

# Burnout among Psychotherapists: A Cross-cultural Value Survey among 12 European Countries during the Coronavirus Disease Pandemic

Angelika Van Hoy (✉ [angelikahoun@psych.uw.edu.pl](mailto:angelikahoun@psych.uw.edu.pl))

University of Warsaw

**Marcin Rzeszutek**

University of Warsaw

**Małgorzata Pięta**

University of Warsaw

**Jose M. Mestre**

University Institute of Sustainability and Social Development (INDESS), Universidad de Cádiz, Puerto Real (Cádiz)

**Álvaro Rodríguez Mora**

University Institute of Sustainability and Social Development (INDESS), Universidad de Cádiz, Puerto Real (Cádiz)

**Nick Midgley**

The Kantor Centre of Excellence

**Joanna Omylinska-Thurston**

University of Salford

**Anna Dopierala**

University of Lincoln

**Fredrik Falkenström**

Linnaeus University

**Jennie Ferlin**

Linnaeus University

**Vera Gergov**

University of Helsinki

**Milica Lazić**

University of Novi Sad

**Randi Ulberg**

University of Oslo

**Jan Ivar Røssberg**

University of Oslo

**Camellia Hancheva**

Sofia University "St. Kliment Ohridski

**Stanislava Stoyanova**

South-West University "Neofit Rilski"

**Stefanie Schmidt**

University of Bern

**Ioana Podina**

University of Bucharest

**Nuno Ferreira**

University of Nicosia

**Anthony Kagialis**

University of Crete Heraklion

**Henriette Löffler-Stastka**

Medical University Vienna

**Ewa Gruszczyńska**

SWPS University of Social Sciences and Humanities

---

## Research Article

**Keywords:** burnout, psychotherapist, values, cross-cultural comparison, COVID-19

**Posted Date:** March 28th, 2022

**DOI:** <https://doi.org/10.21203/rs.3.rs-1414848/v1>

**License:**   This work is licensed under a Creative Commons Attribution 4.0 International License.

[Read Full License](#)

---

# Abstract

## Objective

The aim of this study was to examine cross-cultural differences, as operationalized by Schwartz's refined theory of basic values, in burnout levels among psychotherapists from 12 European countries during the coronavirus disease (COVID-19) pandemic. We focused on the multilevel approach to investigate if individual- and country-aggregated level values could explain differences in burnout intensity after controlling for sociodemographic and work-related characteristics and COVID-19-related distress among participants.

## Methods

In this study, 2915 psychotherapists from 12 countries (Austria, Bulgaria, Cyprus, Finland, Great Britain, Serbia, Spain, Norway, Poland, Romania, Sweden, and Switzerland) participated in this study. The participants completed the Maslach Burnout Inventory-Human Service Survey, the revised version of the Portrait Values Questionnaire, and a survey questionnaire on sociodemographic and work-related factors.

## Results

Multilevel analysis revealed that burnout at the individual level was negatively related to self-transcendence and openness-to-change values but positively related to self-enhancement and conservation values. However, no significant effects on any values were observed at the country level. Moreover, male sex, younger age, being single, and reporting higher COVID-19-related distress were identified as significant burnout correlates.

## Conclusions

Burnout among psychotherapists may be a transcultural phenomenon, where individual differences among psychotherapists are likely to be more important than differences between the countries of their practice. This finding enriches the discussion on training in psychotherapy in an international context and draws attention to the neglected issue of mental health among psychotherapists in the context of their professional functioning.

## Introduction

Nearly half a century of academic disputes over burnout [1, 2, 3, 4] and hundreds of empirical studies on the syndrome conducted with various study samples [see reviews and meta-analyses: 5, 6, 7, 8] resulted in the inclusion of burnout to the *11th Revision of the International Classification of Diseases* [9]. This latter fact is a clear sign that burnout is currently a global and highly prevalent occupational phenomenon

that can be observed in any profession [5, 7]. However, the aforementioned diagnostic milestone occurred amid unresolved controversies regarding the appropriate burnout operationalization and measurement [10, 11, 12]. These controversies can be tackled in the ongoing debate on the advantages and challenges of the two methodological approaches to study burnout, that is, a traditional variable-centered design and the less frequently used person-centered approach [13, 14, 15]. While this first methodological attitude follows the standard correlational pattern with a sole concern for isolated burnout dimensions, the person-centered approach focuses on the multidimensional experiences of burnout, that is, the various configurations (profiles) of burnout that may deviate from the observed correlational patterns [14]. The proponents of the person-centered design claim that it allows for going beyond the traditional all-or-nothing attitude (i.e., individuals with and those without burnout). Thus, subgroups of participants that are at higher risk of burnout, given their specific work-related conditions, can be better identified [13]. Conversely, critics of this relatively novel approach underscored that person-oriented burnout studies revealed burnout subtypes or trajectories, which are largely parallel with the results of variable-oriented studies [15]. In other words, apart from a more sophisticated analysis, we have not received any new information on burnout beyond what we could obtain using the above-mentioned variable-centered design, which could lead to a parsimony problem. More recently, a multilevel approach has been increasingly proposed, which measures burnout at two nested levels at least (e.g., organizational and individual) [16]. This approach may provide new insight into the fundamental question of whether burnout is a multidimensional phenomenon or unitary, single-factor syndrome consisting of interrelated symptoms [10]. In our study, we followed this new methodological approach in examining burnout among psychotherapists from 12 European countries during the coronavirus disease (COVID-19) pandemic.

Since Freud's [17] early observation on the *danger of analysis for the analyst*, subsequent empirical studies have shown that psychotherapists may be vulnerable to burnout [see reviews and meta-analyses: 18, 19]. Although this highly emotionally taxing, helping profession should be a textbook example of a job with high risk of burnout [20, 21], studies on burnout among psychotherapists are much less prevalent than those on burnout in other similar health professions such as physicians or nurses [22]. Thus, the issue of burnout among psychological health psychotherapists was and is still largely understudied in the fields of clinical psychology and psychotherapy, which are traditionally focused on the clients of psychotherapy rather than on psychotherapists [23, 24]. However, several authors have observed that burnout psychotherapists not only lose their ability to maintain their therapeutic relationship with clients and manage the whole therapeutic process [25, 26, 27, 28] but also experience a substantial decline in their well-being, accompanied by various somatic and psychological complaints such as back pain, headaches, gastroenteritis, substance use, and depressive symptoms [29, 30, 31]. Until now, the most commonly studied burnout risk factors among psychotherapists were either work related (e.g., caseload and years of experience) or sociodemographic (sex and age) [19], with much less attention paid to interpersonal and intrapersonal variables (see personality and social support) characterizing therapists [32]. Moreover, almost all contemporary studies on psychotherapist burnout have applied the previously mentioned variable-centered approach, with only one study using the person-centered design [13] and no

study using the multilevel framework. This may explain the vast discrepancies in burnout prevalence among psychotherapists from various countries, ranging from 6% to 54% [19]. Some authors attributed this huge variance also to cultural differences, which shape not only the organizational characteristics of this profession and training but also the types of therapeutic relationships formed with clients [6]. In our study, we followed the basic values in the refined Schwartz value theory [33, 34] to check whether individual differences in burnout intensity exist, both at the individual- and country-aggregated levels.

