Self-perceived health in psychiatrists and psychiatry trainees. The role of perfectionism and distress

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Introduction. Self-perceived health (SPH) is related to disease and well-being. Psychiatrists report burnout and mental disorders more frequently than other physicians, while personality traits related to perfectionism may influence the perception of well-being and health in these professionals. Objective. To compare and determine the association between demographic variables, health conditions, perceived distress, perfectionism, and SPH. Method. A cross-sectional, retrospective, comparative study was performed through an online survey. Psychiatrists and psychiatry trainees who were willing and able to participate were included. Demographic variables and self-reports of mental and physical conditions were examined. SPH was rated on a 10-point visual analogue scale and perfectionism through the Multidimensional Perfectionism Scale. Comparative analyses and multiple linear regression models were performed. Results. Three hundred and thirty psychiatry trainees and 355 psychiatrists were recruited. Psychiatrists reported more physical conditions (32.4% vs. 15%, p < .001), distress (p < .001), and perfectionism (p < .001). Major depression and anxiety were present over 50% of all participants. A higher SPH was associated with being partnered and having higher distress levels in psychiatry trainees and with the absence of a physical health condition, less concern over errors, and higher personal standards in psychiatrists. Discussion and conclusion. Self-oriented perfectionism may have a significant motivational component, accentuated by competitiveness and individualism. Being married and having higher levels of distress in psychiatry trainees appears to create a sense of satisfaction with achievements. The implementation of strategies to prioritize and meet goals is necessary to have an adequate work-life balance without affecting personal satisfaction or the sense of achievement.

Keywords: Self-perceived health, psychiatry, well-being, perfectionism.

ABSTRACT

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RESUMEN

Introducción. La autopercepción de la salud (APS) se relaciona con enfermedad y bienestar. Los psiquiatras reportan desgaste emocional y trastornos mentales con mayor frecuencia que otros médicos. El perfeccionismo puede influir en la percepción de la salud en estos profesionistas. Objetivo. Comparar y determinar la asociación de variables demográficas, condiciones de salud, distrés y perfeccionismo con la APS. Método. Se realizó un estudio transversal, retrospectivo y comparativo mediante una encuesta en línea. Se incluyeron psiquiatras y residentes de psiquiatría que participaron voluntariamente. Se registraron variables demográficas, enfermedades médicas y psiquiátricas (autoinforme). La APS se evaluó con una escala análogico-visual de 10 puntos y el perfeccionismo con la Escala Multidimensional de Perfeccionismo. Se realizaron análisis comparativos y modelos de regresión lineal múltiple. Resultados. Se reclutaron 330 residentes y 355 psiquiatras. Los psiquiatras reportaron más enfermedades físicas (32.4% vs. 15%, p < .001), distrés (p < .001) y perfeccionismo (p < .001). Más del 50% de los participantes reportaron ansiedad y depresión. Una mayor APS se asoció con tener pareja y mayor distrés en los residentes, y con la ausencia de una enfermedad física, menor preocupación por errores y mayores estándares personales en los psiquiatras. Discusión y conclusión. El perfeccionismo orientado hacia sí mismo puede tener un componente motivacional acentuado por la competitividad y el individualismo. Tener una pareja y presentar mayor distrés en los residentes pudiera crear una sensación de satisfacción por logros. La creación de estrategias para priorizar y alcanzar objetivos es necesaria para tener un equilibrio de vida sin afectar la satisfacción personal y la sensación de logro.

