Distress and Resilience in Days of COVID-19: International Study of Samples from Israel, Brazil, and the Philippines

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Abstract
We compared three types of resilience (individual, community, and national resilience), two indicators of distress (sense of danger and distress symptoms) and wellbeing, among samples from Israel, Brazil, and the Philippines, during the “first-wave” of COVID-19 pandemic. Though significant differences were found among the samples regarding all variables, similarities were also

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emerged. Individual resilience and wellbeing negatively predicted distress symptoms in each sample, and women of all samples reported higher level of distress-symptoms compared with men. The differences between the samples are presented and discussed. Understanding the similarities and the differences, between these cultures, may help developing efficient countermeasures tailored to each country. This knowledge may promote efficient health policy to foster people’s ability to cope with the hardship and to prevent future psychological and health implications.

**Keywords**
cross-cultural comparisons, COVID-19, sense of danger, distress symptoms, resilience, wellbeing

**Introduction**

COVID-19, which erupted in China in 2019, is an infectious disease caused by a newly discovered strain of coronavirus. This pandemic is rapidly spreading worldwide leading to constantly growing numbers of morbidity and mortality in some countries, while in others there has been a decline in newly confirmed cases (Anderson et al., 2020; Wang et al., 2020). It has led to severe global disruptions, such as closing schools and academic institutions, partial or total closure on the population enforced by governments, reduced travel, ensuing unemployment and economic difficulties, and a worldwide stock markets decline (Anzai et al., 2020).

For the vast majority of people, whether infected by COVID-19 or not, the epidemic is posing a major threat in many life domains, such as health, economic status, lifestyle, recreation, and more. This threat is expressed by increased psychological tension, concerns, and anxiety, which may have severe psychological and health implications. Furthermore, the ambiguity about the lingering disruption to individual and public life may also elevate psychological distress (Qiu et al., 2020). The ongoing intensive discussion about the pandemic by the mass media and politicians, and grim forecasts of its potential disastrous future outcomes, further enhance these negative emotions (Sorokowski et al., 2020). In the present study, the impact of COVID-19 pandemic on the general public in three different countries was assessed by two major distress indicators: sense of danger and distress symptoms. The study is based on samples from Brazil (N=581), the Philippines (N=401), and Israel (N=605), who have responded to the same questionnaire. The study examines the associations between modes of resilience, wellbeing, demographic characteristics, and the two distress indicators.
Indicators for COVID-19 Effect: Sense of Danger and Distress Symptoms

Lazarus and Folkman (1984) have claimed that perceived post adversity distress and assessment of stress-resistant resources reflect cognitive appraisals. A sense of danger strongly influences reaction to adversities (Scott et al., 2013). For example, low sense of danger has been associated with a higher postwar recovery and life satisfaction, and fewer distress symptoms (Kimhi et al., 2010).

Highly threatening and painful events, such as COVID-19 pandemic, undermine people’s basic sense of security, and increase distress symptoms. These symptoms include continuous emotional and behavioral problems (Soffer-Dudek, 2016) like depression, anxiety, and grief (Hadi et al., 2006). In line with the previous discussion, the level of individual distress symptoms in the context of COVID-19 pandemic constitutes the predicted variable in our study. Both sense of danger and distress symptoms were reported as good indicators for the psychological effect of COVID-19 pandemic (Kimhi et al., 2020).

Resilience

The original concept of resilience comes from the physics of materials and is defined as the maximum energy that can be absorbed within the elastic limit, without creating a permanent distortion (Roylance, 2001). Social scientists have borrowed the concept to describe people’s ability to properly adapt to stress and adversity. The American Psychological Association defines resilience as a process of bouncing back from difficult experiences and adapting well in the face of adversity, trauma, tragedy, threats, or significant sources of stress (APA.org, 2012). Masten (2018) defines resilience as “the potential of the manifested capacity of a dynamic system to adapt successfully to disturbances that threaten the function, survival, or development of the system” (p. 187). Overall, researchers seem to agree that the concept of resilience is useful in discussing people’s ability to withstand stress and adversity (Bonanno, 2004; Luthar et al., 2000; Sudefeld, 2015) but is a complex multifaceted concept whose measurement arouses a rich debate (e.g., Bonanno et al., 2015).

