

# The Role of Psychologists in Healthcare During the COVID-19 Pandemic

## Lessons Learned and Recommendations for the Future

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**Abstract:** Introduction: The COVID-19 pandemic has impacted individuals, communities, and whole populations. Experts across many different fields contributed their time and efforts in different ways to respond to the pandemic. Psychologists working in healthcare provided support and led many initiatives, both regionally and nationally. However, it is unknown how this has differed across Europe and its full range of activities and contributions. *Aim*: The current study is a survey of European member associations of EFPA, carried out to understand the current contributions and the impact those psychology contributions have had on the COVID-19 pandemic response, to share lessons learned, and to propose a roadmap for the future. *Results*: Overall, our study highlights how psychological expertise was integrated into many countries' policy/decision-making, action-planning, caregiving, and the promotion of health and well-being to health professionals and the general public. Even in places where psychologists were not directly integrated into governmental systems, they played an important role in responding to this pandemic by providing their services and empirical knowledge. *Discussion*: Many psychologists possess the skills and tools to adapt their practice to the digital provision of services and to provide a continuity of care during the pandemic. Research carried out by psychologists has contributed important and new knowledge on pandemic effects, consequences, and interventions; yet, more research financial support is needed. We make recommendations for augmenting psychologists' contributions in the future. In a global health crisis, where the main possible treatment is a preventive approach concentrated on sustainable behavior change, psychologists should be included every step of the way – they can make a difference.

Keywords: psychologist contributions, COVID-19, pandemic, psychologists working in healthcare

The unprecedented COVID-19 pandemic has put a considerable toll on all humans around the planet, bringing with it a parallel mental health pandemic (Gloster, Lamnisos, et al., 2020). It positioned psychologists as core professionals who are in demand to deal with both the pandemic and its aftereffects. Psychologists possess competencies that make them an important part of the general intervention to curtail the spread of COVID-19 (by promoting behavior change), assist patients and their families, and prevent burnout in other healthcare providers, among others (Arden et al., 2020). Psychologists are often an underrecognized profession, or their roles are seen as complementary or only working directly with patients/clients (Karayianni, 2018). Generally speaking, psychology's uptake in the current pandemic would seem limited (Freedland et al., 2020). Yet, the psychological science can contribute in a much broader way. The key role of behavior in preventing the spread of COVID-19 or dealing with the pandemic aftereffects means that psychologists are increasingly in greater demand internationally to help at multiple levels of healthcare systems.

In the context of a global threat like a pandemic, an umbrella organization such as the European Federation of Psychologists' Association (EFPA) can be a helpful driver to enhance collaboration across nations and facilitate knowledge sharing amongst experts. EFPA has a mission to "promote the development, dissemination and application of psychology in all its forms, and to contribute to shaping a humane society, in Europe and beyond, based on psychology's expertise" (EFPA, 2021). EFPA encompasses several working groups dealing with the profession of psychology. In particular, the Standing Committee on Psychology and Health is entrusted with "monitoring and assessing developments in research, education and professional practice on mental and physical health, and suggesting standards for the education and professional practice of psychologists working in the field of health" (EJPA, 2021). This research was carried out as part of the Standing Committee's work on the role of psychologists working within the area of health. It focuses on examining the areas where psychologists have contributed during the pandemic and identifying lessons learned that could inform future practices.

#### Psychologists Working Directly With Patients/Clients

A pandemic is a powerful stressor, but its impact on an individual's emotional and behavioral responses is often not direct (Inchausti et al., 2020). Rather, it is mediated by the cognitive descriptions, interpretations, and evaluations of the event. Psychologists working directly with individuals need to consider those who have (1) rigid thinking toward a pandemic and its consequences (e.g., "It should not have happened"), (2) catastrophizing (e.g., "It is awful, the worst"), (3) frustration intolerance (e.g., "I cannot stand it"), and/or (4) global evaluation (e.g., "I [others/life] am bad/weak") and tend to experience more intense and distressing emotions (e.g., depressed mood, panic/anxiety, anger/aggression, guilt) and exhibit maladaptive behaviors (Chong et al., 2020; Gloster, Lamnisos, et al., 2020; Neto et al., 2021). Such presentations can become destructive, as they (1) are problems in and of themselves, (2) affect the quality of life, and (3) do not help the person effectively confront the stressor (e.g., a depressed or panicked person

is not properly motivated to face the stressor, but rather ignores and/or avoids it). Here, psychologists can aid by ameliorating the negative and augmenting the positive responses to the pandemic and its aftereffects (Gloster, Lamnisos, et al., 2020). Psychology encompasses a wide range of specialty areas, and each specialty has unique contributions to make in dealing with different aspects of a pandemic.

#### Psychologists Working at Multiple Levels of the Healthcare System

Regarding the COVID-19 pandemic, most public health agencies worldwide concurred that, in the absence of a vaccine, the key preventive health behaviors were social distancing and wearing masks. Psychologists were thus immediately recognized by some countries as key players in helping policymakers and governments deal with the pandemic. For example, they worked within multidisciplinary teams to aid in reducing virus transmission (Michie et al., 2020) and to address disparities in susceptibility, care, and outcomes (Valrie et al., 2020). As the pandemic turned into a long-term situation, the psychological consequences have become clearer to everyone. The need for public means and efforts is now indisputable, and psychologists have played a major role in this regard, especially for challenged and vulnerable groups but also for the whole population (Breslau et al., 2021).

### Psychologists Supporting Healthcare Professionals and Front-Line Workers

The COVID-19 pandemic affected the entire human race, yet some groups had a qualitatively different experience (Gloster, Zacharia, et al., 2020), such as healthcare workers and especially those at the front lines, whose limits and capacities were tested in the effort to deal with the pandemic. Given the challenges of COVID-19, practical measures including psychological support for front-line healthcare workers are essential. Individual, structural, or organizational interventions can result in clinically meaningful reductions in burnout among physicians and other health professionals (West et al., 2016) and in increases in the health and well-being of physicians (e.g., Hausler et al., 2017; Huber et al., 2020). Psychologists can provide psychological "first aid," especially to health professional staff and patients. Though little research was initially available about health workers' experiences during the pandemic, emerging data suggest that the additional pressures impacted health professionals' emotions and psychology in general (Giusti et al., 2020). As Freedland et al. (2020) report, they experienced difficulties in finding time to rest and having to be

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away from their homes or their relatives to protect the latter from getting infected. Further, commonly reported symptoms included those of posttraumatic stress, depression, anxiety, and burnout (Gruber et al., 2020).

