# Online Integrative Community Therapy: Promoting mental health during the COVID-19 pandemic in Brazil

Terapia Comunitária Integrativa on-line: Promovendo a saúde mental durante a pandemia de COVID-19 no Brasil

Terapia Comunitaria Integrativa online: Promoviendo la salud mental durante la pandemia de COVID-19 en Brasil

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# Abstract

During the COVID-19 pandemic, psychological suffering was intensified due to the social isolation measures. This study aims to investigate the effects of Integrative Community Therapy (ICT) in the online modality as a strategy to promote mental health during the pandemic in Brazil. To this end, an intervention study of mixed design, observational and longitudinal, with a pre-test at T0 and a post-test at T1, was conducted in the virtual environment of ICT circles. The sample comprised 65 participants who answered three forms at T0 and T1 containing questions from five psychological measurement scales. The Wilcoxon paired-sample test was used to compare the scores recorded at T0 and T1 for such scales. Furthermore, content analysis was used to organize and extract meaning from the qualitative data collected in an online thematic ICT circle. Quantitative analyses showed a higher level of psychological well-being at T1, specifically for three dimensions: positive relations with others (p-value < 0.05), environmental mastery (p-value = 0.021), and purpose in life (p-value = 0.048). In addition, content analysis revealed a predominance of reports on positive relations with others. Overall, the present study suggested that, during the pandemic, online ICT has contributed to maintaining essential elements associated with individuals' mental health, such as *close social relationships* and *meaning and purpose in life*. Thus, given its low cost and accessibility, ICT emerges as a potential and innovative resource for promoting mental health in contexts of crisis and adversity.

Keywords: Mental health; Complementary therapies; Community networks; Health promotion.

#### Resumo

Durante a pandemia de COVID-19, o sofrimento psicológico foi intensificado devido às medidas de isolamento social. Este estudo tem como objetivo investigar os efeitos da Terapia Comunitária Integrativa (TCI) na modalidade on-line como uma estratégia para promover a saúde mental durante a pandemia no Brasil. Para tanto, foi conduzido um estudo de intervenção de delineamento misto, observacional e longitudinal, com pré-teste em T0 e pós-teste em T1, no ambiente virtual de rodas de TCI. A amostra foi composta por 65 participantes que responderam a três formulários em T0 e T1 contendo questões de cinco escalas de mensuração psicológica. O teste de Wilcoxon para amostras pareadas foi utilizado para comparar os escores registrados em T0 e T1 para essas escalas. Além disso, análise de conteúdo foi utilizada para organizar e extrair significado dos dados qualitativos coletados em uma roda temática de TCI on-line. As análises quantitativas mostraram um nível mais alto de bem-estar psicológico em T1, especificamente para três dimensões: relações positivas com os outros (p-valor < 0,05), domínio ambiental (p-valor = 0,021) e propósito de vida (p-valor = 0,048). Ademais, a análise de conteúdo revelou uma predominância de relatos sobre relações positivas com os outros. No geral, o presente estudo sugeriu que, durante a pandemia, a TCI on-line contribuiu para a manutenção de elementos essenciais associados à saúde mental dos indivíduos, como *relações sociais próximas* e *significado e propósito de vida*. Assim, dado o seu baixo custo e acessibilidade, a TCI emerge como um recurso potencial e inovador para promoção da saúde mental em contextos de crise e adversidade.

Palavras-chave: Saúde mental; Terapias complementares; Redes comunitárias; Promoção da saúde.

#### Resumen

Durante la pandemia de COVID-19, el sufrimiento psicológico se intensificó debido a las medidas de aislamiento social. Este estudio tiene como objetivo investigar los efectos de la Terapia Comunitaria Integrativa (TCI) en la modalidad online como una estrategia para promover la salud mental durante la pandemia en Brasil. Para ello, se realizó un estudio de intervención de diseño mixto, observacional y longitudinal, con una prueba previa en T0 y una prueba posterior en T1, en el entorno virtual de círculos de TCI. La muestra estuvo compuesta por 65 participantes que respondieron tres formularios en T0 y T1 que contenían preguntas de cinco escalas de medición psicológica. Se utilizó la prueba de Wilcoxon para muestras pareadas para comparar las puntuaciones registradas en T0 y T1 para estas escalas. Además, se utilizó el análisis de contenido para organizar y extraer significado de los datos cualitativos recopilados en un círculo temático de TCI online. Los análisis cuantitativos mostraron un mayor nivel de bienestar psicológico en T1, específicamente para tres dimensiones: relaciones positivas con los demás (p-valor < 0,05), dominio del entorno (p-valor = 0,021) y propósito en la vida (p-valor = 0,048). Además, el análisis de contenido reveló un predominio de informes sobre relaciones positivas con los demás. En general, el presente estudio indicó que, durante la pandemia, la TCI online contribuyó a mantener elementos esenciales asociados con la salud mental de las personas, como las relaciones sociales cercanas y el significado y propósito de la vida. Así, dado su bajo costo y accesibilidad, la TCI emerge como un recurso potencial e innovador para promover la salud mental en contextos de crisis y adversidad.

