Impact of COVID-19 Pandemic on the Psychological Well-being of Migrants and Refugees Settled in Spain

Rocío Garrido[a]*, Virginia Paloma[b], Isabel Benítez[c], Morten Skovdal[d], An Verelst[e] and Ilse Derluyn[f]

[a] *Department of Social Psychology, Universidad de Sevilla, Sevilla, Spain,* *rocioga@us.es*

[b] *Department of Social Psychology, Universidad de Sevilla, Sevilla, Spain,* *vpaloma@us.es*

[c] *Department of Methodology of Behavioral Sciences, Universidad de Granada, Granda, Spain,* *ibenitez@ugr.es*

[d] *Department of Public Health, University of Copenhagen, Copenhagen, Denmark,* *m.skovdal@sund.ku.dk*

[e] *Department of Social Work and Social Pedagogy, Ghent University, Gent, Belgium.* *an.verelst@ugent.be*

[f] *Department of Social Work and Social Pedagogy, Ghent University, Gent, Belgium.* *ilse.derluyn@ugent.be*

*Rocío Garrido, Facultad de Psicología, Departamento de Psicología Social, Universidad de Sevilla. C/Camilo José Cela s/n, 41018 Sevilla, Spain. E-mail: rocioga@us.es

ORCID: https://orcid.org/0000-0002-2238-0222

Impact of the COVID-19 Pandemic on the Psychological Well-being of Migrants and Refugees Settled in Spain

Abstract

Objectives: The COVID-19 pandemic has exacerbated health inequalities worldwide, having a disproportionately harsh impact on unprivileged populations such as migrants and refugees. These populations are often more exposed to the virus, but less protected, while at the same time being at higher risk of suffering from poor living and working conditions, limited access to healthcare, and discrimination by the host society, all of which is challenging to their mental health. Empirical evidence on how the COVID-19 pandemic is affecting migrants and refugees is required to design effective actions aimed at ensuring health equity. Therefore, this paper aims to analyse how the pandemic has impacted the psychological well-being of migrants and refugees living in Spain.

Design: This study was carried out within the framework of the ApartTogether study sponsored by the World Health Organization. Data collection was carried out during March-November 2020, through an online survey completed by 241 participants (age: M=37 years; 129 women).

Results: The results indicate that 78.7% of participants had suffered a decrease in their psychological well-being since the onset of the COVID-19 pandemic, with number of difficulties and worries experienced being the best individual predictors of this outcome. Enjoying social connections and perceiving positive treatment from the host society were positively associated with psychological well-being at a relational and community level, respectively.

Conclusion: Based on these findings, we outline priority areas of psychosocial interventions aimed at guaranteeing the mental health of migrants and refugees in the face of the pandemic in Spain.

Keywords: COVID-19, psychological well-being, migrants, refugees, ecological approach, mental health.

Introduction

The SARS-CoV-2 (COVID-19) outbreak was declared a pandemic by the World Health Organization (WHO 2020a) on March 11, 2020, when more than 118,000 people had been infected in 114 countries and 4,291 people had lost their lives. In response to the situation, most countries took action to protect public health, imposing measures such as lockdowns, mask-wearing and social distancing. The loss of human capital linked to the collateral damage caused by these measures has generated an unprecedented global crisis at the health, economic and socio-political levels (The World Bank 2020). According to Tedros Adhanom Ghebreyesus, Director General of the WHO, COVID-19 'is not just a public health crisis, it is a crisis that will touch every sector'. He continued by stressing that 'this crisis will likely hit the poorest and most vulnerable countries—and people—the hardest' (WHO 2020a, para. 2).

The uncertain and unpredictable nature of the COVID-19 virus and its devastating multilevel impact, has universally affected individuals' psychosocial well-being across the different strata, generating a plethora of negative psychological responses in many people, even non-infected ones (Dubey et al. 2020; Xiang et al. 2020). Such responses include anxiety, emotional distress, depression and worries (Boyraz, Legros, and Tigershtrom 2020; Xiong et al. 2020), as well as multiple behavioural and social adaptation problems, such as over-eating, sleep problems, and substance abuse (Taylor et al. 2020). It can therefore be stated that the COVID-19 pandemic has generated extremely challenging situations that have resulted in mental health problems and distress in many people, especially those in the most unprivileged population groups (Mukhtar 2020; Pinzón-Espinosa et al. 2021; WHO 2020b). Nevertheless, emergency response policy and management, as well as efforts to address the crisis, have focused principally on physical health, and have failed to sufficiently or

adequately integrate mental health (Rahman et al. 2021; Rohilla et al. 2020).

Migrants and refugees are often among the most unprivileged populations in host societies (Ingleby 2012). Their patterns of vulnerability frequently lie at the intersection of many individual elements (e.g., ethnicity, class, gender, migrant status) and multiple contextual risk factors or oppressions, such as poor travelling, living and working conditions, status and financial insecurity, limited social networks, and discrimination (Albar et al. 2011; García-Ramírez et al. 2011; Guadagno 2020; Ingleby 2012). Research has shown that migration represents a risk factor for the mental health and psychological well-being of migrants and refugees (Kokou-Kpolou et al. 2020; Mucci et al. 2020; Virupaksha, Kumar, and Nirmala, 2014), among whom there is often a high prevalence of anxiety, psychosis, and post-traumatic disorder caused by their pre-migration life and/or migratory process, as well as by human rights abuses and the conditions to which they are exposed in their host countries (Jongedijk et al. 2020; Kokou-Kpolou et al. 2020; Paloma et al. 2021). In the context of the COVID-19 pandemic, migrants and refugees are often more exposed to the virus, but less protected (Guadagno 2020; WHO 2020b; Yang, Choi, and Sun 2021). For instance, their living and working conditions make physical distancing and recommended hygiene measures difficult (Orcutt et al. 2020). Furthermore, many migrants—especially undocumented ones—have limited access to healthcare and are excluded from welfare programmes, with services and professionals not always being responsive to their needs (Garrido, García-Ramírez, and Balcázar 2019; Guadagno, 2020). Moreover, the pandemic has exacerbated their already serious financial, residential and legal status insecurity and increased their stigmatisation and exclusion, thereby further reducing their ability to cope with the crisis (Liem et al. 2020; Spiritus-Beerden et al. 2021; WHO 2020b; Yang et al. 2021).

In light of this situation, it is imperative that countries include migrants and refugees in national health plans as part of their commitment to health equity in the context of the COVID-19 pandemic and beyond (Greenaway et al. 2020; Orcutt et al. 2020; WHO 2020a). Health equity for migrants and refugees requires an intersectoral approach to the social determinants of mental health (Ingleby et al. 2019). Social determinants include individual characteristics and lifestyles, social networks, living and working conditions and general socio-economic, cultural, and environmental conditions responsible for health inequalities within and between countries (Marmot 2005). The conditions surrounding migration often fuel health inequalities that put migrants' and refugees' mental health at risk (Ingleby 2012; WHO 2020b), making it imperative to obtain empirical evidence on the impact of the COVID-19 pandemic on migrant health and its predictors at different levels (individual, relational, community).

This paper is structured in the following way. Firstly, we contextualise the situation of migrants and refugees living in Spain during the COVID-19 pandemic and introduce the ApartTogether study, within the framework of which this paper is located. Next, we describe the method and present our main results. Finally, we discuss the major theoretical and practical contributions made by this study, suggesting priority areas of psychosocial intervention aimed at guaranteeing the psychological well-being of migrants and refugees in the face of the pandemic in Spain.

Migrants and Refugees Settled in Spain during the COVID-19 Health Crisis

At the start of the pandemic, Spain emerged (alongside Italy) as a principal contagion hotspot in Europe, with one of the highest infection rates in the world. The first COVID-19 death was registered on March 4, 2020. Ten days later, when 6,000 cases had been recorded and the death toll had risen to 200, the government decreed a nationwide State of Alarm to curb the spread of the virus in the country (BOE 2020). A

compulsory lockdown was imposed, a situation which involved physical distancing, self-isolation at home, drastic limitations on freedom of movement, and the suspension of many commercial and educational activities. One year later, Spain currently has the sixth highest death toll in the world (in percentage terms of its total population), with 92,000 people having lost their lives to the virus (El País 2021).