Palabras clave: Autopercepción de salud, psiquiatría, bienestar, perfeccionismo.
INTRODUCTION

The shortage of psychiatrists in Mexico, 3.7 for every 100,000 inhabitants (Heinze, Bernard-Fuentes, Carmona-Huerta, Chapa, & Guízar-Sánchez, 2019), makes their health and well-being a significant public health issue and a key subject for the research and development of preventive measures. In this context, self-perceived health (SHP), a composite assessment of physical and mental health, which encompasses the ability to function in physical, social, and psychological contexts, has predictive capacity for an array of health outcomes including health service use, the presence of a disease, social and psychological well-being, healthy lifestyles (prevention), and mortality (Weerdesteijn et al., 2019). SHP can also identify health problems that may not be detected by morbidity or mortality surveillance (Moriarty, Zack, & Kobau, 2003). Some authors even propose physicians' well-being as an indicator of the quality of a health system, since diminished well-being coupled with burnout and a poor work-life balance, frequently reported by physicians, contribute to serious health problems in physicians (such as substance abuse, depression, anxiety, and suicide), worsening projections of physician health shortages, increased medical errors, declining patient satisfaction, physician turnover, and decreased productivity (Yester, 2019).

The World Health Organization points out that health is not merely the absence of disease or infirmity, and includes well-being (Yester, 2019), a concept that includes other physiological and psychological determinants. Psychiatrists face a high risk of diminished personal well-being, including burnout, distress, compassion fatigue, and vicarious trauma. In terms of burnout prevalence, these specialists appear to be halfway between the most and least affected medical specialties (Rostenstein et al., 2018; Rostenstein, Hudaib, Facey, & Kulkarni, 2019). Nevertheless, rates of emotional exhaustion (Rostenstein et al., 2018) and distress may be higher. In a study by Korkeila et al. (2003), psychiatrists reported burnout, threat of severe burnout, depression, and mental disorders more often than other physicians, and “good” or “rather good” self-perceived health less often. Tyssen et al. (2019) reported that workload and emotional commitment were the main factors explaining the mental health of psychiatry trainees.

SHP is related to socio-demographic features such as age, sex, social roles, marital status, educational level, and socio-economic status, as well as health-related behaviors, mental health, peer/family support, and social environment. In addition, personality traits have been shown to influence one’s perception of well-being and health (Cloninger & Zohar, 2011). In particular, neurotic perfectionism in graduate students, reflected in attempts to be impeccable, with unachievable goals and fear of judgment by others, correlates negatively with psychological well-being and positively with distress. The pathological consequences of perfectionism include affective disorders, anxiety disorders, eating disorders, and suicide (Curran & Hill, 2019). To our knowledge, there are no studies of the impact of perfectionism on SHP in a high-risk population such as psychiatrists and psychiatry trainees. Understanding this relationship can help promote health and reduce distress and disability (Cloninger, 2006).

Given this information, the objective of the present study was to compare demographic variables, health conditions, perceived distress, and perfectionism among psychiatry trainees and psychiatrists, and to determine which of these variables were associated with SHP in both groups.

METHOD

Design of the study

The present study was a cross-sectional, retrospective comparative study performed through an online survey.

Participants

The study included psychiatrists and psychiatry trainees from Mexico who were willing and able to participate. The objectives and procedures of the study were explained at the beginning of the online survey and anonymity of the information was granted. Those who agreed to participate proceeded to complete the online survey. Recruitment was undertaken in 2018.

Assessment

For the present study, specific sections of the online survey described below were used.

First, demographic information including the following variables: age, sex, and marital status was collected. For psychiatry trainees, the year of the medical specialty being studied at the time of answering the survey was included. Second, participants were asked about the presence of any physical health condition (grouped into respiratory, endocrine, renal, cardiovascular, gastrointestinal, neurological, musculoskeletal, and other) or mental disorder (major depression, anxiety disorders, and burnout) they might have. Participants were asked to evaluate their self-perceived health on a 10-point visual analogue scale, where “0” reflects the worst perceived state of health and “10” the best. Perceived distress was also assessed on a 10-point visual analogue scale, where participants were asked to rate their current level of distress on a scale from 0 to 10, where “0” reflects not having distress at all and “10,” the maximum perceived distress. Finally, perfectionism was assessed through the Multidimensional Per-
fectionism Scale (MPS-F) (Frost, Heimberg, Holt, Mattia, & Neubauer, 1993) validated in a Mexican population (Franco Paredes, Mancilla-Díaz, Álvarez Rayón, Vázquez Arévalo, & López Aguilar, 2010). The MPS-F comprises 35 self-reported items answered on a Likert agreement scale (totally disagree-1, totally agree-5) that evaluates five main dimensions of perfectionism: Concern for errors (CE), Organization (O), Indecision of action (IA), Personal standards (PS), and Expectations (E). Items in the Expectations dimensions were rewritten to assess the expectations of others about being a psychiatrist. Higher scores reflect higher perfectionism.

