35    | 5  | .045 | .953 | .070  | -              | -           | -    | -            | -              |
| 2     | 21.00    | 10 | .021 | .903 | .065  | 9.65           | 5           | No   | -0.05        | -0.005         |
| 3     | 23.44    | 13 | .037 | .908 | .056  | 2.44           | 3           | No   | +0.005       | -0.009         |
| 4     | 38.00    | 18 | .004 | .905 | .065  | 14.56          | 5           | Yes  | -.003        | +0.009         |

*Note.* Model 1: All data. Model 2: Adaptive/Maladaptive Groups. Model 3: Direct Effect Constrained. Model 4: Indirect Effect Constrained

**Model 1** incorporates all groups (adaptive and maladaptive) and demonstrates a good fit (Gadelrab, 2005; Hu & Bentler, 1999) with the data ( $\chi^2 = 12.35$  (5),  $p = .045$ ; CFI = .953, RMSEA = .070). Model 2 distinguishes between the adaptive and maladaptive perfectionism groups, yielding a model fit that is slightly inferior to Model 1 (as indicated by a positive  $\Delta$  CFI value) but generally good (no significant difference compared to Model 1,  $\Delta\chi^2 > .05$ ).

Furthermore, **Model 3** additionally constrained the direct effects of discrepancy to the three dimensions of burnout across the adaptive and maladaptive groups. Model 3 did not significantly differ from Model 2 (no significant difference compared to Model 2,  $\Delta\chi^2 > .05$ ). Consequently, these results indicated no differences between adaptive and maladaptive groups regarding direct effects.

In comparison, **Model 4** constrained the indirect effects across both groups to examine the varying impacts of indirect effects on adaptive and maladaptive groups. As indicated in Table 4, Model 4 significantly deviates from Model 3 ( $\Delta\chi^2 = 14.56$  (5),  $p < .001$ ). These findings suggest a differential role for self-efficacy within the adaptive and maladaptive perfectionism groups.

### The Differential Mediator Effect of Perceived Self-Efficacy

Table 5 presents the results of Model 3 (constant direct effects for both adaptive and maladaptive groups).

**Table 5**

*Unstandardized and Standardized, Direct and Indirect Effects of Model 3*

| Group<br>Parameter      | Adaptive         |                |       | Maladaptive      |                |        |
|-------------------------|------------------|----------------|-------|------------------|----------------|--------|
|                         | Unstand.<br>Est. | Stand.<br>Est. | P     | Unstand.<br>Est. | Stand.<br>Est. | P      |
| Discp --- > SE          | -0.382           | -0.221         | 0.032 | -0.103           | -0.074         | 0.287  |
| Stnd --- > SE           | 0.252            | 0.232          | 0.025 | 0.723            | 0.495          | > .001 |
| SE --- > EE             | -0.675           | -0.248         | 0.020 | -0.465           | -0.202         | 0.007  |
| SE --- > DP             | -0.143           | -0.099         | 0.419 | -0.235           | -0.141         | 0.062  |
| SE --- > PA             | 0.402            | 0.273          | 0.019 | 0.515            | 0.316          | > .001 |
| Discp --- > EE          | 0.471            | 0.100          | 0.030 | 0.471            | 0.148          | 0.030  |
| Discp --- > PA          | -0.220           | -0.086         | 0.132 | -0.220           | -0.097         | 0.132  |
| Discp --- > DP          | 0.303            | 0.121          | 0.046 | 0.303            | 0.132          | 0.046  |
| Discp --- > SE --- > EE | 0.257            | 0.055          | 0.038 | 0.048            | 0.015          | 0.341  |
| Discp --- > SE --- > PA | -0.153           | -0.060         | 0.043 | -0.053           | -0.023         | 0.343  |
| Discp --- > SE --- > DP | 0.055            | 0.022          | 0.508 | 0.024            | 0.011          | 0.377  |
| Stnd --- > SE --- > EE  | -0.170           | -0.058         | 0.029 | -0.336           | -0.100         | 0.002  |
| Stnd --- > SE --- > PA  | 0.101            | 0.063          | 0.035 | 0.372            | 0.156          | 0.002  |
| Stnd --- > SE --- > DP  | -0.036           | -0.023         | 0.491 | -0.170           | -0.070         | 0.051  |

*Note.* Unstand. Est.= Unstandardized Estimates, Stand. Est. = Standardized Estimates, SE = Self-Efficacy, Discp = Discrepancy, Stand = Standards, EE = Emotional Exhaustion, DP = Depersonalization, PA = Personal Accomplishment

As shown in Table 5, the discrepancy to the self-efficacy effect was negative in both adaptive and maladaptive groups. However, it was significant in the adaptive ( $B=-0.382$ ,  $p=0.032$ ) group, while it was insignificant in the maladaptive ( $B=-0.103$ ,  $p=0.287$ ). On the other hand, the standards to the self-efficacy effect were positive and significant in both adaptive ( $B=0.252$ ,  $p=0.025$ ) and maladaptive ( $B=0.723$ ,  $p<.001$ ) groups.