According to the Spanish Ministry of Health (2020), the COVID-19 crisis has highlighted the health inequalities that affect the most socially unprivileged groups, recognising migrants, especially those in an irregular administrative situation, as one of the population groups that suffers most from this lack of health and social equity. Migrants are in a situation of more vulnerability, not only epidemiologically—understood as being at greater risk of contracting COVID-19 due to greater exposure to the infection, delayed diagnosis and identification of contacts, or greater difficulties complying with isolation or quarantine measures—but also socially, due to the worsening of the social determinants of their health (Spanish Ministry of Health 2020).

According to the Spanish National Statistics Institute (INE 2020), at the beginning of 2020, the foreign-born population accounted for almost 15% of the total population of Spain, close to 7 million people. Regarding their country of origin, the main immigrant population groups hail from Morocco, Romania and Colombia. Moreover, it has been estimated that at the end of 2019, there were between 390,000 and 470,000 undocumented migrants in the country, representing around 12% of the total number of non-EU immigrants and around 0.8% of the total population residing in Spain (Fanjul and Galvez-Iniesta 2020). According to recent estimates, 55% of this group are men and most are under 40 years of age (Fanjul and Galvez-Iniesta, 2020).

The crisis triggered by the COVID-19 virus has clearly affected migratory arrivals due to the closure of international borders, but above all, it has affected the

social determinants of health among the existing migrant population. Firstly, the impact of rising unemployment rates and worsening working conditions has been much greater for migrants (Guadagno 2020). According to Arango and colleagues (2021), the unemployment rate for foreign workers in Spain reached 25% in mid-2020 (compared to 11% for nationals). This is an increase of 44% over the previous year, with the situation being more pronounced for women and those under 25 years of age. Loss of employment generates an immediate situation of vulnerability in a foreign population that has little or no savings to cushion periods of crisis and no family support networks (Arango et al. 2021). Indeed, the at-risk-of-poverty rate stands at an alarming 50% in foreign-born households (Arango et al. 2021). Moreover, loss of employment can impact migrants' legal status, generating a vicious circle that is difficult to escape.

Secondly, although healthcare in Spain is universal, there are numerous structural, institutional, administrative and human barriers to accessing and receiving adequate medical attention that have limited migrants'—especially undocumented ones'—access to healthcare during the COVID-19 pandemic (Perna and Moreno-Fuentes 2021). For instance, the NGO Médicos del Mundo denounced the disproportionate increase in the exclusion of migrants from the Spanish healthcare system during the first six months of the pandemic—167 cases in Madrid, more than double the figure from the same period in 2019—pointing out that this is the 'tip of the iceberg' of the problem (Sánchez 2020). Moreover, migrants and refugees are often used as scapegoats for the problems generated by the virus, resulting in the proliferation of anti-migrant narratives and ethnic prejudices in the Spanish mass media, cyberspace and the public mindset (Guadagno 2020; Perna and Moreno-Fuentes 2021). Together with the reduction of social contacts and, consequently, social support, these situations may have led to loneliness and a greater sense of exclusion for many migrants.

The ApartTogether Study

The ApartTogether study (WHO 2020b) aims to determine how the COVID-19 crisis has impacted refugees and migrants around the world, especially in terms of social and public health-related factors. The study is the result of collaboration between the World Health Organization and various research centres, led by the universities of the three last authors of this article. More than 30,000 migrants and refugees in 170 countries completed an online survey.

In its first global report (WHO 2020b), the study confirmed that the COVID-19 virus had had a disproportionately harsh impact on migrant and refugee populations around the world, especially on women and those who are homeless or undocumented. Moreover, the ApartTogether study revealed a negative impact on migrants' and refugees' mental health, with half of the participants reporting increased levels of depression, anxiety and worry and increased feelings of loneliness (Spiritus-Beerden et al. 2021; WHO 2020b). This paper offers an in-depth analysis of the specific data collected in Spain within this broader study, helping to advance knowledge tailored to the social reality in Spain.

Specifically, this paper aims to analyse how the COVID-19 pandemic has affected the psychological well-being of the migrant and refugee population settled in Spain. To this end, we adopt a socio-ecological approach, something which was called for to address the impact of the COVID-19 crisis on migrant mental health during the first waves of pandemic (Lakhan et al. 2020), but was not widely adopted. This approach includes multiple levels in the analysis, thereby helping to shed light on the mutual influences which exist between people and the social systems with which they interact during the course of their daily activities

(Kelly et al. 2000). By adopting the socio-ecological approach, we aim to gain a comprehensive overview of the variables influencing the daily life of migrants and refugees during the pandemic, and to determine to what extent those factors have acted as predictors of psychological well-being at the individual, relational and community levels.

Method

Participants

Participants were 241 migrants and refugees aged between 18 and 69 (*M*=36.64; *SD*=11.14). Of these, 108 were men, 129 were women, two were transgender, one was non-binary and one did not specify the gender. Participants who described their living situation claimed to live in a house or apartment (199), or in another type of accommodation, such as an asylum centre (35). Legal status varied across participants: 35 had Spanish citizenship, 63 had a permanent residence permit, 64 had a temporary residence permit, 75 were undocumented and 4 did not declare their status. In terms of country of origin, 116 participants came from Latin America, 75 from Asia, 48 from Africa, and 2 from non-EU/EFTA Europe.

The online survey included an informed consent form which outlined the study's aims and conditions, making it clear to participants that the data collected would be used purely for research purposes, always safeguarding their right to anonymity. Moreover, a link to the WHO website and the contact details of the research team were provided at the end of the survey. Participation in the online survey was voluntary and participants received no reward for completing it. The WHO Ethics Review Committee and the Ethics Committee of one of the project's leading universities approved the study, guaranteeing its compliance with ethical issues and data protection.

Instruments

The ApartTogether online survey is available in 37 languages and, for this study, included the following topics: (1) participants' socio-demographic characteristics; (2) COVID-19-related problems and worries (symptoms, precautions taken, information collected, difficulties, and worries because of the virus); (3) coping strategies (defined as activities carried out by participants to feel better during the COVID-19 situation); (4) social well-being and connectedness (social connections with others); (5) social stigma and discrimination (perceived treatment by the host society); and (6) psychological well-being (current well-being and well-being compared to the pre-COVID-19 period). The full questionnaire is included in the Appendix.

Most of the scales were developed based on various self-report questionnaires on these topics. To limit the total number of items, we were unable to include entire validated questionnaires. Nevertheless, the selection of these items was agreed upon by the ApartTogether international experts team, providing evidence of content validity.

Procedure and Data Analysis

Data collection was carried out from March 2020 to November 2020 in Spain. For this purpose, aa fact sheet was elaborated, briefly describing the objectives and ethical safeguard of the study, the project webpage, the link to access the online survey, the partners involved, and contact details. After identifying the main institutions and grassroots organizations working directly with migrants and refugees across the country, this material was widely distributed to 52 social entities with the request to share the information to their users and colleagues. Thus, stakeholders working or associated with migrants and refugees, WHO regional offices and the researchers' academic and civil society networks were encouraged to disseminate and promote participation. Local resource persons were also contacted to facilitate participation for more unprivileged groups. Finally, participants were also recruited through a large scale

social media campaign (Facebook, Twitter, and Whatsapp). Due to the risk of accessing a biased sample, we used different and diverse sources to recruit participants. The eligibility criteria and hence the potential population of interest were migrants, asylum seekers or refugees over 16 years old and settled in Spain.

Once data were collected, total scores for all scales were calculated by adding responses to each scale item. In order to obtain total scores that reflected the changes experienced by participants, on these scales where participants were asked to compare their situation before and after the pandemic, the response options were coded from -1 (when they indicated that they were worse off than before) to 1 (when that situation improved after the pandemic), using 0 as the neutral point (to code responses that showed no changes between both moments).