#### **Psychologists and Digital Health**

Although digital means of assessment and the delivery of psychological services have been around for a few years now, their need and use became apparent during the present pandemic, when patients could not see their providers in person (De Witte et al., 2021). Digital means emerged in various forms, ranging from telephone applications, standalone self-help programs, blended formats where the digital medium augments conventional therapy to teletherapy (Ebert et al., 2018; Karekla et al., 2019). For example, hotlines were an early form of remote help used worldwide to provide information and brief interventions in several health-related areas. Nevertheless, very little research has been conducted to assess their impact (Vonderlin et al., 2021). However, they seem to have had an impact on crisis situations such as suicide ideation (Gould et al., 2007) and health promotion, such as smoking cessation (Lichtenstein et al., 1996). Overall, it comes as no surprise that, early during the pandemic outbreak, the World Health Organization proposed using digital interventions as a means of psychological first-aid and mental-health problem management (Kluge, 2020).

## Psychological Research Produces Knowledge and Informs Practice

In the absence of a vaccine or successful medical treatments, the main means available for preventing the spread of COVID-19 and controlling the pandemic were behavioral ones. These strategies focused on changing behaviors to follow hygienic procedures for handwashing, wearing masks, and social distancing. Psychologists are experts in human behavior and have the methodologies available to study it and to answer questions such as: Who will or will not follow guidelines? What influences individuals' choices of up-taking governmental guidelines? How do the pandemic, lockdowns, and social isolation affect peoples' mental and physical health? What ways do individuals use to deal with pandemic stressors? Which of them are effective and lead to resilience vs. which ones place them at risk for maladaptive functioning? Indeed, psychologist researchers were mobilized and used their knowledge and tools to examine these and many more parameters relating to the pandemic and human behavior, with the ultimate aim of reducing the chain of infection and helping people to adhere to healthy behaviors. Research studies were carried out globally, with numerous scientific journals offering special issues on COVID-19-related research. Based on our literature review and information published in an Editorial of *Health Psychology* (Freedland et al., 2020), early research concerning COVID-19 health-related issues included mainly surveys examining stress and mental health pandemic consequences (e.g., sleep, health disparities, etc.).

#### **Study Aims**

The aforementioned includes some of the areas that members of the EFPA Standing Committee on Psychology and Health, in conjunction with the literature review, identified as important areas in which psychologists possessed the expertise and contributed to managing the COVID-19 pandemic and its aftereffects. To further examine this, we decided to investigate the role of psychologists and the contributions made by psychologists within healthcare systems during the pandemic across European member countries of EFPA, with an eye toward sharing the lessons learned and proposing a roadmap for the future.

## Methods

#### Participants

We retrieved and analyzed data from 21 EFPA member countries (55% response rate). The survey was answered by 17 official representatives of the member countries (Austria, Belgium, Cyprus, Czech Republic, Finland, France, Germany, Greece, Italy, Luxembourg, Norway, Poland, Portugal, Serbia, Slovenia, Switzerland, Turkey, and United Kingdom), and four responses came from national expert psychologists from the respective countries (Denmark, Latvia, Ireland, and Sweden).

#### Procedure

The data collection period was November-December 2020. We contacted member association countries of EFPA and requested an expert or a knowledgeable person regarding the psychologists' action within their country during the pandemic to complete the study questionnaire.

#### Instrument

Through an iterative online consensus process, the Standing Committee members developed relevant topics for a survey of EFPA member associations, choosing topics based on a literature search of psychologists' actions during the pandemic and members' experiences from their respective

countries. An online survey consisting of 36 items was prepared in LimeSurvey (https://www.limesurvey.org/) and sent to all EFPA member associations (N = 38 member states). The online survey included open and closed questions (see https://osf.io/dh32e/), allowing member association representatives to provide additional qualitative information regarding actions and psychologists' role in their countries during the pandemic. The survey included questions on the role of psychologists in the health response to the pandemic (ways of working, e.g., with the government or health authorities), initiatives to respond to psychological needs brought about by COVID-19, articulation with national and regional authorities, specific activities in providing support to the public, other professional and frontline workers, the role of research and innovation in the intervention. Respondents rated their level of knowledge about the role psychologists played in the respective country during the pandemic on a scale from 0 (completely uncertain) to 100 (completely certain).

#### Analysis and Data Presentation

Quantitative data were analyzed using SPSS 23 and means  $\pm$  *SD*; frequency data were also reported. Qualitative data were themed and are presented to exemplify actions taken at the national level by psychologists to aid with the pandemic and its aftereffects.

### Results

Respondents had a reasonable self-reported knowledge level about the contribution of psychologists in their country, reporting  $84 \pm 18$  (range 43–100, where 0 (*completely uncertain*) to 100 (*completely certain*)). The indicated level of knowledge was significantly higher when rated by official representatives (88.5 ± 14; range 51–100) than when made by expert psychologists (67.2 ± 24; range 43–90, *p* < .01).

#### Working With the Government

Half of the respondents (50%) indicated that their member association explicitly worked with the government, either on a nationwide (45%) and/or regional level (15%). In nine countries (43%), the government approached their national members' association to provide support, knowledge, and expertise, while five (24%) of the associations proactively contacted their government to offer their professional expertise. If expertise was requested, 60% of associations recommended specific experts to the governmental bodies to provide expert knowledge. In seven countries (35%), governmental bodies used psychological expertise from other psychological societies (non-EFPA member associations), including local universities, research centers, national public health institutes, and non-EU psychological associations (e.g., Australian Psychological Association, Global Alliance in Psychology by American Psychological Association). However, in one EFPA member state, government and health authorities did not seek inputs from any associations or experts. Instead, the perception was that input was informally sought within pre-existing professional networks – people sought advice from personal acquaintances.

Participants presented that psychologists became part of advisory groups in some countries, or their role working within them was reinforced to deal with the pandemic (see Table 1). Work included the production of significant documentation and guidance for governments through membership on committees, but also by commissioned work (e.g., UK), consultancy in the management and execution of the pandemic crisis (e.g., Portugal) through national health plans and reports on health quality, or cooperation in advertising campaigns such as "#Wir bleiben zuhause" (Let's stay at home, Germany).

As is the case in most countries around the planet, the priority, especially early during the pandemic, was to control the infection. In many countries, the main advisory board dealing with the situation consisted mainly of public health experts, virologists, medical doctors, and political representatives; psychologists were not included as part of this team (e.g., Belgium). As such, it took time and effort to get psychological information and perspectives through to politicians and medical/infection control leaders, and consequently to implement psychological awareness and support to the public (e.g., Austria, Cyprus). In some cases, efforts were rewarded when governments recognized psychologists' important contributions and integrated them into their national advisory board of experts (e.g., Belgian psychologists were included in the third iteration of the board of experts). In other countries, such as Cyprus, though psychological importance was publicly recognized, psychologists were not invited to the National Advisory Committee on COVID-19. Elsewhere (e.g., Norway), psychologists may not have been directly incorporated into advisory boards, but they had direct contact with politicians and were able to pass on psychological knowledge and influence decision-making.