Modes of resilience: Individual, community, and national. Three major modes of resilience have been studied empirically: individual, community, and national. (a) individual resilience (IR): Cacioppo et al. (2011) define IR as “the capacity to foster, engage in, and sustain positive relationships and to
endure and recover from life stressors and social isolation” (p. 44). Hjemdal et al. (2011) report that IR contributes significantly and negatively to the prediction of depression, anxiety, stress, and obsessive-compulsive symptoms. An earlier study regarding COVID-19 pandemic has indicated that the best predictors of sense of danger and distress symptoms (controlling each other) were individual resilience and well-being (Kimhi et al., 2020). (b) Community resilience (CR): According to Bonanno et al. (2015) CR expresses the interaction between individuals and their community and refers to the success of the community in providing for the needs of its members and the extent to which individuals are helped by their community. A recent literature review show that CR is associated with increased local capacity, social support, and resources, and with decreased risks, miscommunication, and traumas (Patel et al., 2017). (c) National resilience (NR): NR is a broad concept addressing issues of social sustainability and strength in several diverse realms: trust in the integrity of the government, the parliament, and other national institutions; belief in social solidarity; and patriotism (Kimhi & Eshel, 2019).

Based on the above findings, we hypothesized the following:

A. The three modes of resilience would significantly and negatively predict sense of danger and distress symptoms, across the three countries.

B. Individual resilience and well-being would be the best predictors of the sense of danger and distress symptoms across the three countries.

C. The differences between the three samples regarding the study variables would be examined as an open research question since this issue has hardly been investigated.

Materials and Methods

Samples and Sampling

The current study is based on three independent samples from three countries, Brazil, the Philippines, and Israel.

Brazil: The sample included 581 Brazilians (Females = 402). A snowball sampling was used, with the aid of an online link (SurveyMonkey) which described the research objectives, and included invitation to fill out the questionnaire. Participants were requested to invite other potential participants by sharing the link with their social networks. All data were gathered anonymously, following ethics guidelines from CONEP (Brazilian National Board of Research Ethics, res. 510/2016-CNS). Data collection took place on May 14–24, 2020.
Table 1. Distribution of Demographic Attributes of the Present Sample.

| Variable scale                        | Country      | M         | SD  |
|---------------------------------------|--------------|-----------|-----|
| Age                                   | Israel       | 42.40     | 15.63 |
|                                       | Brazil       | 39.45     | 13.31 |
|                                       | Philippine   | 30.36     | 11.14 |
| Gender                                | Israel       | Man 49%   |     |
|                                       | Brazil       | Man 31%   |     |
|                                       | Philippine   | Man 36%   |     |
| Family income (scale 1–5)             | Israel       | 2.51      | 1.18 |
|                                       | Brazil       | 3.10      | 1.18 |
|                                       | Philippine   | 3.29      | 1.04 |
| Education (scale 1–5)                 | Israel       | 3.28      | 0.98 |
|                                       | Brazil       | 3.84      | 1.08 |
|                                       | Philippine   | 3.80      | 0.78 |
| Political attitudes (scale 1–5)       | Israel       | 2.45      | 0.87 |
|                                       | Brazil       | 2.86      | 0.97 |
|                                       | Philippine   | 2.70      | 0.71 |
| Size of community (Israel and the     | Israel       | 4.13      | 0.95 |
| Philippines: scale 1–5; Brazil:       | Brazil       | 6.00      | 2.43 |
| scale 1-9)                            | Philippine   | 4.45      | 2.29 |
| Number of children (scale 1–5)        | Israel       | 1.64      | 1.50 |
|                                       | Brazil       | 1.98      | 1.03 |
|                                       | Philippine   | 1.57      | 0.95 |
| Economic difficulties (scale 1–5)     | Israel       | 2.88      | 1.26 |
|                                       | Brazil       | 2.62      | 1.23 |
|                                       | Philippine   | 2.62      | 1.01 |

The Philippines: The sample included 401 Filipinos (Females = 254, Males = 146, 1 did not report gender). Like the Brazilian method, a snowball sampling was used, with the aid of an online link (Google form). All data were gathered anonymously, following the ethics approval of the university administrator of the Cavite State University-General Trias Campus. Data collection took place between April 7 and May 20, 2020.

Israel: The sample included 605 Jews (Females = 299) derived from a large pool of an internet survey company. All data were gathered anonymously, following approval of the IRB of Tel Aviv University. Data collection took place on April 10–14, 2020.

All participants signed an informed consent form before filling out the questionnaires. Participants from the three samples are characterized by a wide range of demographic attributes (Table 1).
Instruments

Cronbach’s alpha reliability coefficients of the six research scales (Table 2) across the three samples were high (all were above .80, except for the sense of danger in Brazil which was .75).