According to Schwartz [35], values are “desirable trans-situational goals, varying in importance, that serve as guiding principles in the life of a person or other social entity.” The recently refined theory of basic values [33, 34] highlights 19 basic values, which can be grouped into four higher-order values (self-transcendence, self-enhancement, openness to change, and conservation; see Measures section). These values were recognized in all major cultures [36] and are associated distinctively with human attitudes, behaviors, and demographic variables. The main important assumption in this theory relates to a circular motivational continuum of values, which shows motivational conflict or compatibility across distinct values [37, 38]. In other words, values can be compatible if decisions and behaviors that express the goals of one value also correspond to the goals of the other value. By contrast, values conflict if decisions or behaviors that express the goals of some values do so at the cost of other values. However, one of the still unresolved research questions is to what extent one may observe high within-country similarity and significant between-country variability in the culture as a shared meaning system [39, 40, 41]. This problem may become even more interesting if we can observe the mismatch between the country-aggregated level and declared individual-level meaning systems by the citizens of particular countries [39]. In the issue of psychotherapists, systematic reviews have revealed that the relationship between work-related factors and burnout may be modified by cultural differences, but surprisingly, those factors were never explicitly measured in previous studies [18, 19]. Thus, our study is the first to use a well-established theoretical model for the interpersonal and intercultural comparisons of values.

Finally, we took also into an account the most recent and thus much understudied potential burnout risk factor among psychotherapists, which is the psychological distress during the COVID-19 pandemic [42, 43]. In light of the COVID-19 pandemic psychotherapists were faced with many new challenges and obstacles regarding their therapeutic practice. Many psychotherapists either stopped working altogether or changed their practices in some form. One of the main challenges encompassed switching entirely or partly to providing psychotherapy in online formula. Above-mentioned factors were responsible for elevated levels of depression, anxiety and loneliness in this particular sample [42]. However, until now, no studies have been conducted on how COVID-19 pandemic could be related to burnout among psychotherapists.

## **Present Study**

The main aim of this study was to examine the cross-cultural differences in burnout intensity among psychotherapists from 12 countries during the COVID-19 pandemic. We focused on the multilevel approach to investigate if individual- and country-aggregated level values, as operationalized by

Schwartz's refined theory of basic values [33, 34], could explain differences in burnout after controlling for sociodemographic and work-related characteristics and COVID-19-related distress. We formulated the following hypotheses at the individual and country-aggregated levels to determine whether burnout in that specific occupation is more an individual syndrome or mostly shaped by the between-country differences in values declared by psychotherapists. To the best of our knowledge, no studies have been conducted on burnout in this group of participants using such a concrete model of culture and methodological design. Thus, our study is mainly explorative.

*Hypothesis 1.* Burnout among psychotherapists is significantly related to individual-level values (self-transcendence, self-enhancement, openness to change, and conservation) after controlling for sociodemographic and work-related characteristics and COVID-19-related distress.

*Hypothesis 2.* Burnout among psychotherapists is significantly related to country-aggregated values (self-transcendence, self-enhancement, openness to change, and conservation) after including all the variables from Hypothesis 1.

*Hypothesis 3.* Burnout among psychotherapists is related to cross-level interactions in a way that a higher level of burnout is associated with a higher mismatch between the values declared at the individual- and country-aggregated levels.

## Methods

### Participants

We conducted a cross-cultural survey using standardized questionnaires in online format (see below) via the specialized survey platform among psychotherapists from 12 European countries: Austria, Bulgaria, Cyprus, Finland, Great Britain, Serbia, Spain, Norway, Poland, Romania, Sweden, and Switzerland. The data collection in all the countries was parallelly conducted between June 2020 and June 2021, during the second and third waves of the COVID-19 pandemic. The online set of the study questionnaires was sent in each country to the professional psychotherapeutic associations of various therapeutic modalities, which have distributed it among their members.

Finally, 2915 psychotherapists from the 12 countries representing various psychotherapeutic modalities participated in this study. The eligibility criteria encompassed certification (or being in the process of certification) in a particular psychotherapeutic modality and psychotherapeutic practice for at least 1 year. The participants completed the online versions of the questionnaires, which were preceded by detailed sociodemographic and work-related questions, including items on how the COVID-19 pandemic impacted their practice and on potential psychological distress associated with the pandemic. In each country, participation was anonymous and voluntary, and the participants received no remuneration for participating in the survey. Informed consent was obtained from all participants of this study. The study protocol was accepted by the ethics committee of the Faculty of Psychology at the University of

Warsaw in Poland. The sociodemographic and work-related variables and COVID-19-related distress among the psychotherapists from each country are presented in the supplementary tables.

[Insert supplementary material]

As can be seen in all the tables, age distributions were generally similar among all countries (mean range = 37–53 years). Regarding the participants' sexes, female psychotherapists were overrepresented (83%) in all of the countries. A significant number of participants were also in some form of stable relationships ( $n = 75\%$ ). In terms of education, most participants held psychology degrees. However, Finnish and Swedish participants were almost evenly divided between having a psychology degree or a different degree such as social work, counseling, or nursing. In all 12 countries, most psychotherapists worked with adult clients. However, a significant number of Polish and Bulgarian psychotherapists also worked with children. Having a private workplace was almost universal for therapists in all the countries. Most psychotherapists in all the countries had already undergone their own psychotherapy. Supervision was provided once a month to the participants. However, Austrian psychotherapists used supervision on a quarterly basis, and most Spanish therapists did not use it at all. The results regarding therapeutic modalities varied across countries. Cognitive behavioral therapy seemed to be the more common therapeutic approach in Cyprus, Spain, Poland, and Romania. Next, psychodynamic therapy was the dominant modality in Bulgaria, Norway, and Sweden. Austria and Switzerland seemed to favor Gestalt therapy. Finally, integrative psychotherapy was the most common approach in the United Kingdom. On average, psychotherapists in Bulgaria, Cyprus, Poland, Romania, and Serbia had around 8 years of experience in the profession. On the other hand, psychotherapists who were working in Austria, Finland, Spain, Norway, Switzerland, Sweden, and the United Kingdom had between 10 and 16 years of experience. In eight of the included countries (Austria, Cyprus, Finland, Spain, Norway, Romania, Switzerland, and the United Kingdom), most psychotherapists reported having a psychology certification (80% or more). However, the numbers appeared lower in Bulgaria, Poland, Serbia, and Sweden, with only approximately 35–65% of psychotherapists obtaining a certificate. Psychotherapists worked anywhere between a couple of hours a week and more than 20 hours a week. More specifically, the average weekly workload in Bulgaria, Cyprus, Romania, and Serbia was between 1 and 10 hours. In Sweden and the United Kingdom, the average was between 10 and 20 hours a week. Psychotherapists who worked for more than 20 hours a week were from Finland, Norway, and Poland. Austrian, Spanish, and Swiss psychotherapists were evenly divided between the last two workload categories. Finally, a general trend in working partially online during the COVID-19 pandemic was observed, with this being the case for psychotherapists in 11 countries (Austria, Bulgaria, Cyprus, Finland, Spain, Norway, Poland, Romania, Serbia, Switzerland, and Sweden). At the time of data collection, UK therapists were still mostly providing their services online only.