#### Working With Local and Regional Authorities

In addition to aiding policymakers and governments, psychologists contributed within their local and regional societies. They worked within communities to design programs and implement interventions and ensure that individuals can access needed resources for their health and

Areas psychologists used their expertise during the		
COVID-19 pandemic	Themed examples, illustrated initiatives, reported outcomes	
Working with the government	Psychologists part of advisory groups: Psychologists became part of pandemic government advisory groups (SAGE, SPI-B https://www.gov. uk/government/organisations/scientific-advisory-group-for-emergencies) and produce documentation/commissioned work: UK	
	Psychologists are permanently part of the Health National Council and consulted in the management of the pandemic crisis: Pt	
	Psychologists provide information/evidence:	
	Psychologists pass information and opinions to politicians centrally: Ny	
Working with local and regional authorities	Voluntary groups of psychologists supporting work Organized groups (e.g., community mental-health centers) were staffed by Cyprus Psychological Association (CYPSA) – collaboration on materials, resources, guidelines, best practices, and support. Consultations provided to local communities regarding needs, provision of written and media reports on dealing with psychological concern	
	and difficulties, for example, for parents, teachers, professionals: Cy	
	Health Psychology Exchange – volunteer collaborative with 155 colleagues offering support: UK (https://www. nwppn.nhs.uk/attachments/article/2706/health%20psychology%20exchange%20intro%20extra%20case% 20studiesv2.pdf). Expertise in public health messaging, carrying out rapid reviews of evidence in specific areas (Ghio et al., 2020; Rodham et al, 2020; Thorneloe et al, 2020), and supporting organizations on how to reduce potential psychological effects of COVID-19 on staff	
	Local prevention/intervention networks:	
	Municipalities are required by law to employ clinical psychologists for crisis teams, easy access to public menta health services (all ages) and in administration: Ny	
	Expanded or established new local and municipality initiatives (e.g., the "ACT <i>healthy</i> : Clinical Psychology and Behavioral Medicine" research laboratory http://www.ucy.ac.cy/acthealthy/el/). Offer of prevention and intervention programs to the public via municipilaties (e.g., the "flexiquit.com" program for smoking cessation): Cy	
Psychology association or psychologist-led initiatives	Expert groups: E.g., "Psychology and Corona," academic experts from various psychological fields – to support sustainable behavioral change and reinforce social cohesion, making direct links with other experts like virologists and bio- statisticians: Be	
	Guidance and resources:	
	Series of task forces, guidance for public, healthcare and social care authorities, policymakers, and healthcare and social care professionals. British Psychological Society (https://www.bps.org.uk/coronavirus-resources): UK	
	Educational material in over 18 languages for the general public on topics such as: "home and quarantine," "home office," "dealing with job loss," "homeschooling tips," "protecting yourself and others." The Professional Association of Austrian Psychologists: Au	
	Multidisciplinary reports, (e.g., https://6a659d99-9c24-430e-befc-7bc06146b17c.filesusr.com/ugd/ bdafaa_2d70c31479034c7f85844408f0d23c7c.pdf): Be	
Providing support to the public	Hotlines – pre-existing: The Professional Association of Psychologists, significantly extended the operating hours of existing mental-health helplines and collaborated with local authorities to support existing helplines on various levels: staff training, providing manpower, and supervising helpers. Hotline telephone contacts increased fivefold with associated increases in call duration and were related to (acute) crisis intervention: Au	
	Psychologists integrated into the main health hotline (SNS24 – main entry point for citizens with suspicion of COVID-19-infection) to provide psychological support and crisis interventions: Pt	
	Psychologists helped strengthen the staff numbers and provided support and help for the public calling into helplines: SR	
	Hotlines – created for pandemic:	
	The French Federation of Psychologists for the general public. Also provided information to the public and professionals: Fr	
	The German Association of Psychologists (BDP) provided a pandemic-related hotline for the general public. The Berufsverband Deutscher Psychologinnen und Psychologen provided extensive information for the public and the press. 650 psychologists volunteered for the hotline with 166 actively engaged in counseling provision. More than 12.000 calls were handled, about 400 per day in May 2020: Ge	
	Materials: The Flemish Department of Red Cross (Stroobants, 2019) made available material to psychologists on psychologica first aid. The Flemish Association of Clinical Psychologists assisted in the dissemination of information: Be	

Table 1. Examples of illustrated initiatives and areas where psychologists utilized their expertise in response to the COVID-19 pandemic

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#### Table 1 (Continued)

Areas psychologists used their expertise during the COVID-19	
pandemic	Themed examples, illustrated initiatives, reported outcomes
	Development and dissemination of information via various means (e.g., directly, websites, media appearances, social media). (https://www.bdp-verband.de/aktuelles/2020/corona/aktuelle-informationer zum-coronavirus-sars-cov-2.html): Ge Coping with stress and crisis, advice for people experiencing mental health issues (https://www.nkvts.nd english/corona-advice-on-how-to-cope-with-the-situation/); support and advice in a pandemic (https:// www.uib.no/en/ccp/137609/articles-support-and-advise-pandemic): Ny Development of psychoeducational aspects and context-specific materials. Media to disseminate information (see https://www.ordemdospsicologos.pt/pt/covid19): Pt <i>Cyprus</i> Psychologist Association (https://www.cypsa.org.cy/covid-19/) and the Swiss Federation of Psychologists (https://www.psychologie.ch/aktuelles-publikationen/coronavirus) created websites with materials for the public and professionals: CY & SW The Swiss Federation of Psychologists (FSP) compiled information and guidelines on their website and in t media on topics such as surviving isolation and quarantine, online interventions, practical tips for health professionals, and working from home: Sw The Romanian College of Psychologists and the Romanian Association of Psychologists, organized a team psychologists that (a) elaborated national guides for behavioral and cognitive-emotion regulation, support by an application (PsyPills, https://apps.apple.com/app/psypills/id589004229?ign-mpt=uo%3D4), (b) created and presented psychological guides accompanied by videos and/or popularized presentation to the media, (c) offered public advice, evidence-based services, and free crisis interventions: Ro The Norwegian Centre for Violence and Traumatic Stress Studies (NKVTS) provided help for those affected violence and trauma: Ny Free courses - the Portuguese association also offered free psychological first aid and crisis-related intervention courses for psychologists: Pt <i>Media requests</i> : Behavioral science in general and psychology specifically, more frequently
raviding support to bealthcare	Media requests: Behavioral science in general and psychology specifically, more frequently discussed by the public and in t
Providing support to healthcare and social care professionals & frontline workers	Psychologists solicited to sustain the hard work of the healthcare teams: Fr
	At several hospitals, psychologists provided psychosocial support to healthcare workers, contributing to crisis-response teams and organizing and serving on hotlines or other support services: Ny
	Remote support:
	The Ministry of Health established support teams and a hotline providing help by trained psychologists f medical staff dealing with COVID-19 patients: SR
	The Flemish Association of Clinical Psychologists assisted in a web platform "thecaretogether" to suppor health care workers," https://www.dezorgsamen.be/) to support resilience and mental health of more th 350,000 personnel: Be
	Invited by umbrella organization for all hospitals and healthcare facilities to assist in the development of web platform to offer psychological first aid, psychoeducational video material, hotlines, and a population screener assisting healthcare personnel to receive professional help when needed: Be
	The Lithuanian Psychological Association provided remote psychological help for health care workers ar developed online courses and mobile apps: Li
	CYPSA in Cyprus translated and adapted work (e.g., from BPS in the UK) to provide guidance for frontlir staff. It further organized a webinar, a helpline, and support network: Cy
	Support for psychologists:
	The Portuguese Association of Psychologists developed forums for psychologist intervision and support:
	Section on the associations' website to provide support, updated information on guidelines for profession practice during COVID-19 regarding governmental measures. Provision of updated information regarding governmental guidelines of professional practice during COVID-19 lockdowns and measures https://www.cypsa.org.cy/covid-19/): Cy
	The Swiss Federation of Psychologists (FSP) compiled information and guidelines for psychologists posti them on its website and in the media on topics of quality standards for online interventions, discussion forum on pandemic consequences, telephone-based psychotherapy, and e-mail and video-therapy tips: S