Palabras clave: Salud mental; Terapias complementares; Redes comunitarias; Promoción de la salud.

# 1. Introduction

The mental health care of people and communities gained importance at the end of 2019 when COVID-19, an infection caused by Sars-Cov2, spread rapidly, increasing the number of cases and the variety of clinical spectrums, becoming a pandemic in March 2020 (World Health Organization, 2020). At the beginning of the pandemic, the delay and the existing conflicts between adopting measures to contain the spread of cases and the economic impact of these measures amplified the health and humanitarian impacts of the pandemic, especially in developing countries (Bueno et al., 2021).

Brazil recorded a high number of cases and deaths, challenging one of the largest and most complex public health systems in the world, the Unified Health System (known as SUS in Brazil), which advocates the guarantee of integral, universal, and free access for all the population (Tausch et al., 2022). The restriction and social isolation measures adopted during the pandemic intensified psychological suffering and psychosocial problems, with increased feelings such as fear, insecurity, uncertainty, and loneliness (Duarte et al., 2020). These adverse outcomes are generally more frequent among women, young people, people with pre-existing mental health problems, health professionals, and people living in vulnerable conditions (Kola et al., 2021).

Several mental healthcare strategies were adopted during the COVID-19 pandemic, and studies have shown that group strategies are more effective than individual ones, improving coping self-efficacy and participants' well-being (Damiano et al.,

2021). Consequently, some authors suggest investing in social, community, and cross-cultural initiatives to complement the services already used in mental health services (Barreto & Camarotti, 2021).

One of the resources for managing the unfolding of the health crisis has been the application of Traditional, Complementary, and Integrative Medicines (TCIM), known in Brazil as Integrative and Complementary Practices in Health (ICPH). They are therapeutic resources that seek to prevent diseases and restore health in a broader context (Brasil, 2018). Since 2006, ICPH was incorporated into the SUS, and its list has gradually expanded, reaching 29 currently available to the Brazilian population, including ICT. In May 2020, the National Health Council recommended to the Brazilian Ministry of Health the inclusion and dissemination of ICPH as a coping strategy during the COVID-19 pandemic (Brasil, 2020a).

ICT is a collective therapeutic practice considered an innovation in mental health (Barreto & Camarotti, 2021). It involves community members in an activity that makes it possible to build solidarity social networks to promote life and mobilize the resources and skills of individuals, families, and communities (Brasil, 2018). This practice is genuinely Brazilian, created by the psychiatrist Adalberto Barreto, and is based on five epistemological pillars: systemic thinking, the pragmatics of human communication, cultural anthropology, Paulo Freire's pedagogy of autonomy, and resilience (Barreto, 2008). The steps of an ICT circle include welcoming participants, theme selection, contextualization, sharing of experiences, reflective conclusion, and appreciation of the circle among community therapists (Barreto, 2008).

Over time, ICT has constituted a social movement that breaks with the paradigm of disease, medicine, and the biomedical model, moving towards an approach based on health promotion. It is currently present in several countries across America, Europe, and Africa (Associação Brasileira de Terapia Comunitária Integrativa, 2024).

It is important to emphasize that ICT is not a psychotherapeutic process but rather a therapeutic group activity conducted by community therapists to promote healthy coping strategies through sharing life stories (experiences of suffering and overcoming), allowing the creation of support networks and healthy bonds (Barreto, 2008; Macedo et al., 2020).