Self-efficacy to emotional exhaustion effect was negative and significant in adaptive ( $B=-0.675$ ,  $p=0.020$ ) and maladaptive ( $B=-0.465$ ,  $p=0.007$ ) groups. Likewise, the self-efficacy to personal accomplishment effect was positive and significant in adaptive ( $B=0.402$ ,  $p=0.019$ ) and maladaptive ( $B=0.515$ ,  $p>.001$ ) groups. In comparison, self-efficacy to depersonalization effect was insignificant in both adaptive ( $B=-0.143$ ,  $p=0.419$ ) and maladaptive ( $B=-0.235$ ,  $p=0.062$ ) groups.

The indirect effect of discrepancy to both emotional exhaustion and personal accomplishment through self-efficacy was significant ( $p < .05$ ) in the adaptive group but not significant ( $p > .05$ ) in the maladaptive group. Conversely, the indirect effect of discrepancy to depersonalization through self-efficacy was insignificant in both adaptive and maladaptive groups. On the other hand, the indirect effect of standards on emotional exhaustion and personal accomplishment through self-efficacy was significant in both the adaptive and maladaptive groups. However, the indirect effect of standards to depersonalization through self-efficacy was insignificant in either group. These results support the study's hypothesis that self-efficacy plays a significant indirect role in the relationship between perfectionism and burnout among healthcare professionals, particularly during the challenging times of the COVID-19 pandemic. Furthermore, the current findings demonstrate that this indirect effect of self-efficacy depends on the perfectionism group, thus highlighting the distinct role of self-efficacy in the relationship between perfectionism and burnout among healthcare professionals during the COVID-19 pandemic within the adaptive and maladaptive perfectionism groups.

## Discussion

As hypothesized, self-efficacy had a significant indirect effect on the relationship between perfectionism and burnout among healthcare professionals during the COVID-19 pandemic. Our mediation path analysis

test confirmed that perceived self-efficacy was crucial in differentiating between adaptive and maladaptive perfectionism. It influenced the indirect relationship between perfectionism and burnout. In our study, the Discrepancy dimension was particularly significant in distinguishing between the adaptive and maladaptive groups (Rice et al., 2014; Slaney et al., 2001). We found that the Standards dimension did not have a differential role in the indirect effect among adaptive and maladaptive perfectionists through self-efficacy, as all participants were high on Standards to be classified as perfectionists. However, Discrepancy significantly differed in determining whether the participants were adaptive or maladaptive. Therefore, the higher the Discrepancy score in the adaptive group, the greater the physician burnout level. Conversely, in the maladaptive group, the sensitivity to an increase in the Standards score lead to increased burnout levels through the Emotional Exhaustion and Personal Accomplishment dimensions. Notably, Depersonalization in the current study was not correlated in both groups. These findings have important implications for interventions to support the well-being of physician, particularly during the COVID-19 pandemic, by emphasizing the need to address maladaptive perfectionism and enhance self-efficacy.

These findings were partially consistent with previous studies that found no correlation between perfectionism or self-efficacy and Depersonalization dimension (Badawy & Mohamad, 2015; Li et al., 2014; Makara-Studzińska et al., 2021), while other studies found significant correlations between the study variables and Depersonalization (Bayani & Bagheri, 2020; Chung, 2016; Craiovan, 2014; Koonce, 2014; Newman, 2012). Furthermore, the results showed that the association between self-efficacy and adaptive perfectionism was positive and more robust when compared to the correlation among the maladaptive perfectionism group. These findings were consistent with some studies (Ahn & Kim, 2006; Andrews et al., 2014). On the other hand, Xiao et al. (2020) found a significant relationship between self-efficacy and adaptive perfectionism, but not in the maladaptive group. Finally, Matlon (2014) found no significant relationship between self-efficacy and adaptive and maladaptive perfectionism.