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#### Table 1 (Continued)

Areas psychologists used their expertise during the COVID-19 pandemic	Themed examples, illustrated initiatives, reported outcomes
Switching of assessment and therapeutic interventions to digital platforms	Training and guidance: Secure systems designed to help professionals particularly dealing with issues of confidentiality; Norwegian Psychologist Associations: Ny
	Webinars and guidelines on ethical practice for telehealth, support via phone peer consultations; CYPSA with help from experts at the University of Cyprus: Cy
	Legislation for remote psychological counseling by psychological association: Li
	Online therapeutic services:
	Online services during the postponement of face-to-face services: Be
	Legal restrictions for online psychological intervention provision was lifted temporarily: Au
Research on health behaviors, virus spread measures & pandemic psychological effects	Funding: Though research funding for psychological studies remains limited, several counties established rapid funding schemes to aid research in this area (Po, Au) COVID-related research funding through the European Research Council: Po, Au
	National studies:
	Psychological consequences for health professionals, mental-health behaviors in COVID-times, psychological effects of confinement, psychosocial vulnerability of elders, impact on training and teaching adolescents' experiences, and rituals and grief during the lockdown, how different governmental measures or practices affect human psychology and health: Fr, Pt, Ny, Be, UK
	International research:
	Psychological impacts of the COVID-19 pandemic and comprehend the psychological and health behaviora aspects of the pandemic (e.g., the "COVID-IMPACT" study led by the University of Cyprus and University o Basel, Switzerland, http://www.ucy.ac.cy/acthealthy/en/covid-19-impact-survey, carried out in 22 countries with approximately 10,000 participants): Cy, Sw
	Interdisciplinary research:
	With computer scientists/technology experts – "Hackathons" (e.g., "Tech Takes on Mental Health," "#EUvsVirus Pan-European" hackathons; https://devpost.com/)
	Research repositories and dissemination:
	All ongoing COVID-19 research, e.g., Belgian Association of Psychological Science: Be
	Dissemination, e.g., (a) "Research saves lives" (https://www.ucy.ac.cy/en/22-newsscroll/1515-covid-19) campaign. University of Cyprus: Cy; (b) fast track for dissemination through scientific community: Pt
	Collaboration among researchers with differing expertise to provide expert groups and policy makers with the most recent data and information to be used for governmental policies and decisions

Note. Au = Austria; Be = Belgium; Cy = Cyprus; Fr = France; Ge = Germany; Li = Lithuania; Ny = Norway; PT = Portugal; Ro = Romania; SR = Slovak Republic; Sw = Switzerland; UK = UK.

well-being. Based on the survey results, 30% of the countries reported working directly within their communities (e.g., the UK's Health Psychology Exchange initiative). In Norway, municipalities are required by law to employ clinical psychologists for various roles, including crisis teams, easy access to public mental health services (all ages), and in administrative roles. Hence, psychologists were already present and able to provide help.

European countries have widely different governance systems, which may complicate efforts to govern a pandemic with such widespread societal consequences. Belgium, for example, is a federal country where competencies concerning (mental) health are split between the federal, regional, and local levels. Different groups undertook different initiatives at these varying levels (see Table 1). Elsewhere (e.g., Cyprus), authorities are spread across local municipalities, whereby each mayor or municipal leader can choose to provide foundations for services to their respective community. Some municipalities were already collaborating with psychologists before the pandemic and offering services (e.g., the University of Cyprus Center for Psychological Services), which were deemed helpful during the lockdowns and their aftermath.

## Initiatives Led by Psychological Associations and Psychologists

Mainly in the absence of opportunities for psychologists to directly contribute to governmental efforts, psychological associations and interested psychologists formed their own groups to support and advise the public and other experts through direct links (e.g., Belgian expert group "Psychology and Corona"). The Professional Association of Austrian Psychologists provided educational material in over 18 languages for the general public on various topics and disseminated these within Austria and across Europe (see Table 1). A good example of initiatives led by psychological associations comes from the British Psychological Society, which set up a series of task forces and published extensive guidance based on psychological theory and evidence for the public, health and social care authorities, policymakers, and health and social care professionals (see Table 1).

#### Providing Support to the Public

Providing support to the public was on the agenda of 85% of member associations, with 65% providing support services for the general public and 55% for health professionals. Most of the member associations developed leaflets for the public (60%) and/or guidance documents (50%). Three member associations developed peer-reviewed documents focusing on the pandemic. During the pandemic first waves, 80% of the respondents stated that they proactively worked with the media to disseminate psychological knowledge on dealing with aspects of COVID-19.

Many psychological associations and organized bodies of psychologists contributed to providing services for the public by offering public advice, evidence-based services, and free crisis interventions (e.g., Romania), setting up Corona-specific mental health hotlines (e.g., France, Germany), extending service hours or the content of existing mental health hotlines (e.g., Belgium, Austria), becoming integrated into national health hotlines (e.g., Portugal, Slovak Republic), or developing other means to provide information and support. The installation of the hotlines was well received (e.g., increased usage by a factor of 5, Austria; handling over 12,000 calls or 400 calls per day, Germany). Beyond hotlines, in almost all participating countries, psychologists developed and widely disseminated information and materials for the public via various formats, such as specialized websites, through social media, and pamphlets (see Table 1 for examples). Such information spanned many issues related to the pandemic, lockdowns, psychological first aid, behavioral attitudes, relationships, protective behaviors, psychological aftereffects, cohesion and solidarity in society, surviving isolation and guarantine, online interventions, and working from home. Psychologists (e.g., Cyprus, Switzerland) produced written material for the mass and social media with an eye on helping different groups (e.g., healthcare workers, parents, children, adolescents, educators) better deal with the pandemic and its aftereffects. Additional initiatives, such as creating a psychological support app and downloadable guides popularized presentations, were undertaken in some countries (e.g., Romania). To disseminate information to the public, psychologists appeared on various TV and radio shows to discuss psychological science and how it can help with the pandemic.