## Measures

To assess burnout, we used the Maslach Burnout Inventory-Human Service Survey (MBI-HS) [20]. All 12 language adaptations of the MBI-HS were bought from Mind Garden, the official distributor of the MBI-

HS. The MBI-HS consists of 22 items and evaluates burnout and its three components: (1) Emotional Exhaustion (EE), nine items; (2) Personal Accomplishment (PA), eight items; and (3) Depersonalization (DP), five items. For each item, the respondent indicated the frequency of symptoms on a Likert-type scale from 0 (never) to 6 (every day). All the summed responses form an overall index, higher values of which indicate higher burnout. We decided to use the MBI-HS in our study for two reasons: First, it is the most popular and widely used burnout inventory focused especially on helping professions, which was the case in our research [14, 21]. Second, the MBI-HS is the only tool available for the assessment of burnout with a wide spectrum of different language adaptations; as such, it is valuable in cross-cultural studies [14].

To measure cultural values, the participants completed a revised version of the Portrait Values Questionnaire (PVQ-R) developed by Schwartz et al. [33]. The PVQ-R consists of 57 short, sex-matched, verbal portraits of different people, each depicting a goal that is important to some person. For each portrait, respondents highlight how similar the person is to themselves on a 6-point Likert-type scale defined as follows: 1—not like me at all, 2—not like me, 3—a little like me, 4—moderately like me, 5—like me, and 6—very much like me. The participants' own values are inferred from the values of the other people they described as similar to themselves. For example, a respondent who underlines that a person described by “Enjoying life's pleasures is important to her” is similar to herself probably attributes importance to hedonistic values. The PVQ-R assesses 19 values that can be combined into higher-order values, which was the case in our study: self-transcendence (universalism-nature, universalism-concern, universalism-tolerance, benevolence-care, and benevolence-dependability), self-enhancement (achievement, power dominance, and power resources), openness to change (self-direction thought, self-direction action, stimulation, and hedonism), conservation (security-personal, security-societal, tradition, conformity-rules, and conformity-interpersonal). All the language versions of the PVQ-R were provided by the author of this tool, S. Schwartz.

## **Data Availability**

All data generated or analysed during this study are included in this published article and its supplementary information files.

## **Data Analysis**

The data obtained had a two-level structure with persons (2915 units) nested within countries (12 units); thus, a cross-sectional multilevel model was adopted [44]. The explained variable was the burnout level among the psychotherapists. The explaining variables at Level 1 were the four higher-order values assessed by each person (see Measures section), centered on their means (centering on the group mean). The Level 2 variables were aggregates of the individual person's scores on four higher-order values to form a country mean of each value, which was then centered on the mean for all countries at a given value (centering on the grand mean). The maximum likelihood (ML) estimation method was used. For random effects, the covariance structure of the variance components (VC) was assumed.

Unconditional (i.e., intercept only) modeling was the first step of the analysis. It was also used to obtain the interclass correlation coefficient (ICC) [45], which informs about the proportion of variance in the burnout level explained by a grouping variable, that is, a country in which a participant is a psychotherapist. ICC values as low as .01 were treated as non-trivial [46]. Next, sociodemographic and work-related characteristics and COVID-19-related distress were added to the model. Continuous variables were centered on the group mean (e.g., age, work experience, and pandemic-related stress), whereas categorical variables were transformed into two dummy-coded categories (sex: female = 0, male = 1; relationship status: single = 0, in a stable relationship = 1; weekly workload: 0 = less than 20 hours, 1 = 20 hours and more; supervision: 0 = quarterly or less, 1 = once a month or more). In subsequent steps, only the variables found to be significantly related to the explained variable were taken into account [47]. In the third step, the Level 1 personal values were added, followed by the introduction of the Level 2 aggregates of these values for each country in the fourth step. Finally, the cross-level interactions of all values were tested. For significant cross-level interactions simple slopes, regions of significance, and confidence bands were established using the computational tools developed by Preacher et al. [48]. A statistical analysis was performed using IBM SPSS Statistics version 27 [49]. Only the final hypothesis-testing models are presented in the article.

For model comparison, deviance statistics, based on  $\chi^2$  distribution with the degrees of freedom equal to the difference in the number of parameters estimated in nested models, and the Akaike Information Criterion were used [44].

## Results

### Descriptive Statistics

Table 1 presents descriptive statistics on burnout levels and the four higher-order values for each national sample of therapists.

[Insert Table 1 about here]

Figure 1 illustrates the mean burnout levels at the country level. The lowest mean was noted for Romania, whereas the highest mean was reported for Cyprus. However, the ICC equals .09; thus, only 9% of the variance of burnout level in the study sample of psychotherapists was related to the country level.

[Insert Figure 1 about here]

### Hypothesis Testing

The results of the hypothesis testing are presented in Table 2.

[Insert Table 2 about here]

For Hypothesis 1, the test revealed that the psychotherapist-reported self-transcendence and openness-to-change values that were higher than the typical values for a national sample were related to the lower overall burnout of the psychotherapists. On the other hand, the higher-than-typical self-enhancement and conservation values were related to higher overall burnout. Moreover, we observed significant associations of burnout with some of the sociodemographic and work-related characteristics as well as COVID-19-related distress. The burnout correlates were male sex, being single, younger age, and reporting more intense pandemic-related stress than typical for the national sample.

For Hypothesis 2, after controlling for all the variables mentioned in Hypothesis 1, the differences in values at the country-aggregated level were not significant for burnout.

Finally, with regard to Hypothesis 3, we observed significant cross-level interaction between openness-to-change values reported at individual- and aggregated country-level ( $B = -3.81$ ,  $SE = 1.92$ ,  $t = 1.98$ ,  $p < .05$ ). The analysis of simple slopes are presented in Figure 2. As can be observed, the openness-to-change values were more negatively related to burnout among psychotherapists in the countries with aggregated openness-to-change values higher than (the cross-country average ( $B = -3.47$ ,  $SE = 0.70$ ,  $z = -4.98$ ,  $p < .001$ ) in comparison to the countries for which these aggregated values were lower ( $B = -1.72$ ,  $SE = 0.68$ ,  $z = -2.55$ ,  $p < .05$ ). Thus, the protective effect of being individually highly localized on openness-to-change values in the national sample was further amplified by originating from a country with aggregated openness-to-change values higher than the average for all 12 studied countries. Referring these results to the confidence bands of the aggregated values ( $-61.83$ ,  $-0.29$ ), inside which the simple slopes were equal to zero, we conclude that there was no relationship between personal openness-to-change values and burnout only for psychotherapists from Finland ( $B = -0.75$ ,  $SE = 1.05$ ,  $z = -0.73$ ,  $ns$ ), which at the country level has the lowest openness to change among the studied countries. However, this result should be interpreted with caution as a model including interaction is not significantly better fitted to the data than a model including only main effects.

[Insert Figure 2 about here]

## Discussion

The results of our study were in accordance with our hypotheses at the individual level rather than at the country-aggregated level of analysis. At the individual level, burnout was negatively related to the self-transcendence and openness-to-change values but positively related to the self-enhancement and conservation values. Although Schwartz's [35] theory of basic human values has been used in hundreds of studies and various theoretical contexts [50, 33, 34], it has not been applied to the issue of psychological disorders. Owing to the fact that this is the first study to link cross-cultural values to burnout syndrome among psychotherapists, this result is difficult to discuss other than exploratorily. Nevertheless, it is intriguing that motivational goals expressed in higher order values of self-enhancement (e.g. power-dominance) and conservation (tradition, conformity-rules) were found to be burnout predictors, while motivational goals of self-transcendence (e.g. universalism-tolerance) and openness-to-

change (e.g. self-direction thought) acted as buffers against burnout in this particular sample. Thus, our study may be an interesting adjunct to the literature on the psychological functioning of psychotherapists, including the totally neglected cross-cultural context [18, 19].