Regarding data analysis, the psychometric properties of the scales were assessed first. Reliability was considered adequate when values were higher than .7. Correlations between each item and the total score (Discrimination Index, DI) were calculated, with values below .2 being considered poor. After exploring the instruments' psychometric properties, descriptive analyses were conducted to analyse participants' situation during the pandemic. Variables were described in terms of their distributions and the correlations between the scales administrated.

Responses to the psychological well-being scales were analysed in depth. First, item means were calculated to identify those factors which had worsened since the outbreak of the pandemic. Next, the sample was divided into socio-demographic groups (e.g., legal status or living conditions) and total scores and experiences related to COVID-19 (symptoms, testing positive, having a loved one test positive) were compared.

In order to determine which variables predicted migrants' and refugees' current psychological well-being and changes in this factor during the pandemic, two types of regression analysis were conducted. First, we tested three different linear models that differed in terms of the socio-ecological nature of the variables included as predictors: individual, relational and community. Next, multiple linear regression analyses were performed to identify the variables that explained the variance observed in the model. The models that explained the highest percentage of variance were selected and interpreted.

Finally, a profile study was conducted. To this end, participants were divided into two groups according to their total score in the second well-being evaluation. The first group comprised participants with negative scores, that is, those whose well-being had decreased during the pandemic. Participants with positive scores in well-being were assigned to the second group. Participants from the two groups were compared in terms of both their scores in psychosocial variables and other demographic characteristics. The data analysis was conducted using SPSS Statistics (version 26).

Results

Psychometric Properties

Psychometric properties were assessed for scales measuring a single construct. Instruments comprising a group of individual items assessing diverse variables, such as the questionnaire for evaluating COVID-19 symptoms and the one measuring information collection, were excluded. These instruments were only used for exploratory purposes. Table 1 shows the variables used in this paper, the number of items included in each scale, as well as the Cronbach's Alpha value and the DI range.

Please insert Table 1 about here

As Table 1 indicates, reliability was adequate for all scales, with the psychological well-being scale being the one with the best values in both versions. However, poor DI values were obtained for some items. On the scale measuring precautions, the item assessing whether participants covered their nose and their mouth in public reached a low correlation, indicating a lack of variability in the participants' responses. As this activity was mandatory in Spain, most participants responded that they did it, which caused this item to be inadequate for discriminating between low and high scoring participants. On the psychological well-being scale, the item regarding alcohol and drug consumption did not reach adequate DI values in the version asking about current situation though it did in the one comparing current situation to pre-COVID. Most responders answered that they did not consider this as a problem at present, yet informed of some differences between the two periods. Finally, the coping strategy focused on not thinking about the situation was not used by most participants. leading to a low variability among them.

Descriptive Analysis

Table 2 shows the descriptive indexes calculated, including total scores, the range of values for each scale and the minimum and maximum values obtained by participants. Variables scored on a scale ranging from negative to positive values reflect participants' perceptions of how their situation had changed since the outbreak of the COVID-19 pandemic. Negative values indicate that participants felt that their situation in relation to the variable had worsened, whereas positive values indicate a perceived improvement.

Of the 241 participants who responded to the items about COVID-19 symptoms, 26 acknowledged having or having had symptoms, whereas 191 claimed not to have had symptoms and 19 did not know. However, only 11 had tested positive. A total of 40 participants confirmed that a loved one had tested positive for COVID-19.

Please insert Table 2 about here

As shown in Table 2, participants developed preventive habits, taking precautions to avoid transmitting the virus and using different information sources (two on average). Just over one fifth (22.1%) obtained the highest score for precautions, indicating that they took all six preventive actions evaluated all the time. Moreover, 25.8% of participants obtained information about COVID-19 from four or five different sources such as newspapers or TV. In terms of difficulties, 75.7% claimed to have had more difficulties in their daily life after the start of the pandemic, whereas 13.3% indicated no change and 11% said they now had fewer difficulties than before. Only 0.5% of participants obtained the highest possible score in this scale. The distributions of specific items revealed that difficulties were mainly related to support from NGOs and their relationship with their children.

Negative means in perceived treatment indicated that participants felt they were treated worse than before the pandemic. Specifically, 25.1% of participants felt the treatment they received had worsened, 53.6% reported no change and 21.3% felt better-treated. The mean number of worries participants had during the pandemic was almost 4 (M= 3.77), although 2.4% said they were worried about ten or more issues during this period.

In terms of coping strategies, 52.3% of participants engaged in four or fewer activities to help themselves feel better during the pandemic. The most common activities were staying in contact with family and friends, keeping busy (cooking or doing housework or gardening) and staying active by engaging in physical activity. Social connections decreased, as expected, especially with family and friends living in Spain, as participants' relationships with relatives in their countries of origin did not

change. Just over half (51.4%) claimed to have fewer social connections than before the pandemic, 22% reported no change and 26.6% indicated more connections than before.

Relationships between the variables measured were also explored. Table 3 shows the correlation values between the total scores on all scales. Significant correlations were found between the variables measured, in the expected directions. Negative variables such as difficulties and worries correlated negatively with scales measuring positive variables such as psychological well-being and social connections.

Please insert Table 3 about here

When the total scores obtained by men and women were compared, significant differences were found for precautions (t=-2.6; p<.05), information (t=2.97; p<.01), and difficulties (t=-2.38; p<.05), with women having higher means in the first and third scales, and a lower one in the second. Significant differences were also observed in information between participants who had tested positive for COVID-19 and those who had not (t=2.8; p<.01), as well as between those who had and did not have symptoms (t=3.42; p<.01), with those who had tested positive and those with symptoms having higher means. Moreover, when participants who had tested positive for COVID-19 were compared with those who had not, significant differences were found in relation to perceived treatment (t=3.08; p<.01) and social connections (t=-2.4; p<.05), with the scores showing that participants who had tested positive had fewer social connections but felt better-treated than those who had not tested positive. Participants who had tested positive scored higher for perceived treatment, indicating that they felt well treated, whereas those who had not tested positive obtained negative means, indicating that felt the treatment they received had worsened since the start of the pandemic. No significant differences were found between participants with and without relatives or loved ones who had tested positive for COVID-19.

Psychological Well-being

Psychological well-being was measured in two ways: problems experienced during the COVID-19 pandemic (current well-being) and differences in the presence of these problems before and after the pandemic (compared well-being). In the first measure, higher scores on the scale indicate higher levels of well-being and fewer difficulties during the pandemic (please note that, in the interest of clarity and to facilitate analysis, this scale was scored inversely). In the second measure, scores were negative when problems were worse during the pandemic than beforehand (and well-being decreased) and positive when problems were less frequent (and well-being increased). In general terms, current well-being was high, although 12.1% of participants said they had sometimes experienced ten of the problems described. In terms of comparing their situation before and during the pandemic, 78.7% of participants reported decreased well-being, 13.7% reported no change and 7.6% said their well-being had increased. Table 4 shows the means and standard deviations of the items in the two versions of the well-being scale.

Please insert Table 4 about here

The most frequent mental health problems experienced since the outbreak of the COVID-19 pandemic were use of alcohol or drugs, having physical reactions to stress and feeling angry, whereas feeling depressed or worrying too much were the least frequent. Nevertheless, these same two issues (feeling depressed and worrying too much) were the ones participants identified as having grown worse since the start of the pandemic.

Significant differences were found between men and women in compared well-being (t=2.85; p<.01), with women reporting a greater decrease. However, the two groups scored similarly for current well-being. No significant differences were found in

either current or compared well-being between participants with different living conditions, or between those with different legal statuses.

Regression analyses were performed to identify those variables that best predicted current and compared well-being. Tables 5 and 6 show the results of all the regression models calculated, with the first pertaining to current well-being and the second to compared well-being. Six models were extracted in both cases. The three first models were related to the ecological nature of the potential predictor: individual, relational or community; and the rest included those variables found to have the strongest predictive power in the multiple linear regressions.

Please insert Tables 5 and 6 about here

As shown in Table 5, difficulties and worries were the two individual variables that best predicted current well-being. Social connections and perceived treatment were also significant in their respective models. However, the multiple regression analyses revealed that the model with the greatest explanatory power was the one that included difficulties, worries and social connections as predictors. Difficulties and worries had a negative determinant effect, meaning that more difficulties and more worries were associated with lower scores for current well-being. Social connections, on the other hand, were positively associated with current well-being. This model explained a significant proportion of the variance observed in current well-being ($R^2 = .27$; $F(3, 191) = 25.08$; $p < .001$).