Some associations (e.g., Portuguese association of psychologists) offered their psychological first aid and crisisrelated intervention courses free for psychologists. In contrast, others offered webinar series (e.g., Cyprus) in an attempt for more professionals to be able to offer quality services to the public.

### Providing Support to Health and Social Care Professionals and Front-Line Workers

Fifty-five percent of respondents stated that their associations offered services (e.g., counseling) to health professionals. In France, during the first confinement, psychologists were solicited to sustain the hard work of the healthcare teams. Similarly, at several hospitals in Norway, psychologists provided psychosocial support to healthcare workers, contributing to crisis-response teams, and organizing and serving on hotlines or other support services. The Norwegian member association reported that they preliminarily conclude that healthcare workers were experiencing stress and symptoms of anxiety, sleep disorders, fatigue, and depression. Those who used the hotlines found them helpful in coping with their distress, feeling safe, and that their workplaces care.

Participants reported that digital interventions, hotlines, psycho-educational video material, webinars, screenings, and group activities or support teams were utilized to offer services and promote resilience to professionals and frontline workers in need (see Table 1). For example, Italian psychologists developed a medical staff intervention to help professionals feel safe, rehabilitate tranquility, normalization, promote self-efficacy and sense of belonging, and prolong mental protection (Lissoni et al., 2020). Others (e.g., Lithuania) provided remote psychological help for healthcare workers and developed online courses and mobile apps.

In addition to supporting other health professionals, the Portuguese Association of Psychologists recognized that psychologists themselves are under significant strain and developed forums for intervision and support. Information on guidelines for professional practice during COVID-19 regarding governmental measures was provided to help psychological practice, especially in countries with hard lockdowns (e.g., Cyprus).

## Switching of Assessment and Therapeutic Interventions to Digital Platforms

In many countries (e.g., Belgium, Italy, Cyprus), governments postponed all noncritical healthcare during the first lockdown, with numerous patients canceling appointments causing a continuity-of-care problem. Psychologists quickly stepped up to offer online services. Unfortunately, psychologists are rarely systematically trained to utilize technology in their practice, limiting their ability to easily transfer their practice to a digital presence. For this reason, EFPA, particularly the e-health Task Force and the Psychology and Health Standing Committee, organized webinars to help educate professionals and aid in resolving issues and concerns to digital practice. Further, Van Daele et al. (2020) formulated general guidelines for psychotherapists, health services, and regulatory agencies to promote the development and implementation of high-quality digital health. Different actions were taken in various countries to help educate professionals to transition to ethical and highquality digital service provision (see Table 1). Further, associations (e.g., in Norway) were called to help develop secure systems designed to help professionals deal with ethical and practice issues surrounding digital practices, such as those of confidentiality.

In countries with legal restrictions in providing online interventions (e.g., Austria), psychologists aided in policy changes and lifting such restrictions, at least for the duration of the pandemic. In some countries (e.g., Lithuania), psychological associations developed and promoted new legislation for remote psychological counseling, highlighting and reinforcing the important position of psychologists within health care. All this led to new opportunities for psychologists to expand their digital skills and learn new ways of serving their clients. We foresee that via learning about the utility of digital technologies within mental health care, these will continue to flourish and evolve with their utility recognized by governments to become integral components of healthcare and stepped-care models.

## Research on Health Behaviors, Virus Spread Measures, and Pandemic Psychological Effects

Participants in the present survey presented that only 5% (n = 5) of the national governments provided direct funding for COVID-19-related psychological research. This suggests that limited resources were available for psychological research during this time. However, psychological research flourished during this time, with many research teams within and across countries launching surveys and studies on various pandemic-related topics and areas. Examples

of work carried out include a worldwide research project led by colleagues at the University of Cyprus and the University of Basel (Switzerland), the "COVID-IMPACT" study, carried out in 22 countries with approximately 10,000 participants (http://www.ucy.ac.cy/acthealthy/ en/covid-19-impact-survey). This longitudinal study aimed to comprehend the psychological and behavioral health aspects of the pandemic and was carried out in three phases at different timepoints during the pandemic progression. A preliminary analysis demonstrated that 10% of the sample present with low levels of psychological health and another 50% with medium levels, with consistent predictors of mental health being social support, level of education, and psychologically flexible behavior (Gloster, Lamnisos, et al., 2020). COVID-19-related illness beliefs demonstrated a significant direct effect on adherence with governmental measures, proposing that effective interventions should emphasize not only the health risks but how to deal with avoidance behaviors and empower individuals' self-efficacy in adhering to prevention measures (see also Neto et al., 2021).

Other study examples launched (e.g., in France, Portugal, Norway, Belgium, UK) include examining the psychological consequences for health professionals, mental health behaviors in COVID-19 times, psychological effects of confinement, elders' psychosocial vulnerability, impact on training and teaching, adolescents' experiences, and rituals and grief during the lockdown. A plethora of knowledge has started to emerge. As a result, in the future, we will know much more about various aspects of a pandemic and how different governmental measures or practices affect human psychology and health.

Though research funding for psychological studies remains limited, several counties established funding schemes to aid research in this area. For example, in Portugal and Austria, the main national funding agencies offered funding opportunities for "rapid" research. Some calls dedicated specifically to COVID-19-related research also became available through the European Research Council. Further, efforts led by computer scientists/technology experts involving various professions, including psychologists, were "Hackathons" (e.g., "Tech Takes on Mental Health," "#EUvsVirus Pan-European" hackathons; https://devpost.com). These competitions solicited funds from the industry to support projects dealing with pandemic aspects, spanning from managing conspiracy theories to supporting individuals and health professionals.

Some countries collated the research efforts of their scientists, for example, by forming research repositories (e.g., as organized by the Belgian Association of Psychological Science, BAPS) for all ongoing research concerning COVID-19. In a similar vein, Portugal created a "fast track" to disseminate research projects across the scientific community. In other countries, universities undertook such tasks. For example, the University of Cyprus launched the "Research Saves Lives" campaign (https://www.ucy.ac. cy/en/22-newsscroll/1515-covid-19). Such efforts greatly enhanced the collaboration among researchers with differing expertise and provided expert groups and policymakers with the most recent data and information to be used for governmental policies and decisions.