However, the most intriguing finding was somehow a null result at the country-aggregated level. At this level, differences in values were irrelevant to the burnout levels of the participants. This was also confirmed by the comparisons of the effects at the individual and country levels. For example, we observed differences in burnout among the 12 countries, with the highest levels in Cyprus, Sweden, Norway, and the United Kingdom and the lowest levels in Romania, Serbia, and Finland. Nevertheless, these differences were explained almost entirely by interpersonal differences, as only 9% of the burnout variance was related to the country level. From a different perspective, burnout among psychotherapists tends to be a *transcultural phenomenon* rather than a country-specific problem. Though values matter, individual differences *between* people representing this occupation rather than collectively shared, and in this sense culture-specific attributes are more crucial factor explaining their observed burnout level. This may be an important conclusion for reflection on the organizational structure and training in psychotherapy in Europe [23, 51].

The country-level aggregated values were found to be significant in the only observed cross-level interaction concerning openness to change. This supports the hypothesis on the role of fit between individual and collective values [33,34]. Namely, the protective effect of individual values was enhanced when being a psychotherapist in a country where other psychotherapists also declared high openness-to-change values. However, this result requires further research. Observing it only for this category of values may in fact be due to the specific circumstances of the study. The COVID-19 pandemic universally enforced adaptation to the "new normal". Burnout may therefore actually affect to a lesser extent those who consider openness to change as an important value in their lives since they have an intrinsic motivation for novelty and mastery, but this adaptation may also be facilitated or hindered by what happens in the social environment of such a person. The attitudes represented by one's own occupational group, especially when the external demands include major changes in the conditions of work, are likely to become an influential reference point to modify individual's appraisals and behaviours.

Additionally, we found that higher burnout levels among psychotherapists were associated with sociodemographic data (younger age, being single, and male sex) and higher levels of COVID-19-related distress. Previous studies on burnout among psychotherapists have shown that younger psychotherapists are at greater risk of burnout than older psychotherapists and usually more experienced colleagues [25, 13, 52, 53]. This finding is often explained by the fact that young psychotherapists may have high and unrealistic expectations about their roles in this occupation, and a subsequent *reality crash* may be a burnout catalyst [52]. Our study also showed that male psychotherapists can be at a higher risk of burnout than female psychotherapists, but the results reported in the literature on this topic are discrepant [54, 55]. Our meta-analysis revealed that men and women may experience burnout in different ways; for example, women score higher on emotional exhaustion, whereas men score higher on depersonalization [56]. Consistent with our findings, the psychotherapy profession may also be

associated with burnout among men due to sex-related differences in self-efficacy, which is usually higher among females in helping professions [57]. As expected, COVID-19-related distress was a significant burnout correlate in all the countries included in the study, which is consistent with the most recent research [42, 43]. However, this subject is still understudied in general, particularly in this sample. In light of the COVID-19 pandemic, psychotherapists were faced with many new challenges and obstacles regarding their practices, clients, and their own well-being.

In a more general discussion, our findings contradict one of the main assumptions at the root of cross-cultural psychology, which is high within-country similarity and significant between-country variability in shared cultural meaning systems [40, 41, 58]. This notion suggests conducting cross-country comparisons by “unpacking” cultural differences within the studied psychological constructs and discussing them in light of a culture-comparative perspective [40]. Nevertheless, for at least two decades, attempts have been made to calculate the effect sizes of the aforementioned within-culture consensus and cross-cultural variability in several theoretical constructs [59, 60]. Fischer and Schwartz [39] examined values in 67 countries and observed negligible variances in value ratings that may be associated with country differences. Specifically, they found that the cross-country differences and within-country consensus in values were very low in all examined countries. Thus, we can infer that this is not because values are part of some shared meaning system defined as culture but because people in general differ in values regardless of where they come from. We obtained a similar pattern of results in this study. However, the aforementioned problem needs further examination, as we did not observe a consistent pattern of the effects of a mismatch between individual and country-aggregate values on burnout outcomes at the cross-level interactions (Figure 2). The clinical context in cross-cultural psychology, that is, the role of values in psychological disorders, is therefore an important research gap to address in the future.

## **Strengths and Limitations**

This study has several strengths, including its large sample of psychotherapists from 12 different countries observed during the critical period of the COVID-19 pandemic and the use of a theoretical model for cross-cultural comparisons and a multilevel design, which make it a pioneer study in the relevant literature. However, several limitations should be mentioned. First, for organizational reasons, our samples of psychotherapists were heterogeneous with regard to psychotherapeutic modalities and other work-related characteristics. They can also not be treated as representative of the countries that they are sampled from. This represents a common shortcoming in the literature on the psychological functioning of this professional group [19] but is hard to avoid, particularly in international comparisons and associated differences in regulations for this job between countries. Second, our research shares other common limitations in burnout studies among psychotherapists, including its cross-sectional design and precluding causal inferences [18]. The role of values in the prospective study design would be interesting to investigate to determine the stability of its effect at the individual and country levels. Finally, two typical shortcomings must be born in mind in cross-cultural research, namely the reference group effect [61] and the response style effect [62]. The former deals with the problem of using a self-report measure

to assess cross-cultural differences when participants compare themselves to familiar others (e.g., Poles compared themselves to other known Poles). The latter illustrates culture-related differences in response styles. These effects may also be the reason for the small effects of the country-aggregated level of analysis.

## Conclusions

The results of this study provide important implications for burnout research in general and in the specific case of psychotherapists from a cross-cultural perspective. Our findings indicate the need for further research on burnout in the multilevel approach, as different conclusions can be drawn depending on the level of analysis [16]. In this context, some authors suggest even using different items to assess burnout regarding the examined level of analysis [10]. The cultural level of burnout should be examined more deeply in the future with greater care for reducing the above-mentioned shortcomings.

From a clinical point of view, our data suggest that burnout among psychotherapists may be, in some sense, a *transcultural phenomenon*, in which there is a room for interplay between what is individual and what is shared with one's own occupational group. However, the most important factors are the individual differences between psychotherapists, regardless of their cultures, at least across the studied European countries. Although this finding should be treated with caution because of the explorative characteristics and limitations of our study, it may be an enriching adjunct to the discussion on largely understudied issues of psychotherapy training, mental health and quality of life among psychotherapists [23, 24].

## Declarations

**Conflict of interest:** All the authors declare no conflict of interest.

**Ethical approval:** All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

**Acknowledgments:** This project has received funding from the New Ideas of POB V project implemented within the scope of the "Excellence Initiative - Research University" Program, by the Ministry of Science and Higher Education in Poland (number PSP: 501-D125-20-5004310).