This result can be attributed to physicians being socially motivated to achieve perfection as a societal demand (Yu et al., 2016). Specifically, perfectionism is related to self-efficacy, which determines self-ability

and self-confidence (Ahn & Kim, 2006). Thus, physicians' burnout risk increases when maladaptive perfectionism increases, and self-efficacy decreases. In other words, physicians with maladaptive perfectionism are at considerable risk of developing burnout. On the other hand, self-efficacy plays a crucial role as a psychological resource for rehabilitation in reducing burnout symptoms (Bandura, 1994). Accordingly, Yu et al. (2016) proposed that physicians' perfectionist tendencies do not directly lead to burnout but can negatively affect self-efficacy, thus exacerbating burnout symptoms. Moreover, Hewitt and Flett (1991) suggested that adaptive perfectionists are overly concerned with criticism and expectations from others and fear of making mistakes, creating an adverse emotional experience when facing stress. Physicians face daily stressful events without a preventive approach, so burnout appears to be a common and stressful experience in the medical field. Thus, according to Lazarus and Folkman (1984), perfectionists can develop positive cognitive appraisals and effective coping styles to enhance self-efficacy in response to everyday stress (as cited in Chang, 2012).

Additionally, the present findings support the results of previous literature on the direct relationship between adaptive, maladaptive perfectionism and burnout among physicians (Badawy & Mohamad, 2015; Chang, 2012; Collin et al., 2020; Craiovan, 2014; Robakowska et al., 2018), as well as the proposed mediator role (the indirect effect) of self-efficacy (Yu et al., 2016). However, Matlon (2014) did not support the indirect effect of self-efficacy on the relationship between perfectionism and burnout. Nevertheless, previous literature had demonstrated the role played by other intermediate variables, such as self-esteem (Deuling & Burns, 2017), self-control (Achtziger & Bayer, 2012), coping (Chung, 2016; Gnilka et al., 2017; Li et al., 2014), emotion-focused coping (Chang, 2012), religious coping (Badawy & Mohamad, 2015), equity sensitivity (Koonce, 2014), and team workplace friendship (Chang et al., 2016), in the relationship between perfectionism and burnout.

Furthermore, our findings were partially consistent with previous literature. Yu et al. (2016) indicated that socially prescribed perfectionism and academic self-efficacy could explain 54% of the predictive power for academic burnout. They also revealed that academic self-efficacy partially mediated the relationship between socially prescribed perfectionism and academic burnout among medical school students in Korea (Yu et al.,

2016). Robakowska et al. (2018) found that a low level of maladaptive perfectionism was a significant predictor of an elevated level of exhaustion among medical laboratory scientists. Jarrett (2018) also indicated that the relationships between maladaptive perfectionism and self-compassion predicted burnout among medical students. Spagnoli et al. (2021) conducted a longitudinal two-wave cross-study and showed that perfectionistic concerns play a predictive role in burnout, while burnout was not associated with perfectionistic strivings. Cabell (2021) proposed that exacting standards and avoidant coping changes explained 16% of the variance in work-related burnout among residential employees. On the other hand, Al-Gharib (2014) suggested that self-efficacy was the most independent variable that predicted burnout among government schoolteachers. In contrast, Matlon (2014) indicated that self-efficacy, maladaptive perfectionism, and adaptive perfectionism levels did not predict overall burnout levels among licensed clinical psychologists.

It is worth noting that studies have intensified during the past few years to explore the impact of the COVID-19 pandemic on medical health service providers. Therefore, some studies examined the relationship between stress and burnout among physicians during COVID-19 (Algunmeeyn et al., 2020; Hafiz, 2020; Vagni et al., 2020). For instance, Algunmeeyn et al. (2020) showed that most caregivers working in the COVID-19 sections in Jordanian hospitals suffered from job stress, fear, and anxiety because of the lack of information about the disease and treatment, besides the fear of spreading and transmitting the disease to their families. In comparison, Hafiz (2020) found a significant positive correlation between work stressors and psychological burnout among male and female doctors in Egypt; however, there was a significant negative correlation between problem-solving skills, work stressors, and burnout in both genders. Vagni et al. (2020) revealed that the group of healthcare workers dealing with COVID-19 patients had higher levels of stress and tension than those in an emergency section. Female professionals with more than ten years of work experience had higher levels of anxiety, depression, stress, and insomnia than their male counterparts among 121 healthcare and 89 emergency workers in Italy.