## Discussion

Each country within Europe dealt with the pandemic in its own way, yet psychologists had to deal with similar issues across countries. Some governments value the role of psychologists more than others and from the beginning included psychologists as integral parts of their response teams. In contrast, in other countries, psychologists had to find ways to demonstrate their expertise in supporting the handling of the pandemic. Limiting public debates and allowing single governmental perspectives are a major threat to social cohesion. Losing the necessary social cohesion needed to deal with a pandemic effectively is a factor contributing to large second and third waves of COVID-19 case resurgence across many countries (Borkowska & Laurence, 2021). Permitting and valuing different viewpoints in a nonstigmatizing way allows societies to grow together. Indeed, one of the significant effects of the COVID-19 pressure on society is that it enhances existing problems and inequities (Wang et al., 2020). In contrast, it leads to individuals finding nonfunctional means of dealing with fear and uncertainty, such as turning to conspiracy theories for explanations (Constantinou, Gloster, et al., 2021; Constantinou, Kagialis, et al., 2021). Psychologists were available during the pandemic (physically or digitally), both to the public and other health professionals. As the pandemic turned into a long-term situation, the psychological consequences became clearer (Alzueta et al., 2021). The need for public means and efforts is now indisputable, especially for challenged and vulnerable groups, but over time also for the whole population.

Interestingly, many mental health issues (e.g., increases in depression, anxiety, posttraumatic stress) and behaviors that contribute to the virus spread (e.g., refusing to socially distance or wear a mask) may be a direct result of the responses governments made and not the pandemic itself. Many effective interventions (e.g., physical distancing is among the most effective interventions for preventing the virus spread) come with mental health side effects (e.g., isolation, loneliness, loss of support systems). The main emphasis has been on dealing with the consequences of these measures. This is like oncology, where chemotherapy treats the problem yet results in detrimental side effects that need to be dealt with. This study demonstrated that only in a few countries were psychologists immediately recognized as important experts and incorporated into government advisory groups for managing the pandemic. Especially in countries where psychologists were not given the opportunity to advise governments, psychologist groups and psychological associations developed their own initiatives to help and make known how they can contribute to governments, healthcare systems, and society in general. Psychologists can raise awareness of this complex interdependence issue of solutions contributing to parallel psychological symptoms and problems and need to examine possible solutions based on empirical evidence from the science of psychology.

Most of the initiatives carried out by psychologists in response to the pandemic were for the provision of knowledge and services for the public and healthcare professionals dealing with the pandemic. Population-level and publicfocused approaches are important - focusing on purposive promotion and prevention. To change health behaviors, however, people first need to become aware of the risks and benefits of change. Psychology has identified behavior change techniques that facilitate awareness and adherence to health behaviors such as medication adherence, screening, self-management/self-care, or vaccination uptake. For example, to engage in self-care, a person requires health literacy, motivation, and self-regulatory skills. Social support, functional emotion-regulation strategies, being in the present (mindfulness skills), and engaging in healthy behaviors (sleep and exercise) appear to be the most significant protective factors for good mental health (Gloster, Lamnisos, et al., 2020). Psychologists are experts in behavior change and can play a significant role in addressing a pandemic and its effects across various levels of impact, from policy work to helping communities, health professionals, and the public, to furthering science by conducting high-quality research.

The COVID-19 pandemic has demonstrated a need for service provision via digital means (De Witte et al., 2021; Van Daele et al., 2020). Psychologists have been at the forefront of research and science development in e-health or digital means of delivering psychological interventions. This knowledge base proved especially useful during the pandemic and now offers new opportunities for further development. Digital interventions can become an integral part of healthcare to support both mental and physical health. Psychologists can shape the policies for ethical practice and develop training programs and competencies for better preparing the next generation of providers. In addition to the new opportunities presented for the digital field of psychological provisions, another positive development resulting from this pandemic has been the expansion of collaborative scientific and professional work across institutional boundaries. Psychological research has developed a robust evidence base to understand and identify mechanisms of behaviors, factors affecting behaviors, and effective behavioral interventions. This research includes factors that facilitate the motivation to adopt and maintain healthy behaviors and cessation of risky behaviors. Psychological research has provided a large body of evidence that explains why people behave the way they do and how they can be supported to change their behaviors.

#### **Recommendations for Going Forward**

The COVID-19 pandemic highlighted many areas where psychologists have important roles to play and areas where significant contributions can be made. However, it also highlighted areas where psychologists and their professional associations can improve their reach and practice. Here are some of these areas:

- More *high-quality training* for psychologists, especially in areas such as ensuring digital services are provided ethically and in accordance with psychological standards of practice and the role of psychology and behavior in communicable diseases. Especially regarding digital health services, there is a need to clarify ethical, legal, practical, and other concerns that make e-health difficult (Van Daele et al., 2020). The challenge to psychologists will be to integrate a digital provision of services framework within existing healthcare systems. We foresee that, via learning about the utility of digital technologies within mental healthcare, these will continue to flourish and evolve over time, with their utility recognized by governments to become integral components of healthcare and stepped-care models.
- 2) Expand collaborative efforts across countries to capitalize on the knowledge and best-practice efforts enhancing open-science principles and practices for psychological science and its applications, accelerated through COVID-19 (O'Connor et al., 2020). A greater focus on the translational nature of psychological research. During COVID-19, researchers worked more closely than before with policymakers and commissioners (Arden et al., 2020). This enabled research findings to be incorporated more easily and directly into policy and guidance. We need to continue this momentum by maintaining the important role of psychologists and psychological science in enhancing human well-being worldwide.
- 3) *Health literacy training* for all experts as well as laypeople and the public. This involves reflecting on the role of media and its accuracy in reporting scientific results (e.g., Guenther et al., 2019) and educating the public more about the possibilities of distant

and/or digital possibilities of getting psychological support.

- 4) Emphasis on *prevention and early interventions*, enhancing the provision of evidence regarding what keeps people healthy and shifting mindsets from a bio-medical model toward a bio-psycho-social model. Emphasize health behavior enhancements and the establishment of healthy habits focusing on enhancing immune systems, not only how to avoid a certain disease. Further, psychologists can significantly contribute to the communication of health messages and other problems highlighted by the pandemic (e.g., vaccine hesitancy, resistance to health prevention strategies).
- 5) Advocate for psychologists as integral partners in response teams when dealing with problems with a demonstrable behavioral component, either in their emergency or in their intervention phases. This includes advocating their expertise to policymakers, reporters, and the public.
- 6) Advocate for research funding in psychology, mental health, prevention, and early interventions. Psychological research tends to be underfunded and underappreciated by funding bodies. Psychologists should continue to demonstrate and advocate for more research funding in all aspects of (mental) health.

This study investigated the role and contributions of psychologists within healthcare systems during the pandemic across Europe. It highlighted initiatives and extract lessons learned to propose areas where psychologists need to further invest their efforts in the future. This work is limited since it is based on the opinions and knowledge of the individuals who completed the survey on behalf of their EFPA's member association. As such, initiatives and information presented here reflect what became known to the authors, who may have missed additional initiatives carried out.

Psychology is a well-established science of human experience and behavior. Clinical and health psychologists are the experts concerning human behavior and mental health. In a global health crisis, where the main possible treatment is a preventive approach concentrated on sustainable behavior change, psychologists should be included at every stage. From high-end decision-making at the policy level to local levels of reinforcing (mental) health services: Psychologists can make a difference.