## References

1. Cherniss C. Staff burnout. Job stress in the human services. SAGE Publications; 1980.
2. Demerouti E, Bakker AB, Nachreiner F, Schaufeli WB. The job demands-resources model of burnout. *J Appl Psychol* [Internet]. 2001;86(3):499–512. Available from: <http://dx.doi.org/10.1037/0021-9010.86.3.499>

3. Freudenberger HJ. Staff burn-out. *J Soc Issues* [Internet]. 1974;30(1):159–65. Available from: <http://dx.doi.org/10.1111/j.1540-4560.1974.tb00706.x>
4. Maslach C. Understanding burnout: Definitional issues in analyzing a complex phenomenon. In: Paine WS, editor. *Job stress and burnout*. SAGE; 1982. p. 29–41.
5. Aronsson G, Theorell T, Grape T, Hammarström A, Hogstedt C, Marteinsdottir I, et al. A systematic review including meta-analysis of work environment and burnout symptoms. *BMC Public Health* [Internet]. 2017;17(1). Available from: <http://dx.doi.org/10.1186/s12889-017-4153-7>
6. Cieslak R, Shoji K, Douglas A, Melville E, Luszczynska A, Benight CC. A meta-analysis of the relationship between job burnout and secondary traumatic stress among workers with indirect exposure to trauma. *Psychol Serv* [Internet]. 2014;11(1):75–86. Available from: <http://dx.doi.org/10.1037/a0033798>
7. Guthier C, Dormann C, Voelkle MC. Reciprocal effects between job stressors and burnout: A continuous time meta-analysis of longitudinal studies. *Psychol Bull* [Internet]. 2020;146(12):1146–73. Available from: <http://dx.doi.org/10.1037/bul0000304>
8. Koutsimani P, Montgomery A, Georganta K. The relationship between burnout, depression, and anxiety: A systematic review and meta-analysis. *Front Psychol* [Internet]. 2019;10:284. Available from: <http://dx.doi.org/10.3389/fpsyg.2019.00284>
9. ICD-11 [Internet]. Who.int. [cited 2022 Jan 6]. Available from: <https://icd.who.int/>
10. Gruszczynska E, Basinska BA, Schaufeli WB. Within- and between-person factor structure of the Oldenburg Burnout Inventory: Analysis of a diary study using multilevel confirmatory factor analysis. *PLoS One* [Internet]. 2021;16(5):e0251257. Available from: <http://dx.doi.org/10.1371/journal.pone.0251257>
11. Leiter MP, Hakanen JJ, Ahola K, Toppinen-Tanner S, Koskinen A, Väänänen A. Organizational predictors and health consequences of changes in burnout: A 12-year cohort study: INCONSISTENCY AMONG BURNOUT ELEMENTS. *J Organ Behav* [Internet]. 2013;34(7):959–73. Available from: <http://dx.doi.org/10.1002/job.1830>
12. Mäkikangas A, Feldt T, Kinnunen U, Tolvanen A. Do low burnout and high work engagement always go hand in hand?: investigation of the energy and identification dimensions in longitudinal data. *Anxiety Stress Coping* [Internet]. 2012;25(1):93–116. Available from: <http://dx.doi.org/10.1080/10615806.2011.565411>
13. Berjot S, Altintas E, Grebot E, Lesage F-X. Burnout risk profiles among French psychologists. *Burn Res* [Internet]. 2017;7:10–20. Available from: <http://dx.doi.org/10.1016/j.burn.2017.10.001>
14. Leiter MP, Maslach C. Latent burnout profiles: A new approach to understanding the burnout experience. *Burn Res* [Internet]. 2016;3(4):89–100. Available from: <http://dx.doi.org/10.1016/j.burn.2016.09.001>
15. Mäkikangas A, Kinnunen U. The person-oriented approach to burnout: A systematic review. *Burn Res* [Internet]. 2016;3(1):11–23. Available from: <http://dx.doi.org/10.1016/j.burn.2015.12.002>

16. Bakker AB, de Vries JD. Job Demands-Resources theory and self-regulation: new explanations and remedies for job burnout. *Anxiety Stress Coping* [Internet]. 2021;34(1):1–21. Available from: <http://dx.doi.org/10.1080/10615806.2020.1797695>
17. Freud S. The standard edition of the complete psychological works of Sigmund Freud. Macmillan; 1964.
18. Lee MK, Kim E, Paik IS, Chung J, Lee SM. Relationship between environmental factors and burnout of psychotherapists: Meta-analytic approach. *Couns Psychother Res* [Internet]. 2020;20(1):164–72. Available from: <http://dx.doi.org/10.1002/capr.12245>
19. Simionato GK, Simpson S. Personal risk factors associated with burnout among psychotherapists: A systematic review of the literature. *J Clin Psychol* [Internet]. 2018;74(9):1431–56. Available from: <http://dx.doi.org/10.1002/jclp.22615>
20. Maslach C. Maslach Burnout Inventory Manual. Consulting Psychologists Press; 1997.
21. Maslach C, Schaufeli WB, Leiter MP. Job burnout. *Annu Rev Psychol*. 2001;52(1):397–422. Available from: <http://dx.doi.org/10.1146/annurev.psych.52.1.397>
22. Schaufeli WB, Leiter MP, Maslach C. Burnout: 35 years of research and practice. *Career Dev Int* [Internet]. 2009;14(3):204–20. Available from: <http://dx.doi.org/10.1108/13620430910966406>
23. Laverdière O, Kealy D, Ogrodniczuk JS, Morin AJS. Psychological health profiles of Canadian psychotherapists: A wake up call on psychotherapists' mental health. *Can Psychol* [Internet]. 2018;59(4):315–22. Available from: <http://dx.doi.org/10.1037/cap0000159>
24. Laverdière O, Ogrodniczuk JS, Kealy D. Clinicians' empathy and professional quality of life. *J Nerv Ment Dis* [Internet]. 2019;207(2):49–52. Available from: <http://dx.doi.org/10.1097/NMD.0000000000000927>
25. Ackerley GD, Burnell J, Holder DC, Kurdek LA. Burnout among licensed psychologists. *Prof Psychol Res Pr* [Internet]. 1988;19(6):624–31. Available from: <http://dx.doi.org/10.1037/0735-7028.19.6.624>
26. Berjot S, Altintas E, Lesage F-X, Grebot E. The impact of work stressors on identity threats and perceived stress: An exploration of sources of difficulty at work among French psychologists. *SAGE Open* [Internet]. 2013;3(3):215824401350529. Available from: <http://dx.doi.org/10.1177/2158244013505292>
27. Farber BA, Heifetz LJ. The process and dimensions of burnout in psychotherapists. *Prof Psychol* [Internet]. 1982;13(2):293–301. Available from: <http://dx.doi.org/10.1037/0735-7028.13.2.293>
28. Rupert PA, Morgan DJ. Work setting and burnout among professional psychologists. *Prof Psychol Res Pr* [Internet]. 2005;36(5):544–50. Available from: <http://dx.doi.org/10.1037/0735-7028.36.5.544>
29. Raquepaw JM, Miller RS. Psychotherapist burnout: A componential analysis. *Prof Psychol Res Pr* [Internet]. 1989;20(1):32–6. Available from: <http://dx.doi.org/10.1037/0735-7028.20.1.32>
30. Rosenberg T, Pace M. Burnout among mental health professionals: special considerations for the marriage and family therapist. *J Marital Fam Ther* [Internet]. 2006;32(1):87–99. Available from: <http://dx.doi.org/10.1111/j.1752-0606.2006.tb01590.x>