The conception of human flourishing discussed by VanderWeele (2017) aligns with ICT praxis concerning the search for a broader understanding of the health concept, focusing on people's competencies arising from their needs. According to VanderWeele, flourishing requires doing or being well in six broad domains of human life: (1) happiness and life satisfaction, (2) physical and mental health, (3) meaning and purpose, (4) character and virtue, (5) close social relationships, and (6) financial and material stability. This theoretical framework encompasses positive health indicators, with outcomes such as resilience, positive emotions, integrative health, and well-being in the individual and collective context (VanderWeele, 2017).

Considering that the COVID-19 pandemic has brought a severe health crisis in Brazil, with consequences for mental health, and that recent theoretical perspectives have proposed that online social connections could benefit human well-being when face-to-face interactions are prevented (Marinucci et al., 2022), the adaptation of ICT to the online modality quickly responded to the social isolation restrictions imposed by the pandemic. The first online ICT circles took place in April 2020, thus allowing people to stay connected during the pandemic, even if only virtually. It is worth noting that before the pandemic, community therapists held ICT circles only face-to-face.

This study aims to investigate the effects of Integrative Community Therapy (ICT) in the online modality as a strategy to promote mental health during the pandemic in Brazil.

# 2. Methodology

### 2.1 Design

The methodological approach considered to evaluate ICT in the online modality was an intervention study of mixed design (quantitative and qualitative), observational and longitudinal (Pereira et al., 2018; Toassi & Petry, 2021), with a pre-test

at T0 (October 2020) and a post-test at T1 (December 2020), a period of social isolation before vaccination. The intervention consisted of participation in online ICT circles held between T0 and T1 on the Zoom® platform and conducted in Portuguese by the creator of ICT or other experienced Brazilian community therapists on fixed days of the week (Monday, Tuesday, and Friday, except on holidays). Five trained people (two community therapists) collected and organized the data. In addition, an online thematic ICT circle was held in January 2021 using an unstructured interview.

# 2.2 Samples

The intervention study sample comprised 65 participants who filled out three online forms at T0 and T1. Twenty-four online ICT circles were held between T0 and T1. On average, each circle lasted 80 minutes and had the participation of, on average, 70 people. Moreover, the online ICT thematic circle was attended by 20 of the 24 participants who had their themes selected in the online ICT circles held between T0 and T1.

#### 2.3 Measures

The study consisted of four stages. In stage 1 (pre-test), participants who attended the online ICT circles at T0 voluntarily responded to three online forms in Portuguese created in Google Forms®, containing questions about human life and socioeconomic issues. The items (questions) of five psychological measurement scales were considered in this stage. They are: (1) the satisfaction with life scale (Diener et al., 1985), composed of five items on a seven-point Likert scale; (2) the resilience scale (Smith et al., 2008), composed of six items on a five-point Likert scale; (3) the psychological well-being scale (Ryff, 1989), composed of 36 items on a six-point Likert scale; (4) the general belongingness scale (Malone et al, 2012), composed of 12 items on a seven-point Likert scale; and (5) the flourishing scale (VanderWeele, 2017), composed of two items on each of the six domains of human life, each assessed on a scale of 0 to10. The items of these five scales were divided into three forms, each with a similar number of questions, to prevent the forms from getting too long. Socioeconomic questions (e.g., gender, age, education, and race) were included in all three forms. Each form was applied on one of the days of the first week on which the online ICT circles were held (i.e., Monday, Tuesday, and Friday).

Stage 2 (post-test) comprised reapplying the three online forms at T1. At this stage, participants were asked to fill out the same forms as in Stage 1.

Stage 3 consisted of organizing all the information about the online ICT circles held between T0 and T1 in an Excel® spreadsheet, including duration, number of participants, topics covered, and coping strategies mentioned by the participants.

Stage 4 consisted of an online thematic ICT circle led by the ICT creator using an unstructured interview. This circle aimed to assess the perceptions of participants who attended the circles held between T0 and T1 about the changes, benefits, and impacts ICT had in their lives. The thematic circle was recorded with the consent of all participants and then transcribed into a Word® file for later content analysis.

#### 2.4 Ethical considerations

The Research Ethics Committee of the State University of Ponta Grossa approved the study (Approval Protocol No. 4.253.588). All participants read and signed the online informed consent form.

#### 2.5 Statistical analysis

Averages, standard deviations, and percentages summarized the data from Stages 1 through 3. The scores recorded at T0 and T1 for the five psychological scales considered in the study were compared using the Wilcoxon paired-sample test (Siegel

& Castellan Jr., 1988). The significant statistical level was set at 0.05. All analyses were performed using the R software (R Core Team, 2021).