In terms of changes in well-being, the different models revealed similar results. Difficulties and worries were found to predict changes at an individual level, whereas social connections and perceived treatment did so at the relational and community levels, respectively. However, the model with the greatest explanatory power was the one that included both difficulties and worries, which were negatively associated with

positive changes in well-being, and perceived treatment, which was positively associated with the same variable. The complete model explained a significant proportion of the variance observed in changes in well-being ($R^2 = .31$; $F(3, 183) = 27.73$; $p < .001$).

Profile Analysis

Participants who reported positive and negative changes in well-being were compared in terms of the psychosocial variables measured. Table 7 shows those variables for which significant differences were observed, and specifies which group obtained the highest mean in each case.

Please insert Table 7 about here

According to the results presented in Table 7, participants who reported negative changes in psychological well-being had significantly more difficulties and fewer social connections, felt they had been treated worse, had more worries, and engaged in a higher number of activities to help them cope with the situation (i.e., needed more help). No statistically significant differences were found between participants who reported positive and negative changes in well-being in terms of gender, age, living conditions, legal status, education level and work situation. No differences were found either in terms of COVID-19 symptoms or having or knowing someone who had tested positive.

Discussion

The results presented in this paper show how the COVID-19 crisis has decreased the psychological well-being of migrants and refugees living in Spain, suggesting that the pandemic has either exacerbated pre-existing mental health conditions or generated new vulnerabilities as a result of the deterioration of social determinants. One particularly striking finding is that the psychological well-being of the majority of participants (78.7%) has decreased since the outbreak of the COVID-19 pandemic, with feelings of

depression or worrying too much being the problems identified as having grown worse in comparison with their situation before the pandemic. These results are consistent with those reported by other studies carried out during the COVID-19 crisis (Boyraz, Legros, and Tigershtrom 2020; Taylor et al. 2020; Xiong et al. 2020). Moreover, most participants claimed to have developed preventive habits, taking precautions to avoid transmitting the virus. These results refute prevailing social narratives linking migrants to rule-breaking and poor hygiene and casting them in the role of potential transmitters, one of the main sources of prejudice against this population during the pandemic (Perna and Moreno-Fuentes 2021).

Our study also suggests what the best predictors of psychological well-being may be, from a socio-ecological approach. At the individual level, experiencing more difficulties (e.g., financial hardship, less support from NGOs, poor relationship with one’s children) and having more worries (e.g., getting sick, financial consequences, losing one’s job) were associated with lower scores for current well-being and a greater decrease in well-being compared to the pre-COVID situation. Having social connections and perceiving positive treatment by the host society were positively associated with psychological well-being at a relational and community level, respectively. This is consistent with that reported by studies that found higher rates of psychological well-being among migrants who (a) had a positive attitude towards life (Uskul and Greenglass 2005) and a good sense of control over their own lives (Vukojević Kuburić, and Damjanović 2016); (b) reported higher levels of perceived social support (Moreno-Jiménez and Hidalgo, 2011); and (c) reported lower levels of perceived discrimination (Murillo-Muñoz and Molero-Alonso 2012).

In general, the migrants and refugees in our study felt they were treated worse than prior to the pandemic. These findings support those reported in other studies that

argue that COVID-19 has spread discrimination in terms of racism and xenophobia, which in turn has had a negative impact on the psychological well-being of migrants and ethnic minorities (Ahuja et al. 2020; Rahman et al. 2021; Spiritus-Beerden et al. 2021). However, it is worth noting that participants who had tested positive for COVID-19 felt better-treated by their host society than those who had never tested positive. This suggests that people who caught the virus may feel they received good, equal treatment from the health system and other community resources. It may reflect the fact that they have been considered as victims or perhaps it might legitimising their status as citizens of their host country. This should be further explored in future research.. These results partially contradict those found by some other studies, which argue that migrants and refugees have suffered disproportionally from the COVID-19 virus due to healthcare inequity, based on administrative, cultural, and linguistic barriers and the inadequate cultural competence of professionals (Gil-González et al. 2015; Guadagno 2020; Ingleby et al. 2019; Vearey, Hui, and Wickramage, 2019). We should therefore acknowledge the efforts made by the Spanish healthcare system and the professionals working in it to provide truly universal coverage and leave no one behind (Perna and Moreno-Fuentes, 2021).

In terms of gender, as other previous studies have pointed out (Burki 2020; Castellanos-Torres, Mateos, and Chilet-Rosell 2020; Ryan and El Ayadi 2020; Spanish Ministry of Health 2020), the psychological well-being of women has decreased more than that of men since the start of the pandemic. Moreover, the women in our study claimed to have taken more precautions than men, but had also experienced more difficulties and were less well-informed. This is probably linked to the gender inequalities that already existed in our society prior to the pandemic, as well as to those generated by the measures adopted to combat the spread of the COVID-19 virus (e.g.,

closure of schools and day-care centres), which imposed a physical and mental burden on women, especially mothers and those caring for dependent or older adults (Castellanos-Torres, Mateos, and Chilet-Rosell 2020). Indeed, one of the principal difficulties identified was participants' relationship with their children. Moreover, the COVID-19 pandemic has had a particularly harsh effect on certain essential jobs that are already highly feminised and mainly carried out by migrant women, such as domestic work, care work and agriculture (Mahía 2021; Obinna 2021; Spanish Ministry of Health 2020).

Limitations

The present study has certain limitations that should be taken into consideration when interpreting the findings reported here. Firstly, data were collected over a relatively long period of time (i.e., from March to November 2020) and it might have influenced the participants' responses to psychological well-being items and the other scales. Additionally, the sample was not representative and the use of an online survey may have influenced participant profile, limiting the participation of those in more unprivileged situations. For instance, no significant differences were found in relation to participants' living conditions or legal status, two variables which have been identified as key risk factors in other studies (e.g., WHO 2020b). This could be due to sample bias: since most people in our study were living in a house or apartment—where their basic needs are more likely to be met—they would not have faced other difficulties that have been widely documented in the media during the COVID-19 pandemic, such as energy poverty, limited access to water and homelessness (Patel et al. 2020; Spanish Ministry of Health 2020).

Secondly, the data were collected exclusively through questionnaires, a circumstance which enables only limited interpretations. Future studies should

incorporate qualitative phases in which participants are given the opportunity to elaborate on their responses and give more detailed information about their situations, since this will provide greater insight into how individual, relational and community variables influence their psychological well-being.

Finally, due to the presence of low DI items in the psychometric analysis, future studies should aim at reviewing the current version of the scales in order to adapt the content to be useful when evaluating participants in Spain. Namely, the item regarding not considering the situation as a coping strategy as it does not seem to contribute to the measure construct. Other items with lower DI reflect contextual issues that are not relevant to this study, although they could be in others.

Social Implications and Areas for Psychosocial Intervention

Despite these limitations, however, the paper contributes to our understanding of how the COVID-19 pandemic is affecting migrants and refugees settled in Spain. In addition to helping address the health disparities that affect these populations in relation to the virus, the results reported here may also help clarify the contributions made by individual, relational and community factors. The following are some priority areas of psychosocial intervention at different ecological levels that may help guarantee migrants' and refugees' psychological well-being and health equity in Spain during the current pandemic.

First, there is an urgent need to improve mental health services and their ability to help people cope with the difficulties and worries generated by the COVID-19 pandemic. This requires a firm commitment by the government to recognise psychological well-being, is an important pillar of individual, community, and public health. Psychological well-being should therefore be taken into consideration in the design of health plans, not only enhancing public mental health care/services for the

entire population, but also addressing their diversity (Garrido, García-Ramírez, and Balcázar 2019). Accessible and responsible mental health services may help reduce not only fear of the COVID-19 virus, but also the worries and difficulties derived from its adverse socio-economic consequences (Asmundson and Taylor 2020), with a particular focus on unprivileged populations (Lakhan et al. 2020). Other steps designed to preserve the mental health of migrants and refugees include ensuring decent living conditions and basic resources (i.e., water, food, housing, and security), enforcing the legal framework regarding working conditions in order to protect migrant employees, and facilitating access to temporary residence permits and social security for as long as the crisis continues (Guadagno 2020).