31. Rupert PA, Stevanovic P, Hunley HA. Work-family conflict and burnout among practicing psychologists. *Prof Psychol Res Pr* [Internet]. 2009;40(1):54–61. Available from: <http://dx.doi.org/10.1037/a0012538>
32. Rzeszutek M, Schier K. Temperament traits, social support, and burnout symptoms in a sample of therapists. *Psychotherapy (Chic)* [Internet]. 2014;51(4):574–9. Available from: <http://dx.doi.org/10.1037/a0036020>
33. Schwartz SH, Cieciuch J, Vecchione M, Davidov E, Fischer R, Beierlein C, et al. Refining the theory of basic individual values. *J Pers Soc Psychol* [Internet]. 2012;103(4):663–88. Available from: <http://dx.doi.org/10.1037/a0029393>
34. Schwartz SH, Cieciuch J, Vecchione M, Torres C, Dirilen-Gumus O, Butenko T. Value tradeoffs propel and inhibit behavior: Validating the 19 refined values in four countries: Value tradeoffs and behavior. *Eur J Soc Psychol* [Internet]. 2017;47(3):241–58. Available from: <http://dx.doi.org/10.1002/ejsp.2228>
35. Schwartz SH. Are there universal aspects in the structure and contents of human values? *J Soc Issues* [Internet]. 1994;50(4):19–45. Available from: <http://dx.doi.org/10.1111/j.1540-4560.1994.tb01196.x>
36. Schwartz SH, Melech G, Lehmann A, Burgess S, Harris M, Owens V. Extending the cross-cultural validity of the theory of basic human values with a different method of measurement. *J Cross Cult Psychol* [Internet]. 2001;32(5):519–42. Available from: <http://dx.doi.org/10.1177/0022022101032005001>
37. Schwartz SH. Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. In: *Advances in Experimental Social Psychology*. Elsevier; 1992. p. 1–65.
38. Schwartz S. A Theory of Cultural Value Orientations: Explication and Applications. *Comp Sociol* [Internet]. 2006;5(2–3):137–82. Available from: <http://dx.doi.org/10.1163/156913306778667357>
39. Fischer R, Schwartz S. Whence differences in value priorities?: Individual, cultural, or artifactual sources. *J Cross Cult Psychol* [Internet]. 2011;42(7):1127–44. Available from: <http://dx.doi.org/10.1177/0022022110381429>
40. Hofstede G. *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*. SAGE. 2001.
41. Leung K, van de Vijver FJR. Strategies for strengthening causal inferences in cross cultural research: The consilience approach. *Int J Cross Cult Manag* [Internet]. 2008;8(2):145–69. Available from: <http://dx.doi.org/10.1177/1470595808091788>
42. Brillon P, Philippe FL, Paradis A, Geoffroy M-C, Orri M, Ouellet-Morin I. Psychological distress of mental health workers during the COVID-19 pandemic: A comparison with the general population in high- and low-incidence regions. *J Clin Psychol* [Internet]. 2021;(jclp.23238). Available from: <http://dx.doi.org/10.1002/jclp.23238>
43. Summers EMA, Morris RC, Bhutani GE, Rao AS, Clarke JC. A survey of psychological practitioner workplace well-being. *Clin Psychol Psychother* [Internet]. 2021;28(2):438–51. Available from:

<http://dx.doi.org/10.1002/cpp.2509>

44. Snijders T, Bosker R. Multilevel analysis: An introduction to basic and advanced multilevel modeling. SAGE Publishers; 2012.
45. Kreft I, de Leeuw J. Introducing multilevel modeling. 1 Oliver's Yard, 55 City Road, London England EC1Y 1SP United Kingdom: SAGE Publications, Ltd; 1998.
46. Bliese PD. Group size, ICC values, and group-level correlations: A simulation. *Organ Res Methods* [Internet]. 1998;1(4):355–73. Available from: <http://dx.doi.org/10.1177/109442819814001>
47. Becker TE. Potential problems in the statistical control of variables in organizational research: A qualitative analysis with recommendations. *Organ Res Methods* [Internet]. 2005;8(3):274–89. Available from: <http://dx.doi.org/10.1177/1094428105278021>
48. Preacher KJ, Curran PJ, Bauer DJ. Computational tools for probing interactions in multiple linear regression, multilevel modeling, and latent curve analysis. *J Educ Behav Stat* [Internet]. 2006;31(4):437–48. Available from: <http://dx.doi.org/10.3102/10769986031004437>
49. IBM. *SPSS Statistics for Windows, Version 27.0*. Armonk, NY: IBM; 2020
50. Cieciuch J, Davidov E, Vecchione M, Schwartz SH. A hierarchical structure of basic human values in a third-order confirmatory factor analysis. *Swiss J Psychol* [Internet]. 2014;73(3):177–82. Available from: <http://dx.doi.org/10.1024/1421-0185/a000134>
51. McCormack HM, MacIntyre TE, O'Shea D, Herring MP, Campbell MJ. The prevalence and cause(s) of burnout among applied psychologists: A systematic review. *Front Psychol* [Internet]. 2018;9:1897. Available from: <http://dx.doi.org/10.3389/fpsyg.2018.01897>
52. Rupert PA, Kent JS. Gender and work setting differences in career-sustaining behaviors and burnout among professional psychologists. *Prof Psychol Res Pr* [Internet]. 2007;38(1):88–96. Available from: <http://dx.doi.org/10.1037/0735-7028.38.1.88>
53. van der Ploeg HM, van Leeuwen JJ, Kwee MG. Burnout among Dutch psychotherapists. *Psychol Rep* [Internet]. 1990;67(1):107–12. Available from: <http://dx.doi.org/10.2466/pr0.1990.67.1.107>
54. Allwood CM, Geisler M, Buratti S. The relationship between personality, work, and personal factors to burnout among clinical psychologists: exploring gender differences in Sweden. *Couns Psychol Q* [Internet]. 2020;1–20. Available from: <http://dx.doi.org/10.1080/09515070.2020.1768050>
55. Emery S, Wade TD, McLean S. Associations among therapist beliefs, personal resources and burnout in clinical psychologists. *Behav Change* [Internet]. 2009;26(2):83–96. Available from: <http://dx.doi.org/10.1375/bech.26.2.83>
56. Purvanova RK, Muros JP. Gender differences in burnout: A meta-analysis. *J Vocat Behav* [Internet]. 2010;77(2):168–85. Available from: <http://dx.doi.org/10.1016/j.jvb.2010.04.006>
57. Roohani A, Irvani M. The relationship between burnout and self-efficacy among Iranian male and female EFL teachers. *J Lang Educ* [Internet]. 2020;6(1):173–88. Available from: <http://dx.doi.org/10.17323/jle.2020.9793>

58. Poortinga YH, Van De Vijver FJR. Explaining cross-cultural differences: Bias analysis and beyond. *J Cross Cult Psychol* [Internet]. 1987;18(3):259–82. Available from: <http://dx.doi.org/10.1177/0022002187018003001>
59. Matsumoto D, Grissom RJ, Dinnel DL. Do between-culture differences really mean that people are different?: A look at some measures of cultural effect size. *J Cross Cult Psychol* [Internet]. 2001;32(4):478–90. Available from: <http://dx.doi.org/10.1177/0022022101032004007>
60. Schwartz SH, Bardi A. Value hierarchies across cultures: Taking a similarities perspective. *J Cross Cult Psychol* [Internet]. 2001;32(3):268–90. Available from: <http://dx.doi.org/10.1177/0022022101032003002>
61. Heine SJ, Lehman DR, Peng K, Greenholtz J. What's wrong with cross-cultural comparisons of subjective Likert scales?: The reference-group effect. *J Pers Soc Psychol* [Internet]. 2002;82(6):903–18. Available from: <http://dx.doi.org/10.1037/0022-3514.82.6.903>
62. van de Vijver FJR, Leung K. Methods and data analysis of comparative research. In Berry JW, Poortinga YH, Pandey J, editors, *Handbook of cross-cultural psychology*, 2nd ed.. Boston: Allyn & Bacon. 1997. p. 257–300.