**Procedure**

Psychiatrists and psychiatry trainees known to the researchers responsible for the study were invited to participate by email. This email included information on the objective and methods of the study as well as the statement of confidentiality. Subjects were also asked to invite other colleagues in Mexico to participate by sending the mail with the online survey link.

**Statistical analysis**

Analyses were performed using SPSS Statistics 21. Bivariate analyses for comparisons between psychiatry trainees and psychiatrists were performed using chi-square tests ($\chi^2$) for categorical variables and independent sample Student’s $t$ tests for continuous variables. Multiple linear regression models using the backward conditional method were conducted, one for psychiatry trainees and another for psychiatrists. Each model included demographic, health conditions, perceived distress, and perfectionism as explanatory variables and SPH as the outcome variable. $\beta$-coefficients were used as an effect size measure of the variables with the highest association with SPH. The significance level for all tests was established at $p < .05$.

**Ethical considerations**

The Ethics and Research Committees of the Instituto Nacional de Psiquiatría Ramón de la Fuente Muñiz (INPRFM) approved the study (09-CEI-010-20170316). All subjects took part on a voluntary basis and were not remunerated for their participation in the study.

### Table 1

**Physical and mental self-reported health conditions, SHP, distress and perfectionism dimensions between psychiatrists and psychiatry trainees**

| Physical and mental self-reported health conditions (n, %) | Total (n = 685) | Psychiatry trainees (n = 330) | Psychiatrists (n = 355) | Statistics |
|-----------------------------------------------------------|-----------------|-----------------------------|-------------------------|------------|
| Any physical health condition – Yes                       | 161 (23.5)      | 46 (13.9)                   | 115 (32.4)              | $\chi^2 = 32.3, p < .001$ |
| Respiratory – Yes<sup>a</sup>                             | 31 (19.3)       | 8 (17.4)                    | 23 (20.0)               | $\chi^2 = .1, p = .70$   |
| Endocrine – Yes<sup>a</sup>                               | 53 (32.9)       | 15 (32.6)                   | 38 (33.0)               | $\chi^2 = 0.003, p = .95$ |
| Renal – Yes<sup>a</sup>                                   | 3 (1.9)         | 2 (4.3)                     | 1 (9)                   | $\chi^2 = 2.1, p = .14$  |
| Cardiovascular – Yes<sup>b</sup>                           | 36 (22.4)       | 7 (15.2)                    | 29 (25.2)               | $\chi^2 = 1.8, p = .16$  |
| Gastrointestinal – Yes<sup>b</sup>                        | 26 (16.1)       | 8 (17.4)                    | 18 (15.7)               | $\chi^2 = .07, p = .78$  |
| Neurological – Yes<sup>b</sup>                            | 8 (5.0)         | 3 (6.5)                     | 5 (4.3)                 | $\chi^2 = .3, p = .56$   |
| Musculoskeletal - Yes<sup>b</sup>                          | 27 (16.8)       | 8 (17.4)                    | 19 (16.5)               | $\chi^2 = .01, p = .89$  |
| Other - Yes<sup>a</sup>                                   | 20 (12.4)       | 6 (13.0)                    | 14 (12.2)               | $\chi^2 = .02, p = .88$  |
| Any mental health condition - Yes                         | 459 (67.0)      | 218 (66.1)                  | 241 (67.9)              | $\chi^2 = .2, p = .61$   |
| Depression – Yes<sup>b</sup>                              | 344 (67.3)      | 167 (66.0)                  | 177 (68.6)              | $\chi^2 = .3, p = .53$   |
| Anxiety – Yes<sup>b</sup>                                 | 318 (62.2)      | 166 (65.6)                  | 152 (58.9)              | $\chi^2 = 2.4, p = .11$  |
| Burnout – Yes<sup>b</sup>                                 | 218 (42.7)      | 100 (39.5)                  | 118 (45.7)              | $\chi^2 = 2.0, p = .15$  |
| Self-perceived health (mean; SD)                          | 68.9 ± 26.7     | 60.6 ± 30.1                 | 76.6 ± 20.3             | $t = -8.1, p < .001$     |
| Perceived distress (mean; SD)                             | 48.3 ± 29.2     | 53.2 ± 27.8                 | 43.8 ± 29.8             | $t = 4.2, p < .001$      |