Second, due to the importance of social connectedness for psychological well-being, it is essential to adopt a community-based approach to the provision of mental health services, moving beyond the dominant individual-focused perspective (see, for example, Paloma, de la Morena, and López-Torres 2020; Paloma et al. 2020). Specifically, the development of prevention and promotion programmes addressing social support and community resilience is fundamental for maintaining and recovering psychological well-being in times of pandemic and beyond (Jewett et al. 2021; Yip et al. 2021). During the initial period of this pandemic, a community-based crisis response arose spontaneously. This response was rooted in solidarity and served to highlight the power of social connections and partnerships among organisations to promote community resilience. Numerous actions were carried out informally within the community to cover essential needs and provide basic necessities (e.g., masks, hand sanitiser, food, rental payment), particularly to more unprivileged people who had been overlooked by public services. Moreover, some voluntary initiatives also emerged offering psychological aid to help people deal with their worries and difficulties.

However, this type of informal action is hard to sustain over time, and state intervention is required to strengthen this neighbourhood solidarity and help build community resilience (Jewett et al. 2021). It is crucial to ensure upstream planning before a disaster occurs, engaging diverse stakeholders (e.g., NGOs, neighbour associations, community leaders, religious leaders) and including and empowering people in situation of social vulnerability as part of the social capital (Yip et al. 2021).

Third, host societies should strive to ensure that the migrants and refugees settled in their communities are treated well, since this has an enormous impact on their psychological well-being (Pinzón-Espinosa et al. 2021; Rahman et al. 2021; Spiritus-Beerden et al. 2021). In this sense, we need to combat discrimination and stigma, monitoring and sanctioning racist and xenophobic behaviour, as well as demanding social responsibility in the mass media and conducting awareness-raising campaigns focusing on human rights and cultural diversity (WHO 2020c). At the same time, although the Spanish health system has been identified as a best practice in terms of health equity during the COVID-19 pandemic (Perna and Moreno-Fuentes 2021) and our findings suggest that people who received healthcare felt they were treated well, we need to continue to work to promote and protect an equitable healthcare system and to improve the cultural competences of the professionals working in it (Ingleby et al. 2019; Kluge et al. 2020).

Fourth, our findings suggest that an explicitly gender-responsive approach is required to offer psychological assistance and self-support to migrant women regarding the COVID-19 pandemic (Ryan and El Ayadi 2020). An intersectional perspective should be adopted to simultaneously address the interdependent categories (e.g., gender, ethnicity, age, sexual orientation) that define women’s experiences within their socio-political and historical context (Garrido and Cubero 2019; Obinna 2021). Moreover,

mental health programmes for women should include topics such as care work, motherhood, migratory grief, gender-based violence, and family-work life balance, and be accompanied by health, financial and social protection (WHO 2020d), thereby reducing their worries and difficulties. Programmes should also address the barriers that limit female participation (e.g., ensuring schedules that are compatible with their jobs, providing childcare facilities for those who are mothers) and should strive to promote women's personal and social empowerment (Garrido and Cubero, 2019).

This paper sheds light on how the current pandemic is affecting migrants and refugees living in Spain and suggests potential strategies which could be implemented to design effective actions aimed at health equity (Choudhari 2020; Dubey et al. 2020; Mukhtar 2020; Rahman et al. 2021). As Asmundson and Taylor (2020) state: 'the search for evidence-based and accessible mental health interventions continues and, with the increasing psychological burden of the pandemic, is becoming just as important as the search for a vaccine' (p. 2). In this regard, host societies need new paradigms that rethink public health, such as ecological and community-based approaches including psychosocial interventions aimed at ensuring health equity for diverse communities, especially in times of crisis such as the current COVID-19 pandemic.

References

Ahuja, Kanika K, Debanjan Banerjee, Kritika Chaudhary, and Chehak Gidwani. 2020. “Fear, Xenophobia and Collectivism as Predictors of Well-Being during Coronavirus Disease 2019: An Empirical Study from India.” *International Journal of Social Psychiatry* 67 (1): 46–53. doi:10.1177/0020764020936323.

Andrino, Borja, Daniele Grasso, and Kiko Llaneras. 2021. “92.000 muertos en un año: España es uno de los países con más exceso de fallecidos en la pandemia.” *El País,* March 14, Sociedad. https://elpais.com/sociedad/2021-03-13/92000-muertos-en-un-ano-espana-es-uno-de-los-paises-con-mas-exceso-de-fallecidos-en-la-pandemia.html

Albar, María Jesús, Carlos Camacho, Manuel García-Ramírez, Rocío Garrido, Manuel El Jebari, Turia El Karti, Mustapha Hernández-Plaza, and et al. 2010. “Contributions of liberation psychology to the integration of immigrant population.” *Psychosocial Intervention* 19 (3): 223–234. doi:10.5093/in2010v19n3a3.

Asmundson, Gordon J. G., and Stephen Taylor. 2020. “Coronaphobia revisted: A state-of-the-art on pandemic-related fear, anxiety, and stress.” *Journal of Anxiety Disorders* 76: 102326. doi:10.1016/j.janxdis.2020.102326.

BOE (Boletín Oficial de Estado, Gobierno de España). 2020. *Real Decreto 926/2020, de 25 de octubre, por el que se declara el estado de alarma para contener la propagación de infecciones causadas por el SARS- CoV-2. Gobierno de España*. https://www.boe.es/boe/dias/2020/10/25/pdfs/BOE-A-2020-12898.pdf

Boyraz, Güler, Dominique N. Legros, and Ashley Tigershtrom. 2020. “COVID-19 and traumatic stress: The role of perceived vulnerability, COVID-19-related worries,

and social isolation." *Journal of Anxiety Disorders* 76: 102307. doi:10.1016/j.janxdis.2020.102307.

Burki, Talha. 2020. "The indirect impact of COVID-19 on women." *The Lancet Infectious Diseases* 20 (8): 904–905. doi:10.1016/S1473-3099(20)30568-5.

Castellanos-Torres, Esther, José Tomás, Mateos, and Elisa Chilet-Rosell. 2020. "COVID-19 from a gender perspective." *Gaceta Sanitaria* 34 (5): 419–421. doi:10.1016/j.gaceta.2020.04.007.

Choudhari, Ranjana. 2020. "COVID 19 pandemic: Mental health challenges of internal migrant workers of India." *Asian Journal of Psychiatry* 54: 102254. doi:10.1016/j.ajp.2020.102254.

Dubey, Souvik, Payel Biswas, Ritwik Ghosh, Subhankar Chatterjee, Mahua Jana Dubey, Subham Chatterjee, Durjoy Lahiri, and et al. 2020. "Psychosocial impact of COVID-19." *Diabetes & Metabolic Syndrome: Clinical Research & Syndrome* 14 (15): 779–788. doi:10.1016/j.dsx.2020.05.035.

Fanjul, Gonzalo, and Ismael Galvez-Iniesta. 2021. *Extranjeros, sin papeles e imprescindibles: Una fotografía de la inmigración irregular en España*. Organización Por Cusa. Accessed February 4. https://porcausa.org/wpcontent/uploads/2020/07/RetratodelairregularidadporCausa.pdf

García-Ramírez, Manuel, Manuel De la Mata, Virginia Paloma, and Sonia Hernández-Plaza. 2011. "A liberation psychology approach to acculturative integration of migrant populations." *American Journal of Community Psychology* 47 (1-2): 86–97. doi:10.1007/s10464-010-9372-3.

Garrido, Rocío, and Aloe Cubero. 2019. “The socio-political participation of black African women in Seville (Spain).” *ODISEA. Revista de Estudios Migratorios* 6: 1–30.

Garrido, Rocío, Manuel García-Ramírez, and Fabricio E. Balcázar. 2019. “Moving towards community cultural competence.” *International Journal of Intercultural Relations* 73: 89–101. doi:10.1016/j.ijintrel.2019.09.002.