## References

Alzueta, E., Perrin, P., Baker, F. C., Caffarra, S., Ramos-Usuga, D., Yuksel, D., & Arango-Lasprilla, J. C. (2021). How the COVID-19 pandemic has changed our lives: A study of psychological correlates across 59 countries. *Journal of Clinical Psychology*, 77(3), 556–570.

- Arden, M. A., Byrne-Davis, L., Chater, A., Hart, J., McBride, E., & Chilcot, J. (2020). The vital role of health psychology in the response to COVID-19. *British Journal of Health Psychology*, 25, 831–838. https://doi.org/10.1111/bjhp.12484
- Borkowska, M., & Laurence, J. (2021). Coming together or coming apart? Changes in social cohesion during the COVID-19 pandemic in England. *European Societies*, *23*(suppl. 1), S618– S636.
- Breslau, J., Finucane, M. L., Locker, A. R., Baird, M. D., Roth, E. A.,
  & Collins, R. L. (2021). A longitudinal study of psychological distress in the United States before and during the COVID-19 pandemic. *Preventive Medicine*, 143, Article 106362.
- Chong, Y. Y., Chien, W. T., Cheng, H. Y., Chow, K. M., Kassianos, A. P., Karekla, M., & Gloster, A. (2020). The role of illness perceptions, coping and self-efficacy on adherence to precautionary measures for COVID-19. *International Journal of Environmental Research and Public Health*, *17*(6540), 2–11. https://doi.org/10.3390/ijerph17186540
- Constantinou, M., Gloster, A. T., & Karekla, M. (2021). I won't comply because it is a hoax: Conspiracy beliefs, lockdown compliance, and the importance of psychological flexibility. *Journal of Contextual Behavioral Science, 20*, 46–51. https:// doi.org/10.1016/j.jcbs.2021.03.001
- Constantinou, M., Kagialis, A., & Karekla, M. (2021). COVID-19 Scientific facts vs. conspiracy theories: Is science failing to pass its message? *International Journal of Environmental Research and Public Health, 18*, 6343. https://doi.org/10.3390/ ijerph18126343
- De Witte, N. A. J., Carlbring, P., Etzelmueller, A., Nordgreen, T., Karekla, M., Haddouk, L., Belmont, A., Øverland, S., Abi-Habib, R., Bernaerts, S., Brugnera, A., Compare, A., Duque, A., Ebert, D. D., Eimontas, J., Kassianos, A. P., Salgado, J., Schwerdtfeger, A., Tohme, P., Van Assche, E., & Van Daele, T. (2021). Online consultations in mental healthcare during the COVID-19 outbreak: An international survey study on professionals' motivations and perceived barriers. *Internet Interventions*, 25. https://doi.org/10.1016/j.invent.2021.100405
- Ebert, D. D., Van Daele, T., Nordgreen, T., Karekla, M., Compare, A., Zarbo, C., Brugnera, A., Overland, S., Trebbi, G., Jensen, K., Kaehlke, F., & Baumeister, H. (2018). Internet- and mobilebased psychological interventions: Applications, efficacy, and potential for improving mental health. A report of the EFPA E-Health Taskforce. *European Psychologist, 23*, 167–187. https://doi.org/10.1027/1016-9040/a000318
- European Federation of Psychology Associations. (2021). *EFPA fact sheet*. http://www.efpa.eu/about/fact-sheet
- Freedland, K., Dew, M. A., Sarwer, D. B., Burg, M. M., Kart, T. A., Feldstein-Ewing, S. W., Fang, C. Y., Blozis, S. A., Puterman, E., Marquez, B., & Kaufmann, P. G. (2020). Health psychology in the time of COVID-19. *Health Psychology*, 39(12), 1021–1025.
- Ghio, D., Lawes-Wickwar, S., Tang, M. Y. D., Epton, T., Howlett, N., Jenkinson, E., Stanescu, S., Westbrook, J., Kassianos, A., Watson, D., Sutherland, L. M., Stanulewicz, N., Guest, E., Scanlan, D., Carr, N., Chater, A., Hotham, S., Thorneloe, R., Armitage, C., ... Keyworth, C. (2020, July 13). What influences people's responses to public health messages for managing risks and preventing disease during public health crises? A rapid review of the evidence and recommendations. PsyArXiv. https://doi.org/10.31234/osf.io/nz7tr
- Giusti, E. M., Pedroli, E., D'Aniello, G. E., Badiale, C. S., Pietrabissa, G., Manna, C., Badiale, M. S., Riva, G., Castelnuovo, G., & Molinari, E. (2020). The psychological impact of the COVID-19 outbreak on health professionals: A cross-sectional study. *Frontiers in Psychology*, *11*, Article 1684. https://doi.org/10.3389/fpsyg.2020. 01684

- Gloster, A. T., Lamnisos, D., Lubenko, J., Presti, G., Squatrito, V., Constantinou, M., Nicolaou, C., Papacostas, S., Gokcen, A., Yuen, Y. C., Chein, W. T., Cheng, H. Y., Ruiz, F. J., Garcia-Martin, M. B., Obando-Posada, D. P., Segura-Vargas, M. A., Vasiliou, V. S., McHugh, L., Hofer, S., ... Karekla, M. (2020). Impact of COVID-19 pandemic on mental health: An international study. *PLoS One*, *15*(12). https://doi.org/10.1371/journal. pone.0244809
- Gloster, A. T., Zacharia, M., & Karekla, M. (2020). Psychological aid for front-line healthcare workers. *Clinical Neuropsychiatry*, *17*(4), 253–254.
- Gould, M. S., Kalafat, J., HarrisMunfakh, J. L., & Kleinman, M. (2007). An evaluation of crisis hotline outcomes. Part 2: Suicidal callers. *Suicide and Life-Threatening Behavior*, 37(3), 338–352.
- Gruber, J., Pristein, M. J., Clark, L. A., Rottenberg, J., Abramowitz, J. S., Albano, A. M., Aldao, A., Borelli, J. L., Chung, T., Davila, J., Forbes, E. E., Gee, D. G., Hall, G. C. N., Hallion, L. S., Hinshaw, S. P., Hofmann, S. G., Hollon, S. D., Joormann, J., Kazdin, A. E., & Weinstock, L. M. (2020). Mental health and clinical psychological science in the time of COVID-19: Challenges, opportunities, and a call to action. *American Psychologist*, *76*(3), 409–426. https:// doi.org/10.1037/amp0000707
- Guenther, L., Bischoff, J., Löwe, A., Marzinkowski, H., & Voigt, M. (2019). Scientific evidence and science journalism: Analysing the representation of (un) certainty in German print and online media. *Journalism Studies*, 20(1), 40–59.
- Hausler, M., Strecker, C., Huber, A., Brenner, M., Höge, T., & Höfer, S. (2017). Associations between the application of signature character strengths, health and well-being of health professionals. *Frontiers in Psychology*, 8(1307), 1–11. https:// doi.org/10.3389/fpsyg.2017.01307
- Huber, A., Strecker, C., Hausler, M., Kachel, T., Hoge, T., & Hofer, S. (2020). Possession and applicability of signature character strengths: What is essential for well-being, work engagement, and burnout? *Applied Research Quality Life*, 15, 415–436. https://doi.org/10.1007/s11482-018-9699-8
- Inchausti, F., MacBeth, A., Hasson-Ohayon, I., & Dimaggio, G. (2020). Psychological intervention and COVID-19: What we know so far and what we can do. *Journal of Contemporary Psychotherapy*, 50, 243–250.
- Karayianni, E. (2018). A European perspective on regulating psychology: A review of the European Commission's Mutual Evaluation of Regulated Professions. *Psichologija*, *58*, 125–134. https://doi.org/10.15388/Psichol.2018.7
- Karekla, M., Kasinopoulos, O., Neto, D. D., Ebert, D. D., Van Daele, T., Hofer, S., Overland, S., & Jensen, K. L. (2019). Best practices and recommendations for digital interventions to improve engagement and adherence in chronic illness sufferers. *European Psychologist, 24*, 49–67. https://doi.org/10.1027/ 1016-9040/a000349
- Kluge, H. H. P. (2020, March 26). Statement: Physical and mental health key to resilience during COVID-19 pandemic. http://www. euro.who.int/en/media-centre/sections/statements/2020/ statementphysical-and-mental-health-key-to-resilienceduringcovid-19-pandemic
- Lichtenstein, E., Glasgow, R. E., Lando, H. A., Ossip-Klein, D. J., & Boles, S. M. (1996). Telephone counseling for smoking cessation: Rationales and meta-analytic review of evidence. *Health Education Research*, *11*(2), 243–257.
- Lissoni, B., Del Negro, S., Brioschi, P., Casella, G., Fontana, I., Bruni, C., & Lamiani, G. (2020). Promoting resilience in the acute phase of the COVID-19 pandemic: Psychological interventions for intensive care unit (ICU) clinicians and family members. *Psychological Trauma: Theory, Research, Practice, and Policy, 12*, S105–S107.