To conclude, personal cognitive appraisal of stress experiences can lead to burnout symptoms as it influences how they cope with stress and interpret and assess information about the external environment (Chang,

2012). Therefore, the cognitive process plays a crucial role in behavioral reactions and how individuals respond (Cano-García et al., 2005). Moreover, burnout is commonly associated with perfectionists and highly motivated individuals. When the level of professional expectation is high, emotional exhaustion intensifies and persists, resulting in negative feelings such as anxiety, depression, and stress (Aliyev & Tunc, 2015). However, perfectionists can develop effective adaptation mechanisms to manage tasks and conflicts effectively, and understanding these mechanisms can contribute to improved job performance and the prediction of self-efficacy (Deuling & Burns, 2017). Self-efficacy beliefs are instrumental in determining adaptive behavior, exerted effort, and the ability to overcome difficult obstacles and challenges. They reflect an individual's ability to control a challenging environment by implementing coping strategies and increasing optimism and self-confidence in dealing with the various life stressors (Scholz et al., 2002). Furthermore, accumulating theoretical and empirical evidence demonstrates a positive correlation between burnout and maladaptive perfectionism (Badawy & Mohamad, 2015; Cabell, 2021; Chang et al., 2016; Craiovan, 2014; Gnilka et al., 2017; Holden & Jeanfreau, 2021; Rice & Liu, 2020); while negatively correlated with self-efficacy (Aliyev & Tunc, 2015; Hou et al., 2020; Jaljal et al, 2019; Newman, 2012). Therefore, previous research findings suggest that higher levels of maladaptive perfectionism increase the risk of burnout, whereas higher levels of adaptive perfectionism decrease the risk by improving self-efficacy skills (Chang, 2012; Newman, 2012). These findings contribute to the existing literature by providing an accurate understanding of the role of self-efficacy in the relationship between perfectionism and burnout among healthcare professionals, particularly during such exceptional circumstances.

## **Limitations**

The study has several limitations that warrant consideration. Firstly, data collection via the Internet was advantageous in reaching a vast pool of participants at minimal cost. However, it introduced challenges in verifying the validity of respondent data. To address this concern, participants were invited using personal communication contacts and social media credited accounts (e.g., Twitter, Instagram, and WhatsApp). Besides, responses originating from outside Kuwait were excluded based on the QuestionPro software respondent map.

Additionally, self-report measures facilitated efficient data collection directly from respondents, although this approach may be susceptible to social desirability bias, potentially skewing responses towards more favorable representations. We administered measures in the original language and relied on reliable and valid measures to reduce the impact of this problem.

Furthermore, the study relied on a convenience sample, limiting the generalizability of findings to a broader population. However, we believe that the characteristics of the current sample were not significantly different from those of any other random sample of physicians in Kuwait during the COVID-19 pandemic.

### **Implications for Future Research**

Despite these limitations, the study generates valuable insights on the direct relationships between perfectionism, burnout, and self-efficacy, as well as the mediating role of self-efficacy in the relationship between adaptive and maladaptive perfectionism and burnout amidst a crisis. These findings have practical implications for therapeutic interventions, highlighting the importance of enhancing self-efficacy to mitigate burnout, particularly among individuals with maladaptive perfectionist tendencies.

Future research avenues could explore additional variables, such as the impact of social support, psychological resilience, or perceptions of justice, as potential mediators in the perfectionism-burnout relationship. Additionally, investigating the role of self-efficacy in mediating the relationship between perfectionism and productivity or coping strategies and burnout could provide further insights. Replicating the study with a more extensive and diverse sample of physicians and healthcare professionals post-pandemic would enable the comparison of findings across different contexts, confirming the observed direct and indirect relationships among variables.

### **Conclusion**

In conclusion, healthcare providers in the medical field encounter various stressors and challenges, leading to increased symptoms of burnout. This study employed structural equation modeling to elucidate the role of perceived self-efficacy as a crucial mediator in the relationship between adaptive and maladaptive perfectionism and burnout among physicians in Kuwait. The analysis supported the hypothesized connections among the

study variables. Maladaptive perfectionism was found to be significantly associated with heightened symptoms of burnout. Furthermore, adaptive perfectionism appeared to mitigate vulnerability to burnout symptoms through the pathway of self-efficacy, functioning as a positive cognitive appraisal mechanism. Therefore, perceived self-efficacy plays a pivotal role in distinguishing between adaptive and maladaptive perfectionism, influencing the indirect relationship between perfectionism and burnout. These implications highlight the practical relevance of our research and the need for effective interventions to promote the well-being of physicians. These findings offer valuable insights into potential interventions to understand and alleviate burnout among perfectionist healthcare providers. In this context, the findings of our study can be considered relevant and crucial. They provide insights into the psychological factors that can influence the well-being of healthcare professionals during such demanding times, emphasizing the immediate need for interventions to support their mental health. By comprehending the impact of perceived self-efficacy, healthcare organizations can implement strategies to support and enhance the well-being of their staff.

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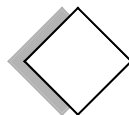
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