Gil-González, Diana, Mercedes Carrasco-Portiño, Carmen Vives-Cases, Andrés A. Agudelo-Suárez, Ramón Castejón Bolea, and Elena Ronda-Pérez. 2015. “Is health a right for all? An umbrella review of the barriers to health care access faced by migrants.” *Ethnicity & Health* 20 (5): 523–541. doi:10.1080/13557858.2014.946473.

Greenaway, Christina, Sally Hargreaves, Sapha Barkati, Christina M. Coyle, Federico Gobbi, Apostolos Veizis, and Paul Douglas. 2020. “COVID-19: Exposing and addressing health disparities among ethnic minorities and migrants.” *Journal of Travel Medicine* 27 (7): 1–3. doi:10.1093/jtm/taaa113.

Guadagno, Lorenzo. 2021. *Migrants and the COVID-19 pandemic: An initial analysis*. Migration Research Series, 60. International Organization for Migration, 2020. Accessed January 23. https://publications.iom.int/system/files/pdf/mrs-60.pdf

Ingleby, David. 2021. “Ethnicity, migration and the ‘social determinants of health’ agenda.” *Psychosocial Intervention* 21 (3): 331–341. doi:10.5093/in2012a29.

Ingleby, David, Roumyana Petrova-Benedict, Thomas Huddleston, and Elena Sanchez. 2019. “The MIPEX health strand: A longitudinal, mixed-methods survey of policies on migrant health in 38 countries.” *European Journal of Public Health* 29 (3)): 458–462. doi:10.1093/eurpub/cky233.

INE (Instituto Nacional de Estadística). 2020. *Cifras de Población*. Accessed February 9. https://www.ine.es/dynt3/inebase/es/index.htm?padre=1894&capsel=1895

Jewett, Rae L., Sarah M. Mah, Nicholas Howell, and Mandi M. Larsen. 2021. "Social cohesion and community resilience during COVID-19 and pandemics: A rapid scoping review to inform the United Nations Research Roadmap for COVID-19 recovery." *International Journal of Health Services* 51 (3): 325–336. doi:10.1177/0020731421997092.

Kelly, James G., Ann Marie Ryan, B. Eileen Altman, and Stephen P. Stelzner. 2000. "Understanding and changing social systems: An ecological view." In *Handbook of Community Psychology,* edited by Julian Rappaport, and Edward Seidman, 133–159). Boston, MA: Springer. doi: 0.1007/978-1-4615-4193-6_7.

Kokou-Kpolou, Cyrille Kossigan, Charlemagne Simplice Moukouta, Joanic Masson, Amal Bernoussi, Jude Mary Cénat, and Marie-Frédérique Bacqué. 2020. "Correlates of grief-related disorders and mental health outcomes among adult refugees exposed to trauma and bereavement: A systematic review and future research directions." *Journal of Affective Disorders* 267: 171–184. doi:10.1016/j.jad.2020.02.026.

Lakhan, Ram, Srinivas Kosgi, Amit Agrawal, and Manoj Sharma. 2020. "Primary care physician's approach for mental health impact of COVID-19: Case of migrant workers mental health." *Journal of Family Medicine and Primary Care* 9 (10): 5394–5396. doi:10.4103/jfmpc.jfmpc_1716_20.

Liem, Andrian, Cheng Wang, Yosa Wariyanti, Carl A. Latkin, and Brian J. Hall. 2020. "The neglected health of international migrant workers in the COVID-19 epidemic." *The Lancet* 7 (4): e20. doi:10.1016/S2215-0366(20)30076-6.

Sánchez, Gabriela. 2020. “La exclusión sanitaria de migrantes aumenta en Madrid durante la pandemia: Médicos del Mundo detecta 167 casos desde marzo.” *El Diario,* October 5. Desalambre. https://www.eldiario.es/desalambre/exclusion-sanitaria-migrantes-aumenta-madrid-durante-pandemia-medicos-mundo-detecta-167-casos-marzo_1_6268895.html

Spanish Ministry of Health. 2021. *Equidad en Salud y COVID- 19: Análisis y propuestas para abordar la vulnerabilidad epidemiológica vinculada a las desigualdades sociales.* Gobierno de España. Accessed February 20, 2021. https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/alertasActual/nCov/documentos/COVID19_Equidad_en_salud_y_COVID-19.pdf

Marmot, Michael. 2005. “Social determinants of health inequalities.” *The Lancet* 365 (9464): 1099–1104. doi:10.1016/S0140-6736(05)71146-6.

Moreno-Jiménez, Pilar M., and M. Carmen Hidalgo. 2011. “Measurement and prediction of satisfaction with life in immigrant workers in Spain: Differences according to their administrative status.” *Anales de Psicología* 27 (1): 179–185.

Mucci, Nicola, Veronica Traversini, Gabriele Giorgi, Eleonora Tommasi, Simone De Sio, and Giulio Arcangeli. 2020. “Migrant workers and psychological health: A systematic review.” *Sustainability* 12 (1): 120. doi:10.3390/su12010120.

Mukhtar, Sonia. 2020. “Psychological health during the coronavirus disease 2019 pandemic outbreak.” *International Journal of Social Psychiatry* 66 (5): 512–516. doi:10.1177/0020764020925835.

Murillo-Muñoz, Javier, and Fernando Molero-Alonso. 2021. “Psychosocial factors associated with the well-being of Colombian immigrants to Spain.” *Psychosocial Intervention* 21 (3): 319–329. doi:10.5093/in2012a28.

Obinna, Denise N. 2021. “Essential and undervalued: health disparities of African American women in the COVID-19 era.” *Ethnicity & Health* 26 (1): 68–79. doi:10.1080/13557858.2020.1843604.

Orcutt, Miriam, Parth Patel, Rachel Burns, Lucinda Hiam, Rob Aldrige, Delan Devakumar, Bernadette Kumar and et al. 2020. “Global call to action for inclusion of migrants and refugees in the COVID-19 response.” *The Lancet* 395 (10235): 1482–1483. doi:10.1016/S0140-6736(20)30971-5.

Paloma, Virginia, Irene de la Morena, and Clara López-Torres. 2021. “Promoting posttraumatic growth among the refugee population in Spain: A community-based pilot intervention.” *Health & Social Care in the Community* 28 (1): 127–136. doi:10.1111/hsc.12847.

Paloma, Virginia, Irene de la Morena, Jana Sladkova, and Clara López-Torres. 2020. “A peer support and peer mentoring approach to enhancing resilience and empowerment among refugees settled in southern Spain.” *Journal of Community Psychology* 48 (5): 1438–1451. doi:10.1002/jcop.22338.

Paloma, Virginia, Marta Escobar-Ballesta, Blanca Galván-Vega, Juan Diego Díaz-Bautista, and Isabel Benítez. 2021. “Determinants of life satisfaction of economic migrants coming from developing countries to countries with very high human development: A systematic review.” *Applied Research in Quality of Life* 16: 435–455. doi:10.1007/s11482-020-09832-3.

Patel, Jay, Freja Nielsen, A. A. Badiani, S. Assi, V. Unadkat, B. Patel, B., R. Revindrane, and et al. 2020. “Poverty, inequality and COVID-19: The forgotten vulnerable.” *Public Health* 183: 110–111. doi:10.1016/j.puhe.2020.05.006.

Perna, Roberta, and Francisco Javier. 2021. “Inmigración y atención sanitaria en un contexto de pandemia: Vulnerabilidades y (escasas) respuestas en Europa y en

España." *Anuario CIDOB de la Inmigración 2020*: 115–128. doi: 10.24241/AnuarioCIDOBInmi.2020.116.

Pinzón-Espinosa, Justo, María José Valdés-Florido, Ilaria Riboldi, Erensu Baysak, Eduard Vieta, E., and EFPT Psychiatry Across Borders Working Group. 2021. "The COVID-19 pandemic and mental health of refugees, asylum seekers, and migrants." *Journal of Affective Disorders* 280 (1): 407–408. doi:10.1016/j.jad.2020.11.029.