- Michie, S., West, R., Rogers, M. B., Bonell, C., Rubin, G. J., & Amlôt, R. (2020). Reducing SARS-CoV-2 transmission in the UK: A behavioural science approach to identifying options for increasing adherence to social distancing and shielding vulnerable people. *British Journal of Health Psychology, 25*(4), 945–956. https://doi.org/10.1111/bjhp.12428
- Neto, D. D., Nunes da Silva, A., Roberto, M. S., Lubenko, J., Constantinou, M., Nicolaou, C., Lamnisos, D., Papacostas, S., Höfer, S., Presti, G., Squatrito, V., Vasiliou, V. S., McHugh, L., Monestès, J. L., Baban, A., Alvarez-Galvez, J., Paez-Blarrina, M., Montesinos, F., Valdivia-Salas, S., Ori, D., Lappalainen, R., Kleszcz, B., Gloster, A., Karekla, M., & Kassianos, A. P. (2021). Illness perceptions of COVID-19 in Europe: Predictors, impacts and temporal evolution. *Frontiers in Psychology*, *12*, 1–11. https://doi.org/10.3389/fpsyg.2021.640955
- O'Connor, D. B., Aggleton, J. P., Chakrabarti, B., Cooper, C. L., Creswell, C., Dunsmuir, S., Fiske, S. T., Gathercole, S., Gough, B., Ireland, J. L., Jones, M. V., Jowett, A., Kagan, C., Karanika-Murray, M., Kaye, L. K., Kumari, V., Lewandowsky, S., Lightman, S., Malpass, D., Meins, E., Morgan, B. P., Morrison Coulthard, L. J., Reicher, S. D., Schacter, D. L., Sherman, S. M., Simms, V., Williams, A., Wykes, T., & Armitage, C. J. (2020). Research priorities for the COVID-19 pandemic and beyond: A call to action for psychological science. *British Journal of Psychology*, *111*, 603–629. https://doi.org/10.1111/bjop.12468
- Rodham, K., Bains, K., Westbrook, J., Stanulewicz, N., Byrne-Davis, L., Hart, J., & Chater, A. (2020, May 6). Rapid review: Reflective practice in crisis situations. PsyArXiv. https://doi. org/10.31234/osf.io/e8tqn
- Thorneloe, R., Epton, T., Fynn, W., Daly, M., Stanulewicz, N., Kassianos, A., & Hart, J. (2020, April 30). Scoping review of mobile phone app uptake and engagement to inform digital contact tracing tools for COVID-19. PsyArXiv. https://doi.org/ 10.31234/osf.io/qe9b6
- Valrie, C., Thurston, I., & Santos, M. (2020). Introduction to the special issue: Addressing health disparities in pediatric psychology. *Journal of Pediatric Psychology*, 45(8), 833–838. https://doi.org/10.1093/jpepsy/jsaa066
- Van Daele, T., Karekla, M., Kassianos, A. P., Compare, A., Haddouk, L., Salgado, J., Ebert, D. D., Trebbi, G. (on behalf of the EFPA Project Group on eHealth), Bernaerts, S., Van Assche, E., &

De Witte, N. A. J. (2020). E-mental health essentials following the COVID-19 outbreak: Recommendations for policy and practice in Europe and beyond. *Journal of Psychotherapy Integration*, 30(2), 160–173. https://doi.org/10.1037/int0000218

- Vonderlin, R., Biermann, M., Konrad, M., Klett, M., Kleindienst, N., Bailer, J., Lis, S., & Bohus, M. (2021, March). Implementation and evaluation of a telephone hotline for professional mental health first aid during the COVID-19 pandemic in Germany. *Der Nervenarzt, Europe PMC*. https://doi.org/10.1007/s00115-021-01089-x
- Wang, M. L., Behrman, P., Dulin, A., Baskin, M. L., Buscemi, J., Alcaraz, K. I., Goldstein, C. M., Carson, T. L., Shen, M., & Fitzgibbon, M. (2020). Addressing inequities in COVID-19 morbidity and mortality: Research and policy recommendations. *Translational Behavioral Medicine*, 10(3), 516–519.
- Watson, D. (2020, May 7). How will you help sustain collective efficacy? *The Psychologist*. https://thepsychologist.bps.org.uk/ how-will-you-help-sustain-collective-efficacy
- West, C. P., Dyrbye, L. N., Erwin, P. J., & Shanafelt, T. D. (2016). Interventions to prevent and reduce physician burnout: A systematic review and meta-analysis. *The Lancet, 388*(10057), 2272–2281. https://doi.org/10.1016/S0140-6736(16)31279-X

#### History

Received May 14, 2021 Accepted July 21, 2021 Published online August 4, 2021

#### Open Data

Instruments are available through the Open Science Framework at https://osf.io/dh32e/.

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