## Tables

Table 1. Descriptive statistics for overall burnout level and personal values in the study sample of psychotherapists (N = 2915) according to country of origin.

Country	n	Mean	SD	Range	Kurtosis	Skewness
Burnout						
Austria	151	32.21	14.26	9–76	0.89	1.05
Bulgaria	217	38.36	15.26	8–105	0.97	0.79
Cyprus	202	42.50	17.74	10–85	-.72	.47
Finland	254	31.32	12.52	8–82	.84	.89
Norway	225	42.12	16.27	11–89	.13	.60
Poland	340	37.38	14.28	10–122	4.19	1.22
Romania	202	26.50	13.51	8–74	.73	1.06
Serbia	237	31.39	14.28	8–79	.68	.89
Spain	320	35.61	16.03	8–90	.41	.85
Sweden	275	40.53	16.00	9–106	.61	.74
Switzerland	205	33.90	12.95	9–74	.44	.77
United Kingdom	287	42.14	17.19	10–103	.46	.76
Self-transcendence						
Austria	150	4.83	0.77	1–6	1.49	-1.17
Bulgaria	217	4.48	0.79	1–6	-.80	1.19
Cyprus	202	4.91	0.65	2–6	1.32	-.93
Finland	254	4.86	0.55	3–6	-.66	.05
Norway	225	4.82	0.63	1–6	3.23	-1.20
Poland	340	5.01	0.50	3–6	1.03	-.64
Romania	202	4.82	0.68	1–6	5.43	-1.63
Serbia	237	4.38	0.64	2–6	1.91	-1.13
Spain	320	5.09	0.55	3–6	.88	-.88
Sweden	275	4.83	0.57	3–6	-.52	-.40
Switzerland	205	5.10	0.54	3–6	.00	-.63
United Kingdom	287	4.90	0.58	2–6	.67	-.73
Self-enhancement						
Austria	151	3.02	0.75	1–6	-0.47	0.25

Bulgaria	217	3.14	0.81	1-6	-.46	.22
Cyprus	202	3.64	0.85	1-6	-.14	-.27
Finland	254	2.67	0.89	1-6	.46	.84
Norway	225	3.29	0.93	1-6	-.44	.44
Poland	340	2.88	0.83	1-6	.50	.62
Romania	202	3.37	0.81	1-6	.70	.11
Serbia	237	3.71	0.69	2-6	.13	.22
Spain	320	2.88	0.80	1-6	.42	-.22
Sweden	275	2.88	0.85	1-6	.16	.78
Switzerland	205	2.94	0.76	1-5	-.31	.39
United Kingdom	287	3.24	0.74	1-6	-.30	.28
Openness to Change						
Austria	151	4.53	0.73	2-6	0.39	-0.58
Bulgaria	217	4.31	0.79	1-6	.64	-.47
Cyprus	202	3.64	0.66	2-6	.74	-.54
Finland	254	3.98	0.60	2-6	-2.94	-.22
Norway	225	4.25	0.62	1-6	-.82	2.56
Poland	340	4.56	0.57	2-6	.28	-.37
Romania	202	4.63	0.69	1-6	3.43	-.99
Serbia	237	4.42	0.70	2-6	.96	-.92
Spain	320	4.76	0.56	2-6	.07	-.35
Sweden	275	4.26	0.59	2-6	-.31	.11
Switzerland	205	4.74	0.58	2-6	.12	-.50
United Kingdom	287	4.41	0.63	2-6	-.19	-.23
Conservation						
Austria	151	3.66	0.65	2-6	-0.07	-0.04
Bulgaria	217	3.79	0.75	1-6	.78	-.21
Cyprus	202	4.31	0.70	1-6	1.10	-.61
Finland	254	3.77	0.72	2-6	-.57	.00

Norway	225	3.89	0.72	1-6	.35	-.42
Poland	340	3.69	0.70	1-6	-.50	.31
Romania	202	3.91	0.66	1-6	1.81	-.84
Serbia	237	4.28	0.66	2-6	.55	-.60
Spain	320	3.98	0.80	1-6	-.13	-.20
Sweden	275	3.57	0.71	1-6	-.21	.21
Switzerland	205	3.69	0.67	1-6	-.39	-.02
United Kingdom	287	3.70	0.73	1-6	-.51	.05

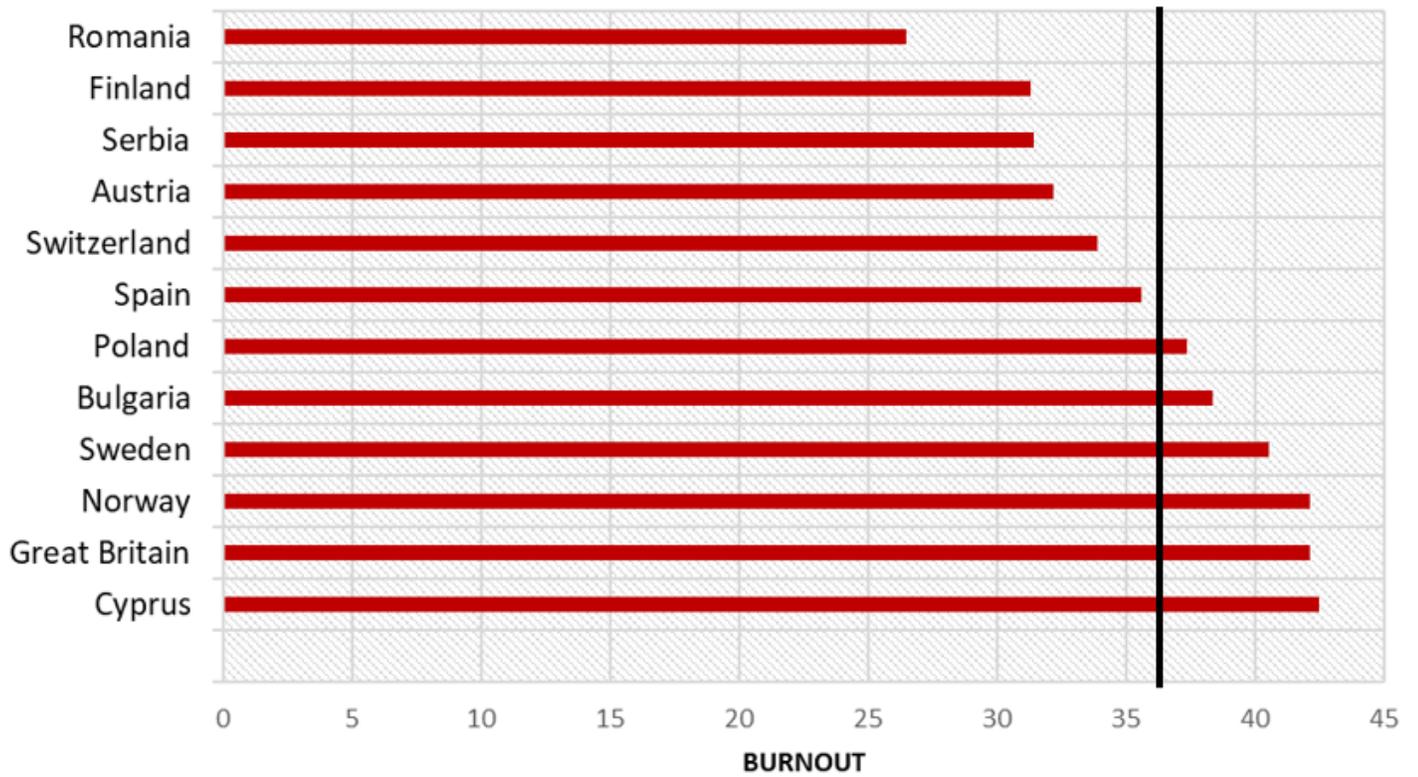
Table 2. Results for the hypothesis testing for the overall burnout indicator in the study sample of psychotherapists (N = 2915).