Rahman, Muhammad, Rabab Ahmed, Modhurima Moitra, Laura Damschroder, Ross Brownson, Bruce Chorpita, Priscilla Idele, Fatima Gohar, and et al. 2021. "Mental distress and human rights violations during COVID-19: A rapid review of the evidence informing rights, mental health needs, and public policy around vulnerable populations." *Frontiers in Psychiatry* 11: 1–18. doi:10.3389/fpsyt.2020.603875.

Rohilla, Jitendra, Pinki Tak, Shubham Jhanwar, and Shazia Hasan. 2020. "Primary care physician's approach for mental health impact of COVID-19." *Journal of Family Medicine and Primary Care* 9 (7): 3189–3194. doi:10.4103/jfmpc.jfmpc_513_20.

Ryan, Nessa E., and Alison M. El Ayadi. 2020. "A call for a gender-responsive, intersectional approach to address COVID-19." *Global Public Health* 15 (9): 1404–1412. doi:10.1080/17441692.2020.1791214.

Spiritus-Beerden, Eva, An Verelst, Ines Devlieger, Nina Langer-Primdahl, Fábio Botelho-Guedes, Antonio Chiarenza, Stephanie De Maesschalck, Natalie Durbeej, Rocío Garrido, and et al. 2021. "Mental health of refugees and migrants during the COVID-19 pandemic: The role of experienced

discrimination and daily stressors." *International Journal of Environmental Research and Public Health* 18 (12): 6354. doi:10.3390/ijerph18126354.

Taylor, Steven, Caeleigh A. Landry, Michelle M. Paluszek, Geoffrey S. Rachor, and Gordon J. G. Asmundson. 2020. "Worry, avoidance, and coping during the COVID-19 pandemic: A comprehensive network analysis." *Journal of Anxiety Disorders* 76: 102327. doi:10.1016/j.janxdis.2020.102327.

The World Bank. 2021. "Decisive Action in an Unprecedented Crisis." Accessed March 9, 2021. https://www.worldbank.org/en/news/feature/2020/04/17/decisive-action-in-an-unprecedented-crisis

Uskul, Ayse K., and Esther Greenglass. 2005. "Psychological well-being in a Turkish-Canadian sample." *Anxiety, Stress and Coping* 18 (3): 269–278. doi:10.1080/10615800500205983.

Vearey, Jo, Charles Hui, and Kolitha Wickramage. 2019. "Migration and health: Current issues, governance and knowledge gaps. In *World Migration Report,* edited by Maurie McAuliffe and Binod Khadria, 212–232. International Organization for Migration. doi:10.18356/9ea52c60-en.

Vukojeviü, Vesna, Zorica Kuburiü and Aleksandar Damjanoviü. 2016. "The influence of perceived discrimination, sense of control, self-esteem and multiple discrepancies on the mental health and subjective well-being in Serbian immigrants in Canada." *Psihologija*, 49(2): 105-127. doi:10.2298/PSI1602105V

WHO (World Health Organization). 2020a. *WHO Director-General's opening remarks at the media briefing on COVID19*. Accessed March 3, 2021. https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020

WHO (World Health Organization). 2020b. *ApartTogether Survey: Preliminary Overview of Refugees and Migrants Self-Reported Impact of COVID-19.* World Health Organization. Accessed March 3, 2021. https://apps.who.int/iris/handle/10665/337931

WHO (World Health Organization). 2021. *Gender and COVID-19: Advocacy Brief.* World Health Organization, 2020c. Accessed March 3. https://apps.who.int/iris/bitstream/handle/10665/332080/WHO-2019-nCoV-Advocacy_brief-Gender-2020.1-eng.pdf

Xiong, Jiaqi, Orly Lipsitz, Flora Nasri, Leanna M. W. Lui, Hartej Gill, Lee Phan, David Chen- Li, and et al. 2020. "Impact of COVID-19 pandemic on mental health in the general population: A systematic review." *Journal of Affective Disorders* 277: 55–64. doi:10.1016/j.jad.2020.08.001.

Xiang, Yu-Tao, Yuan Yang, Wen Li, Ling Zhang, Qinge Zhang, Teris Cheung, and Chee H. Ng. 2020. "Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed." *The Lancet Psychiatry* 7 (3): 228–229. doi:10.1016/S2215-0366(20)30046-8.

Yang, Tse-Chuang, Seung-Won Emily Choi, and Feinuo Sun. 2021. "COVID-19 cases in US counties: roles of racial/ethnic density and residential segregation." *Ethnicity & Health* 26 (1): 11–21. doi:10.1080/13557858.2020.1830036.

Yip, Wanfen, Lixia Ge, Andy Hau Yan Ho, Bee Hoon Heng, and Woan Shin Tan. 2021. "Building community resilience beyond COVID-19: The Singapore way." *The Lancet Regional Health–Western Pacific* 7: 100091. doi:10.1016/j.lanwpc.2020.100091.

Table 1

Variables and Psychometric Properties of the Scales used during the Evaluation

Variables	Short-name	Number of items	Reliability	Discrimination Index (range)
COVID-19-related problems and worries				
Coronavirus symptoms	Symptoms	3		
Precautions taken	Precautions	6	.71	.19/.57
Information collected	Information	7		
Difficulties caused by the coronavirus	Difficulties	11	.76	.30/.56
Worries	Worries	11	.71	.23/.42
Coping				
Activities to deal with COVID-19	Coping	14	.72	.18/.42
Social well-being and connectedness				
Social connections with others	Social connections	7	.83	.55/.65
Social stigma and discrimination				
Perceived treatment from host society	Perceived treatment	6	.78	.21/.75
Psychological well-being				
Well-being (now)	Well-being (now)	11	.87	.13/.73
Well-being (compared to pre-COVID-19)	Well-being (compared)	11	.91	.55/.76

Table 2

Descriptive Data for Total Scores

Variables	**Range of values**	**Minimum/ maximum**	**Mean (SD)**
Precautions	0/18	2/18	14.93 (2.90)
Information	0/6	0/5	1.96 (1.57)
Difficulties	-11/11	-8/10	2.52 (3.03)
Worries	0/13	0/12	3.77 (2.52)
Coping	0/14	0/14	3.59 (3.42)
Social connections	-7/7	-7/7	-.76 (2.60)
Perceived treatment	-6/6	-6/5	-0.22 (1.58)
Well-being (now)	0/33	0/33	19.69 (6.88)
Well-being (compared)	-11/11	-11/10	-4.04 (4.01)

Table 3

Correlations between Scales Total Scores

Variables	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**
Precautions (1)		.02	.15*	-.05	.08	.08	-.05	-.03	-.13
Information (2)			-.08	.19**	.38**	.03	.08	-.00	-.03
Difficulties (3)				.27**	.15*	-.28**	-.43**	-.42**	-.49**
Worries (4)					.64**	-.16*	-.16*	-.27**	-.31**
Coping (5)						-.03	.02	-.09	-.23**
Social connections (6)							.29**	.35**	.25**
Perceived treatment (7)								.31**	.35**
Well-being (now) (8)									.5**
Well-being (compared to pre-COVID-19) (9)									

Note: *p<.05; **p<.01

Table 4

Exploration of Changes in Psychological Well-being

	Well-being (now)		**Well-being (compared)**	
	M	**SD**	**M**	**SD**
Feeling depressed	1.30	.910	-.57	.630
Feeling like you worry too much	1.29	.911	-.62	.600
Feeling anxious	1.50	.963	-.53	.610
Feeling lonely	1.74	.969	-.52	.593
Feeling angry	2.10	.919	-.52	.578
Being reminded of earlier difficult experiences	1.82	.996	-.30	.640
Having physical reactions	2.17	.918	-.35	.606
Becoming easily annoyed	1.93	.910	-.43	.577
Feeling hopeless	1.77	1	-.57	.599
Having sleep problems	1.80	1.84	-.46	.603
Using alcohol or drugs	2.82	.504	-.14	.561

Table 5

Regression Coefficients for Alternative Models Predicting Current Psychological Well-being