**Multidimensional Perfectionism Scale (MPS-F) (Mean ± SD)**

| Concern for errors                                      | 23.6 ± 8.6      | 24.7 ± 9.0                  | 22.6 ± 8.2              | $t = 3.2, p = .001$      |
| Organization                                            | 23.5 ± 4.1      | 23.5 ± 4.1                  | 23.4 ± 4.1              | $t = .2, p = .79$        |
| Indecision of action                                    | 12.3 ± 4.2      | 13.0 ± 4.4                  | 11.6 ± 3.9              | $t = 4.5, p < .001$      |
| Personal standards                                      | 13.0 ± 2.9      | 13.0 ± 2.9                  | 13.0 ± 2.9              | $t = -3, p = .72$        |
| Expectations                                            | 11.4 ± 3.6      | 11.6 ± 3.5                  | 11.2 ± 3.7              | $t = 1.4, p = .14$       |
| Total                                                   | 83.9 ± 17.6     | 86.0 ± 18.4                 | 82.0 ± 16.6             | $t = 3.0, p = .003$      |

Notes: <sup>a</sup> n = 161 of those who reported physical health conditions. <sup>b</sup> n = 459 of those who reported mental health conditions.
RESULTS

Sample description

A total of 330 (48.2% of the total sample) of psychiatry trainees and 355 (51.8% of the total sample) psychiatrists were recruited. As expected, psychiatrists were older (mean age 42.1 years, $SD = 11.3$) than psychiatry trainees (mean age 28.4 years, $SD = 2.1$). A similar proportion of men (47.0%, $n = 155$ for residents and 49.3%, $n = 175$ for psychiatrists) and women (53.0%, $n = 175$ and 50.7%, $n = 180$, respectively; $p = .54$) were included and a higher proportion of psychiatrists were married or partnered (57.2%, $n = 203$) than psychiatry trainees (7.0%, $n = 23$; $\chi^2 = 195.5, p < .001$). In the group of psychiatry trainees, 36.1% ($n = 119$) were in the first year of their specialty, 28.8% ($n = 95$) in the second, 29.4% ($n = 97$) in the third, and 5.8% ($n = 19$) in the fourth year of their psychiatric training.

Self-reported physical and mental health conditions

Less than 15% of psychiatry trainees (13.9%, $n = 46$) and almost one third of psychiatrists (32.4%, $n = 115$; $\chi^2 = 32.3, p < .001$) reported having a physical condition at the time of the study. Endocrine disorders were the most common in both groups, followed by respiratory conditions in psychiatry trainees and cardiovascular conditions in psychiatrists (Table 1). Also, as can be seen in Table 1, over half the participants in both groups reported having a mental condition, with major depression being the most common in both groups. SPH was lower in psychiatry trainees as was their perceived distress compared with those of psychiatrists.

Perfectionism in psychiatry trainees and psychiatrists

The comparisons of the five dimensions of the MPS-F are shown in Table 1. Psychiatry trainees obtain higher scores, reflecting higher perfectionism features in the dimensions Concern for errors and Indecision of action compared with psychiatrists, while no differences were observed between groups in the remaining dimensions.