Qualitative data recorded in Stage 4 were analyzed using content analysis. It followed Bardin's methodology (Bardin, 2015), with the following three categories established a posteriori: (1) *positive relations with others*, which refers to a close, satisfying, and trusting relationship with others; a sense of concern for the well-being of others; a capacity for empathy, affection, and intimacy, as well as the understanding of the acts of giving and receiving of the human being; (2) *environmental mastery*, that comprises a sense of mastery and competence in managing everyday issues; control of a complex array of external activities; effective use of surrounding opportunities; and ability to choose or create contexts suited to personal needs and values; and (3) *meaning and purpose in life*, which refers to the ability to develop aims and objectives for living and a sense of directedness; feel that there is meaning to present and past life; and maintenance of beliefs that give life purpose.

#### 3. Results

### 3.1 Online ICT circles and their participants

Twenty-four online ICT circles were held between T0 and T1. Thirteen (54%) were conducted by the ICT creator and eleven (46%) by other experienced Brazilian community therapists. The themes most addressed in the circles were stress, family conflicts, depression, violence, and broken social bonds. The most frequently mentioned coping strategies were self-care, personal empowerment, religious/spiritual support, and seeking support from solidarity networks or specialized professionals. More than one coping strategy was cited per circle.

Of the participants who completed the three online forms at T0 (pre-test), 65 completed them at T1 (post-test). The intervention study sample consists of these individuals. The predominant profile of them was female (92.3%), white (66.1%), aged 30 to 59 (61.5%), and with complete higher education (83%).

#### 3.2 Comparison of scale scores

Table 1 shows the comparison of the scores obtained at T0 and T1 for the five psychological scales. A statistically significant difference can be observed between the scores on the well-being scale (p-value = 0.006), with a higher score at T1 than at T0, since T1–T0 is greater than zero, indicating a higher level of psychological well-being at T1. For the other scales (satisfaction with life, flourishing, resilience, and general belongingness), no statistically significant differences were observed, indicating that between T0 and T1 no significant change was captured by the items of these scales.

Table 1 - Com	parison of scale scores at T1 and T0 using the W	ilcoxon paired-sample	e test.
rical scale	Mean of the difference T1–T0 (SD)	W statistics	F

Psychological scale	Mean of the difference T1-T0 (SD)	W statistics	P-value
Satisfaction with life	0.00 (3.6)	187	0.728
Flourishing	-0.28 (8.5)	197	0.902
Resilience	-0.39 (3.6)	167	0.425
Psychological well-being	6.35 (9.6)	226	0.006
General belongingness	1.64 (5.6)	69	0.326

Notes: SD is the standard deviation. Twenty-four online ICT circles were held between T0 and T1. Source: Authors.

A comparison of the scores for the six dimensions of the well-being scale (Table 2) shows significant differences for positive relations with others (p < 0.05), environmental mastery (p = 0.021), and purpose in life (p = 0.048), all with a higher

score at T1 than at T0, since T1-T0 > 0.

Although non-statistically differences were observed for the other three dimensions (autonomy, personal growth, and self-acceptance), there was a trend toward higher scores at T1.

Table 2 - Comparison of the psychological well-being dimensions scores (T1 vs. T0) using the paired samples Wilcoxon test.

Dimensions	Mean of the difference T1-T0	W statistics	P-value
	(SD)		
Positive relations with others	1.78 (2.7)	228	< 0.05
Autonomy	0.95 (3.9)	156	0.601
Environmental mastery	1.43 (3.0)	213	0.021
Personal growth	0.65 (2.3)	165	0.427
Purpose in life	1.09 (2.2)	203	0.048
Self-acceptance	0.43 (1.7)	171	0.329

Notes: SD is the standard deviation. Twenty-four online ICT circles were held between T0 and T1. Source: Authors.

# 3.3 Content analysis

Content analysis indicated a clear connection between the dimensions of the psychological well-being scale and the reports provided by participants in the online thematic ICT circle. Their reports were organized into the three categories described next, with the first being the most prevalent.

#### 3.3.1 Category 1 - Positive relations with others

Reports showed the power of contact between people, even if only virtually, allowing a close, satisfactory, and trusting relationship. For instance: [...] Even during the pandemic, we are more connected than ever. [...] The connections we can make are wonderful, even in a difficult period. [...] I realized that I was not alone in the universe.