	Model 1		**Model 2**		**Model 3**		**Model 4**		**Model 5**		**Model 6**	
Variables	**β**	***t*-value**	**β**	***t*-value**	**β**	***t*-value**	**β**	***t*-value**	**β**	***t*-value**	**β**	***t*-value**
Individual												
Precautions	-.01	-0.13										
Information	-.02	-0.26										
Difficulties	-.39	-5.70**					-.47	-7.49**	-.42	-6.46**	-.37	-5.62**
Worries	-.26	-3.18**							-.20	-3.11**	-.19	-2.89**
Coping	.16	1.90										
Relational												
Social connections			.35	5.32**							.15	2.32*
Community												
Perceived treatment					.31	4.64**						
F	10.93**		28.39**		21.58**		56.10**		34.14**		25.08**	
Constant	23.35		20.60		20.13		22.41		24.40		24.32	
Adjusted R^2	.20		.09		.09		.22		.25		.27	

Note: *p<.05; **p<.01

Table 6

Regression Coefficients for Alternative Models Predicting Changes in Psychological Well-being

	Model 1		**Model 2**		**Model 3**		**Model 4**		**Model 5**		**Model 6**	
Variables	**β**	***t*-value**	**β**	***t*-value**	**β**	***t*-value**	**β**	***t*-value**	**β**	***t*-value**	**β**	***t*-value**
Individual												
Precautions	-.10	-1.61										
Information	.03	0.43										
Difficulties	-.41	-6.21**					-.51	-8.09**	-.46	-7.05**	-.39	-5.61**
Worries	-.20	-2.44*							-.18	-2.76**	-.18	-2.75**
Coping	.00	0.04										
Relational												
Social connections			.25	3.58**								
Community												
Perceived treatment					.35	5.1**					.16	2.40*
F	14.37**		12.85**		26.04**		65.57**		37.77**		27.73**	
Constant	0.65		-3.71		-3.84		-2.34		-1.29		-1.44	
Adjusted R^2	.26		.06		.12		.26		.29		.31	

Note: *p<.05; **p<.01

Table 7

Differences between Participants with Negative and Positive Changes in Psychological Well-being during the COVID-19 Pandemic

Variables	***t*-value**	**Means of the group with negative changes (*n*=155)**	**Means of the group with positive changes (*n*=15)**
Precautions	0.71	15.12	14.47
Information	-0.46	2.57	2.73
Difficulties	5.70**	3.12	-1.07
Worries	4.35*	4.35	2.80
Coping	2.94*	5.54	3.27
Social connections	-2.90**	-1.10	0.87
Perceived treatment	-2.93**	-0.35	0.87

Note: *$p<.05$; **$p<.01$

Appendix

Questionnaire Used in this Study

Question	Response Option
Socio-demographic characteristics	
What is your gender?	▪ Male ▪ Female ▪ Other
What is your age?	In years
What is your country of birth?	
How long have you been living in this country?	Number of years
Where do you live?	▪ In a house/apartment ▪ Asylum centre ▪ Refugee Camp ▪ On the street ▪ Somewhere else
What is your residence status in Spain?	▪ I am a citizen in this country ▪ I have permanent documents ▪ I have temporary documents ▪ No documents/I am without legal documents ▪ Other
What is your highest educational level?	▪ Primary school ▪ Secondary education ▪ Higher education ▪ No schooling ▪ Other
My current work situation is:	▪ I am a student ▪ I work normally ▪ I have been sent home to work remotely ▪ I receive an unemployment allowance ▪ I have been sent home without pay ▪ I am responsible for a critical function in society (e.g., hospital worker, firefighter, police) ▪ I was already unemployed/not in the labour market before the corona crisis ▪ Other
Coronavirus symptoms	
Do/did you have symptoms of the corona-virus (e.g. cough, difficulty breathing, pain in lungs), high hart rate, extreme fatigue, fever, low blood pressure or high blood pressure)	▪ Yes ▪ No ▪ I don't know
Have you tested positive for the corona	▪ Yes, I have tested positive

virus?	▪ No
Have you or someone close to you tested positive for the corona virus?	▪ Yes, someone close to me is/has tested positive ▪ No
Precautions taken	
What precautions are you taking to avoid transmitting the corona virus? ▪ Increased hand-washing/use of hand sanitizer ▪ Increased physical distance from others ▪ Covering my nose and mouth in public ▪ Avoid public transport ▪ Avoid going out of my house Other precautions	▪ Yes, all the time ▪ Yes, sometimes ▪ No, because I am not able to in the situation that I am living in ▪ No, I don't want to
Information collected	
Where do you get information about the corona crisis?	▪ News from Spain (e.g., TV, radio, website) ▪ News from [the country where I was born] (e.g., TV, radio, website) ▪ NGOs/organisations that support me ▪ Social media (e.g., Facebook, Instagram, Twitter, Whatsapp group) ▪ Friends/family ▪ Other ▪ I don't have any information I trust/I understand
Difficulties caused by the coronavirus	
Because of the coronavirus and the corona measures, have you had difficulties in the following domains? ▪ Housing situation ▪ Accessing work ▪ Feelings of safety ▪ Food ▪ Clothes ▪ Financial means ▪ Support from NGOs and other organisations ▪ Medical care ▪ Health situation ▪ Relationship with my partner/husband/wife ▪ Relationship with my children	▪ Worse than before ▪ Same as before ▪ Better than before ▪ Not applicable
Worries	
What makes me worried about Coronavirus? ▪ I am/will get sick; my loved ones are/will get sick	▪ Never ▪ Sometimes ▪ Often ▪ Always

▪ I would die ▪ That we will suffer serious financial consequence ▪ That I will have difficulty getting the medical care I need ▪ That I will have difficulty feeding my family ▪ That I will have difficulty to follow preventive measures where I live ▪ I will lose my job ▪ That the security situation will get worse where I live ▪ That it will lead to (more)violence in my home/…) ▪ That I become isolated from family and caregivers ▪ That my future becomes uncertain	
Coping	
What helps you feeling better during this period? ▪ I seek information (e.g., read about COVID-19, watch the news) ▪ I make myself busy (e.g., cooking, housing/gardening) ▪ I activate myself (e.g., sports, walking) ▪ I entertain myself (e.g., TV, social media, movies, gaming) ▪ I stay in contact with family/friends ▪ I meditate/pray ▪ I take precautions measurements (e.g., take my temperature, wash my hands, keep social distance) ▪ I seek help (e.g., counsellor, medical doctor, religious leader, social worker, online help) ▪ I self-medicate ▪ I try not to think about it ▪ I think something good might come out of this ▪ I think that my past experiences can help me through this ▪ I volunteer to help others (e.g., shop for older adults) ▪ I think about the things that are important in my life ▪ Other	▪ Yes ▪ No
Social well-being and connectedness	
Because of the coronavirus and the corona measures, how do you feel connected with the people in your life?	▪ Worse than before ▪ Same as before ▪ Better than before

▪ Housemates ▪ Family in this country ▪ Family in another country ▪ Friends in this country ▪ Friends in another country ▪ Colleagues / classmates ▪ Neighbours	▪ Not applicable
Social stigma and discrimination	
Since coronavirus and the corona measures, how do you feel treated by others? ▪ I feel treated differently by others because of my origin ▪ I am treated by others with kindness ▪ Others call me names because of my origin or religion ▪ Others avoid me ▪ Others seem to be anxious about me ▪ Police treat me unfairly because of my residence status	▪ Worse than before ▪ Same as before ▪ Better than before ▪ Not applicable
Psychological well-being	
Since the coronavirus and the corona measures, have you been bothered by the following problems? ▪ Feeling depressed ▪ Feeling like you worry too much ▪ Feeling anxious ▪ Feeling lonely ▪ Feeling angry, like you are about to explode ▪ Being reminded of earlier difficult experiences I had ▪ Having physical reactions to stress, such as sweating, trouble breathing, nausea, or a pounding heart ▪ Becoming easily annoyed or irritable ▪ Feeling hopeful about the future ▪ Having sleep problems ▪ Using alcohol or drugs	▪ Worse than before ▪ Same as before ▪ Better than before ▪ Not applicable