Variables related to self-perceived health in psychiatry trainees and psychiatrists

Both linear regression models (for psychiatry trainees and psychiatrists) included demographic, health conditions, perceived distress, and perfectionism dimensions. For each group, different variables were associated with SPH. For psychiatry trainees (Table 2), the most important variable associated with better SPH was being married/partnered. At the same time, a higher level of distress was associated with better SPH in this group.

On the other hand, as can be seen in Table 3, for the group of psychiatrists, having a physical health condition and higher scores in the perfectionism dimension Concern for errors was associated with worse SPH. Moreover, higher scores in the perfectionism dimension Personal standards were associated with better SPH in this group.

| Table 2 | Linear regression model for low self-perceived health in psychiatry trainees |
| --- | --- | --- | --- |
| **Initial regression model** | Effect Size | Confidence Interval 95% | Significance |
| Sex | 2.3 | -4.3 – 9.0 | .48 |
| Marital status | 17.1 | 4.5 – 29.7 | .008 |
| Age | -0.9 | -1.5 – 1.4 | .90 |
| Any physical health condition | 8.1 | -1.1 – 17.5 | .08 |
| Any mental health condition | 4.3 | -2.9 – 11.7 | .24 |
| Perceived distress | .1 | .07 – 0.3 | .002 |
| MPS-F Concern for errors | -.2 | -.8 – 0.3 | .47 |
| MPS-F Organization | .09 | -.7 – 0.9 | .82 |
| MPS-F Indecision of action | -.07 | -.11 – 1.0 | .89 |
| MPS-F Personal standards | .5 | -.8 – 2.0 | .43 |
| MPS-F Expectations | -.3 | -1.6 – 0.9 | .59 |
| **Final regression model** | Effect Size | Confidence Interval 95% | Significance |
| Marital status | 17.0 | 4.5 – 29.4 | .007 |
| Any physical health condition | 8.5 | -.5 – 17.7 | .06 |
| Perceived distress | .2 | 1.0 – 3.3 | <.001 |
DISCUSSION AND CONCLUSION

The aim of the present study was to compare demographic variables, health conditions, perceived distress, and perfectionism between psychiatry trainees and psychiatrists, and to determine which of these variables were associated with self-perceived health in both groups. The study shows that the most important factors related to a better SPH were perceived distress and being partnered for psychiatry trainees; for psychiatrists, not having a physical health condition, lower concern for errors, and higher personal standards were related to better SPH.

In both psychiatrists and psychiatry trainees, perfectionism was high in our sample and found to play an important role in self-perceived health. Perfectionism involves anxiety over making mistakes and the pursuit of high standards, which are often unrealistic, leading to excessive work and frustration over not meeting one’s goals (Curran & Hill, 2019). When perfectionism is directed toward the self, individuals attach irrational importance to being perfect and may be punitive in their self-evaluations (self-oriented perfectionism) (Hewitt & Flett, 1991). When perfectionism standards are set by others, individuals believe or perceive that others demand perfection from them, and therefore press themselves to meet unattainable standards, believing their social context is excessively demanding, that others judge them harshly, and that they must display perfection to secure approval (socially prescribed perfectionism) (Hewitt & Flett, 1991).

Self-oriented perfectionism has an important worthwhile motivational component, accentuated by competitiveness and individualism, with the aim of avoiding failure and achieving the perfect lifestyle (reflected in achievement and socio-economic status) first through educational achievement and subsequently professional achievement. This is often associated with apparently adaptive behaviors that link self-esteem with achievement and conceal the vulnerability to motivational and psychological difficulties that may arise (Curran & Hill, 2019). Furthermore, the perception of social perfectionism may be chronic and debilitating, both physically and emotionally, as the perceived expectations of others are experienced as uncontrollable, excessive, and sometimes unjust and unattainable. This can lead to enormous physical effort (neglect of healthy lifestyle habits or ignoring the physical signs of a possible emerging disease), as well as frequent experiences of failure and negative emotional states (Curran & Hill, 2019).