When having contact with other people in the ICT circle, listening to the other has therapeutic potential, in addition to developing empathy, connection, and understanding of the acts of giving and receiving of the human being. Reports in this regard were: [...] What I heard from others moved me significantly because they led me to reflections I had not imagined. [...] What touched me the most here in community therapy is how you learn by listening to the other.

#### 3.3.2 Category 2 - Meaning and purpose in life

Participants' reports refer to the sense of self-knowledge, transformation, recognition of the need to have goals for living, and a sense of directedness aiming at happiness. For instance: [...] I recognize that I was one before the ICT circle, and after, I am another. Today, I want the best for myself because I have boycotted myself too much, and now I do not want it anymore; I just want to be happy.

The period of social isolation allowed for a more accentuated inner reflection, a more evident connection with what matters, and a recognition that there is meaning to present and past life. For example: [...] I will only stick with what matters, only with the essence. [...] This period allowed me to recognize myself as the being that I am and with the quality of people I always wanted to be.

# 3.3.3 Category 3 - Environmental mastery

From the reports on the perception of mastery over the adverse environment experienced during the pandemic, the

influence of online ICT circles on those infected with the disease could be noted. Two participants said: [...] The ICT circle prepared me for the great impact of facing COVID-19. [...] I had to face it and saw how fragile I was and how much I fought for a thread of air. I wanted to live!

Some reports also evidenced a change in perspective. For example, three participants said: [...] When I started to see other reading possibilities, I changed my reading, which freed me. [...] The problem is the same, but I am no longer the same. [...] I learned to re-signify fear.

Online ICT was also highlighted as a safe and trusting environment, an opportunity to adapt situations/contexts to personal needs and values. One of the participants said: [...] I allowed myself to suffer, cry, and go through this moment and try to get through it in the best way possible.

#### 4. Discussion

This study shows that ICT adapted to the online format promoted a space for strengthening positive relationships during the COVID-19 pandemic. It also helped develop environmental mastery, meaning, and purpose in life, which are fundamental components of human existence that enhance people's connection to themselves and the world around them.

The quantitative and qualitative analyses revealed convergence regarding positive relations with others during the COVID-19 pandemic. This finding is very relevant considering that although data collection took place in a period of high morbidity and mortality of COVID-19 (Brasil, 2020b), with restrictive social isolation conditions and without the prospect of vaccination for the population at that time, ICT potentiated the bonds and social connections between people, even if only virtually, corroborating another study (Marinucci et al., 2022).

The practice of online ICT enabled the transformation of social isolation into emotional reception, allowing, through human relationships, which Mehry (2014) considers light and low-cost technology, to create a space for sharing and overcoming psychic suffering by finding strength and beauty in our own emotions and experiences.

Humans are driven by a fundamental need to create and maintain meaningful social relationships, providing community cohesion and a sense of belonging (Baumeister & Leary, 1995). In addition, it is known that social connections, directly and indirectly, impact the health of populations, acting as a protective factor for psychological well-being (Argyle, 2001) and maintaining physical health in various conditions (Heffner et al., 2011), reducing the risk of mortality. The magnitude of the impact of connections on longevity can be considered as important as not smoking, not consuming alcohol abusively, not being obese, and practicing physical activity (Holt-Lunstad et al., 2015).

This study also revealed positive changes in the dimensions of *environmental mastery* and *purpose in life*, indicating a higher score level at T1 than at T0. Environmental mastery comprises managing routine and life, adapting or creating contexts suited to their needs and values. In this perspective, the participants highlighted how online ICT circles helped them to face the external factor of COVID-19 and to deal with emotions during social isolation, bringing more self-control and security to move forward. In addition, they allowed the participants to express their feelings without judgment and with acceptance, bringing a greater psycho-emotional domain to demands generally treated with medication in health systems.

The meaning of life, expressed in the participants' reports of the thematic ICT circle, is related to the transmutation of understanding and the possibility of carrying out a new reading of the situation experienced, focusing, at that moment, on the lessons that the pandemic was bringing. Also, the narratives about prioritizing what is essential and what is best for oneself align with Viktor Frankl's theory (2019) on the possibility of choosing how to face difficult situations, including finding meaning for the suffering experienced. According to Frankl, everything can be taken from a man except one thing: the freedom to choose his attitude in any set of circumstances (Frankl, 2019). Ultimately, the survival of human beings depends on their ability to lead life

towards what for or for whom, i.e., the ability to transcend (Silveira & Gradim, 2015).