	Hypothesis 1 model		Hypothesis 2 model		Hypothesis 3 model	
	Estimate (SE)		Estimate (SE)		Estimate (SE)	
<b><i>Fixed effects</i></b>						
Intercept	37.11	(1.50) <sup>***</sup>	37.10	(1.31) <sup>***</sup>	37.14	(1.35) <sup>***</sup>
Sex	1.70	(0.69) <sup>**</sup>	1.68	(0.69) <sup>**</sup>	1.68	(0.69) <sup>**</sup>
Relationship status	-1.54	(0.61) <sup>**</sup>	-1.54	(0.61) <sup>**</sup>	-1.58	(0.61) <sup>**</sup>
Age	-0.33	(0.03) <sup>***</sup>	-0.33	(0.03) <sup>***</sup>	-0.33	(0.03) <sup>***</sup>
COVID-19-related stress	4.33	(0.26) <sup>***</sup>	4.33	(0.26) <sup>***</sup>	4.33	(0.26) <sup>***</sup>
<b><i>Level 1 values</i></b>						
Self-transcendence_w	-4.01	(0.56) <sup>***</sup>	-4.01	(0.56) <sup>***</sup>	-4.10	(0.56) <sup>***</sup>
Self-enhancement_w	1.65	(0.39) <sup>***</sup>	1.65	(0.39) <sup>***</sup>	1.61	(0.39) <sup>***</sup>
Openness to change_w	-2.52	(0.52) <sup>***</sup>	-2.52	(0.52) <sup>***</sup>	-2.57	(0.52) <sup>***</sup>
Conservation_w	0.94	(0.45) <sup>**</sup>	0.94	(0.45) <sup>**</sup>	0.92	(0.45) <sup>**</sup>
<b><i>Level 2 values</i></b>						
Self-transcendence_b			15.88	(9.71)	15.89	(9.71)
Self-enhancement_b			12.84	(7.82)	12.84	(7.82)
Openness to change_b			-10.66	(7.81)	-10.66	(7.81)
Conservation_b			-6.42	(8.69)	-6.43	(8.69)
<b><i>Cross-level interactions</i></b>						
Self-transcendence_w*b					-0.97	(2.08)
Self-enhancement_w*b					1.80	(1.14)
Openness to change_w*b					-3.81	(1.92) <sup>**</sup>
Conservation_w*b					-0.06	(1.82)
<b><i>Random effects</i></b>						
Residual variance	185.20	(4.95) <sup>***</sup>	185.21	(4.94) <sup>***</sup>	184.71	(4.93) <sup>***</sup>
Between-country variance	22.32	(9.49) <sup>**</sup>	17.04	(7.35) <sup>**</sup>	17.04	(7.35) <sup>**</sup>
<b><i>Model parameters</i></b>						

Akaike Information Criterion	22765.39	22770.33	22770.85
-2LL	22743.39	22740.33	22732.85
-2 LL Δ (df)		3.06 (4)	7.48 (4)

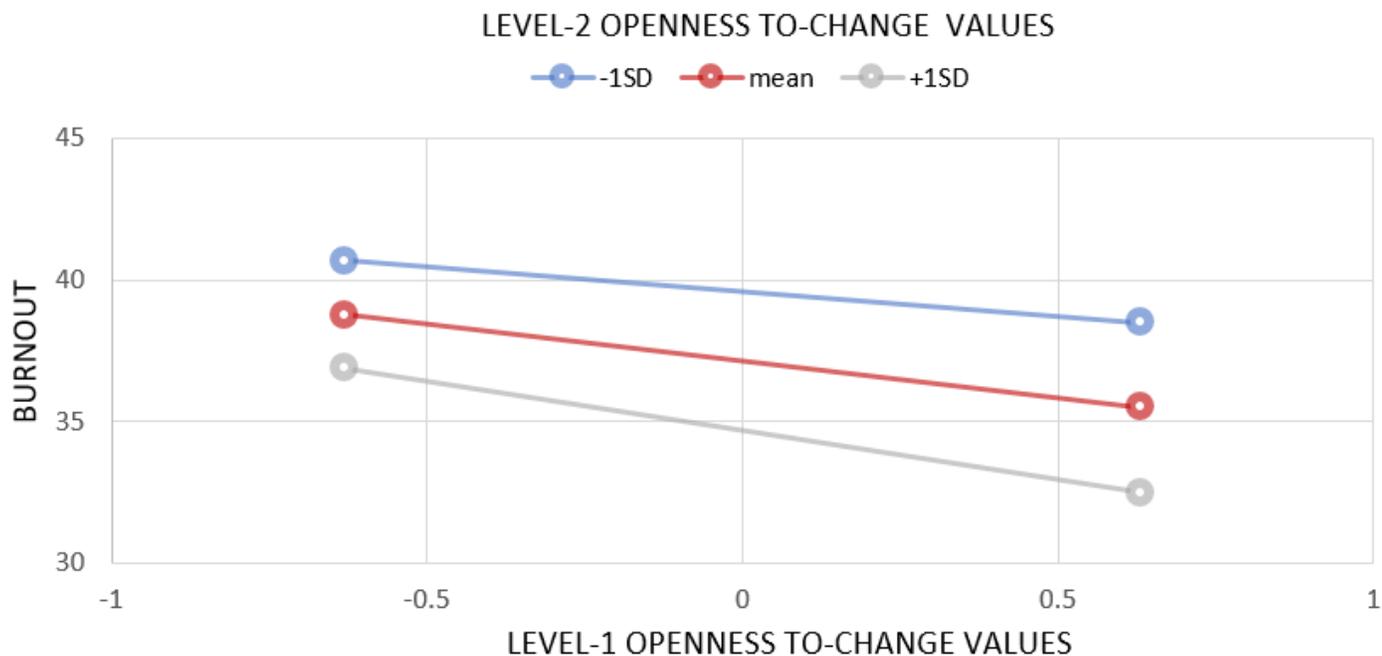
Note: \*\*\* $p < .001$ , \*\* $p < .05$ .

## Figures



**Figure 1**

Burnout mean levels values per country. A black line indicates a grand mean.



**Figure 2**

Simple slopes for cross-level interaction for openness-to-change values on burnout. For Level-2 openness-to-change values slopes are probed at a mean and one standard deviation above and below a mean. Level-1 openness-to-change values were centered around within-country means.

## Supplementary Files

This is a list of supplementary files associated with this preprint. Click to download.

- [Burnoutdatafile.sav](#)
- [Supplementarymaterial.docx](#)