Perfectionism has also been linked to increased somatic expressions of anxiety and increased severity of physical problems - when present - that could affect SPH (Molnar, Sadava, Flett, & Colautti, 2012). Studies on the association between perfectionism and physical health have provided evidence of a direct link, relating it to a worse perception of health in university students (Hadjistavropoulos, Dash, Hadjistavropoulos, & Sullivan, 2007) and adults in the general population (Molnar et al., 2012). In turn, it is considered a predictor of increased disease symptoms over time (Pritchard, Wilson, & Yamin, 2007; Saboonchi & Lundh, 2003) and of mortality, even when taking other health-related variables into account, such as age, satisfaction with social support, and number of visits to the doctor (Fry & DeBats, 2009).

It has been suggested that distress may represent a pathway linking perfectionism to physical health. Flett, Baricza,

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**Table 3**

Linear regression model for self-perceived health in psychiatrists

|                          | Effect Size | Confidence Interval 95% | Significance |
|--------------------------|-------------|--------------------------|--------------|
| **Initial regression model** | Goodness-of-fit, adjusted $R^2 = .096$ | | |
| Sex                      | -2.5        | -6.8 – 1.6               | .23          |
| Marital status           | 1.2         | -2.9 – 5.4               | .55          |
| Age                      | -0.05       | -2 – .1                 | .60          |
| Any physical health condition | -9.3        | -13.8 – -4.8             | <.001        |
| Any mental health condition | .4         | -4.2 – 5.1               | .84          |
| Perceived distress       | .02         | -0.4 – 0.9               | .46          |
| MPS-F Concern for errors | -.5         | -1.0 – 0.1               | .009         |
| MPS-F Organization       | .1          | 0.3 – 0.7                | .52          |
| MPS-F Indecision of action | -0.3         | -1.1 – -.3              | .32          |
| MPS-F Personal standards | 1.1         | .3 – 2.0                | .01          |
| MPS-F Expectations       | -.1         | -.9 – .5                | .65          |
| **Final regression model** | Goodness-of-fit, adjusted $R^2 = .10$ | | |
| Any physical health condition | -9.2        | -13.5 – -4.9            | <.001        |
| MPS-F Concern for errors | -.7         | -1.0 – -.4              | <.001        |
| MPS-F Personal standards | 1.2         | .4 – 2.0                | .002         |
Gupta, Hewitt, and Endler (2011) argued that perfectionists are more vulnerable to exposure to distress because it violates their high desire for control. Perfectionism can be particularly damaging to psychiatrists, since they use themselves as “tools” in their profession and the doctor-patient relationship itself evokes emotions such as the need to rescue the patient, a sense of failure and frustration. When the patient’s disease progresses or does not respond to treatment, feelings of helplessness in the face of the disease and its associated losses, pain, and fear of getting sick may arise or become worse (Kumar, 2007). In comparison with psychiatrists, radiologists, for example, who may want to improve their diagnostic accuracy, use an external element, not related to themselves, by looking for high definition images. Therefore, efforts to help psychiatrists maintain realistic goals and learn how to deal with performance anxiety are essential.

Research among college students has found that self-directed perfectionism is associated with mental and physical illnesses (such as depression, anxiety, anorexia nervosa, increased physiological reactivity, high blood pressure), illnesses in response to distress, and premature death (Besser, Flett, Hewitt, & Guez, 2008). Since perfectionism levels were also high in psychiatry trainees, it is possible that this personality trait together with job demands may at least partly explain the high levels of distress found in this group.