The search for the meaning of life and possible happiness in a health crisis scenario has been a human need. The search itself for meaning in the pandemic context is part of this continuum, which challenges individuals to keep moving for various reasons, including health promotion and disease prevention (Cabral et al., 2021; Frankl, 2019).

In this context, the online ICT methodology, through connecting the life stories of others and themselves and with strategies for dealing with or overcoming the challenges arising from the COVID-19 pandemic, has boosted the expansion of the concept of meaning for the suffering and pain experienced by the loss and grief of loved ones, mental disorders, financial crisis, family conflicts, home office, and homeschooling, among others (Lauer, 2020; Santos et al., 2022; Souza, 2022).

About the concerns and anxieties expressed in the circles, the most prevalent were related to stress, family conflicts, depression, and violence, corroborating the findings of another study carried out during the pandemic (Silva et al., 2020).

In our study, stress was the most frequent topic in online ICT circles, coinciding with findings from other studies on ICT (Rocha et al., 2013; Martins et al., 2020), as well as its consequences on mental health due to the absorption of excess information, lack of clarity (especially about the risk of contamination), concern about uncertainties, duration of the pandemic, and lack of affection/physical contact between people. A study on mental health issues showed that more than half of people perceived the psychological impact of the pandemic as moderate or severe, and 8.1% reported moderate to severe stress levels (Wang et al., 2020).

Family conflicts also appeared as a recurring theme, especially the fear of being infected or infecting a family member. Changes in family dynamics during the period of isolation also have greatly affected women, as they generated an overload of domestic tasks and new responsibilities, such as school support for children and care for elderly family members. There was also an increase in domestic violence, exacerbating gender inequalities and decreasing access to public services to ask for help (Bertelli et al., 2020).

In this study, self-care was the first of the three most cited coping strategies. This was widely discussed during the pandemic, with ICPH being suggested as a self-care tool since it can offer learning and personal growth opportunities in times of crisis (Andrade & Lima, 2021; Esperidião et al., 2020). Other studies also evidenced the other two coping strategies, personal empowerment and religious/spiritual support (Martins et al., 2020; Rocha et al., 2013).

Except for the psychological well-being scale, non-significant differences between the scores at T0 and T1 were found for the other scales considered in this study (satisfaction with life, flourishing, resilience, and general belongingness). This suggests that (*i*) in the interval between T0 and T1, online ICT circles helped maintain similar scores for the dimensions measured by the items on these scales, which can be a relevant finding in such an adverse period as the COVID-19 pandemic; and (*ii*) the items that make up these scales are perhaps less sensitive than those on the psychological well-being scale for detecting changes over short or medium intervals, thus not excluding the possibility that changes may be captured over longer intervals than the one considered in this study.

A strength of this study is the care taken to ensure the internal validity of the research. We analyzed online ICT circles conducted only by experienced community therapists, such as the creator of ICT and his team, using the *gold standard* method. Another strength is that data collection was performed mostly by community therapists, facilitating the data interpretation due to their knowledge of the methodology. As a limitation, one can cite the selection bias due to some people not having access to the internet or having difficulties using smartphones or computers, thus limiting the participation of some age groups, especially the elderly or people with a low level of education (Ornell et al., 2020).

It is worth mentioning that face-to-face activities were suspended during the pandemic, making it impossible to compare face-to-face and online ICT circles in the current study, as is generally recommended in the literature (Marinucci et al., 2022).

Nevertheless, as online ICT continued to be offered after the pandemic, further studies are recommended as they may reveal valuable insights into its effects on mental health in different contexts, realities, and countries.

# 5. Conclusion

Online ICT carried out during one of the most worrying phases of the COVID-19 pandemic, with social isolation and vaccination not in progress, contributed to the development of aspects related to mental health, particularly positive relations with others, environmental mastery, meaning and purpose in life, which are linked to psychological well-being.

Thus, due to its low cost and accessibility, online ICT emerges as a powerful strategy for promoting mental health in contexts of crisis and adversity, especially in developing countries, where the social determinants of mental health generally act more strongly.

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