Contrary to various studies on medical trainees from different specialties including psychiatry (Jovanović et al., 2016; O’Connor, Neff, & Pitman, 2018; Rathod et al., 2000), in the present study, a better perception of SPH is related to higher perceived distress in psychiatry trainees. In this population, distress levels seem to activate the need to successfully perform various activities (such as those carried out by residents) and create a sense of satisfaction with one’s achievements despite personal sacrifice. Most doctors who pursue a medical career are motivated, altruistic, and have a strong desire to help others, and then continue studying a medical specialty in anticipation of a rewarding and fulfilling career and life in exchange for the effort, excessive workload, distress, and delayed gratification associated with years of training (Kuhn & Flanagan, 2017). Additionally, previous studies have shown that psychiatry trainees are more satisfied with their work, finding their role interesting, intellectually challenging, with good financial prospects, and a better quality of life than other doctors, such as general practitioners (Denman, Oyebode, & Greening, 2016; Kumar, Hatcher, & Huggard, 2005). Possibly, due to this personal work satisfaction, “motivating factors” (achievements, growth, and interest in professional development) offset the “stressors” (working conditions) during residency (Mundia, 2019; Siegrist & Li, 2016). Psychiatry trainees, despite having a medical or psychiatric diagnosis, continue to carry out their activities, which makes them regard themselves as being healthy or maybe the idea of being productive ties in with the idea of being healthy.

Additionally, various factors have been identified that can cushion the negative effects of distress on individuals, as well as their SPH, including partner support, recreational activities, relationships with colleagues/colleagues and rest periods (vacations) (McCann et al., 2013). Studies in physicians of various specialties conclude that those who have never been married and, in particular, divorced persons have significantly higher self-assessed odds of ill health than the married/cohabiting group (Amoafo, Hanbali, Patel, & Singh, 2015; Assari & Bazargan, 2019; Daily, 2019; Lindström, 2009).

However, the continuity of distress as well as the performance of multiple activities, may eventually lead to attrition, thus preventing the fulfillment of multiple objectives, affecting both well-being and the perception of health in graduate psychiatrists. Where a good SPH was related to the absence of a physical illness (unlike psychiatry trainees, it seems that over the years medical illness confronts them with the cognitive representation or perception of health), as well as the lower concern for mistakes they have made and higher personal standards. According to previous research (Koreki et al., 2015; McFarland, Hubocky, & Riba, 2019; Rotstein et al., 2019; Umene-Nakano et al., 2013), psychiatrists tend to find considerable purpose and meaning in what they do, as well as high levels of job satisfaction and personal achievement. There are a number of factors that can explain this, including the role that intellectual satisfaction, favorable job prospects, strong team identity, greater job control, and a good work-life balance offer. In Germany (Fothergill, Edwards, & Burnard, 2004), graduate psychiatrists perceived more autonomy in their work and were more satisfied when they actively participated in decisions, received or gave feedback on job performance, and worked in the management of various organizations. They were more satisfied with both the opportunity to do things for others (and be valued for it) such as being able to keep busy, have job security, and the opportunity to work alone or be affiliated to an academic center or medical community.

These findings must be interpreted with caution. Mainly, the total variation in self-perceived health was small. The concept of perception of health is too broad and many different factors, both objective and subjective, may exert an influence as well as other variables such as diet, exercise, and leisure activities (Pisinger, Toft, Aadahl, Glümer, & Jørgensen, 2009). Also, there could be contributing factors that were not accounted for. Furthermore, the cross-sectional nature of the design does not detect time variations in the variables studied. It should also be noted that physical and mental illnesses were self-reported and participants may not realize they have certain conditions or fail to report them.

The findings highlight the role of perfectionism and distress in SPH in psychiatrists and psychiatry trainees. Empirical research treats perfectionism as maladaptive, only
associated with negative outcomes. However, sometimes personal growth and improvement result from the inherent efforts of human beings to reach achieve standards and strive for perfection (Adler, 1956). In the case of psychiatry trainees, it could be related more to a better perception of health despite a previous medical or psychiatric diagnosis and a higher level of distress. The continuity of the latter in graduate psychiatrists, coupled with the performance of multiple activities, eventually leads to burnout, preventing the fulfillment of personal goals and objectives, and thereby affecting well-being and consequently their perception of health. Accordingly, the recommendation is to create strategies to prioritize and meet goals without affecting personal satisfaction or the sense of achievement resulting from a certain level of distress.

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**Conflicts of interest**

The authors declare they have no conflicts of interest.

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**Conflicts of interest**

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