**Table 2.** Alpha Cronbach and Pearson Correlations among the Research Variables across the Three Participant Countries.

|                          | Alpha Cronbach | 2  | 3  | 4  | 5  | 6  | 7  |
|--------------------------|----------------|----|----|----|----|----|----|
| **1. Sense of danger**   |                |    |    |    |    |    |    |
| Israel                   | .83            | .353*** |     |    |    |    | .194*** |
| Brazil                   | .75            | .440*** | -.188*** | -.164*** | -.061 | .029 | .028* |
| Philippine               | .90            | .305*** | -.240*** | -.228*** | -.195 | -.325*** | .136** |
| **2. Distress symptoms** |                |    |    |    |    |    |    |
| Israel                   | .88            |     | -.382*** | -.502*** | -.183*** | -.160*** | .184*** |
| Brazil                   | .88            |     | -.498*** | -.544*** | -.257*** | -.355*** | .226*** |
| Philippine               | .90            |     | -.401*** | -.510*** | -.270*** | -.333*** | .184*** |
| **3. Individual resilience** |            |    |    |    |    |    |    |
| Israel                   | .87            |     | .409*** | .281*** | .168*** | .011 |
| Brazil                   | .85            |     | .428*** | .305*** | .221*** | -.118*** |
| Philippine               | .90            |     | .507*** | .364*** | .371*** | -.006 |
| **4. Well-being**        |                |    |    |    |    |    |    |
| Israel                   | .83            |     | .344*** | .271*** | -.214*** |
| Brazil                   | .84            |     | .250*** | .274*** | -.250*** |
| Philippine               | .85            |     | .407*** | .399*** | -.268*** |
| **5. Community resilience** |            |    |    |    |    |    |    |
| Israel                   | .92            |     | .497*** | -.116** |
| Brazil                   | .87            |     | .458*** | -.069 |
| Philippine               | .91            |     | .649*** | -.022 |
| **6. National resilience** |            |    |    |    |    |    |    |
| Israel                   | .91            |     |     | -.074 |
| Brazil                   | .86            |     |     | .004 |
| Philippine               | .95            |     |     | .091 |

Note. Shaded cells indicate a different correlation pattern between the three countries. *p < .015. **p < .01. ***p < .001.

**Instruments**

Cronbach’s alpha reliability coefficients of the six research scales (Table 2) across the three samples were high (all were above .80, except for the sense of danger in Brazil which was .75).

**Sense of danger.** A seven-item sense of danger scale was employed, based on Solomon and Prager’s (1992) scale referring to a lingering sense of danger in the context of security threats. However, the term “security” was modified to “COVID-19 pandemic threat” in all relevant questions (e.g., “To what extent are you concerned about the increase of COVID-19 global crisis?”). Furthermore, one item was added to the scale: “To what extent are you worried that
we will not be able to overcome COVID-19 crisis before many citizens in our country have died from this disease”? Responses were rated on a Likert scale ranging from 1 (=not at all) to 5 (=very much).

**Distress symptoms.** The level of individual distress symptoms was determined by nine items taken from the Brief Symptom Inventory (BSI, Derogatis & Savitz, 2000) about anxiety and depression. This inventory was scored on a Likert scale ranging from 1 (=not suffering at all) to 5 (=suffering very much). For example, “How much do you suffer from feelings of a sudden fear with no reason?.” Due to ethical considerations, the item concerning suicidal thoughts was not included in the study.

**Individual resilience.** IR was measured by the 10-item Connor-Davidson scale (CD-RISC 10, Campbell-Sills & Stein, 2007) portraying individual feelings of ability and power in the face of difficulties (Alarcón et al., 2020). This scale was rated on a 5-point Likert scale ranging from 1 (=not true at all) to 5 (=generally true).

**Community resilience.** Perceived CR was determined by a short version of the CCRAM scale (CCRAM10; Leykin et al., 2013). The ratings for its 10 items ranged from 1 (=do not agree at all), to 5 (=totally agree). An example of an item: “I can depend on people in my town to come to my assistance in a crisis.”

**National resilience.** A short version of the NR Scale was employed (Kimhi & Eshel, 2019). This 13-item tool pertained to trust in national leadership, patriotism, and trust in major national institutions. (e.g., “I love my country and I am proud of it”). In the current study, we added three items regarding COVID-19 crisis (e.g., “I have full faith in the ability of my country’s health system to care for the population in the current Coronavirus crisis”). The 6-point response scale ranged from 1 (=very strongly disagree) to 6 (=very strongly agree).

**Well-being.** The present measure of well-being was based on the Recovery from War Scale (Kimhi & Shamai, 2004; Kimhi & Eshel, 2009). This 9-item self-report scale described perceived individual strengths in the domains of work, health, recreation, wider social contacts, achievements, family relations, daily functioning, relations with friends, and general assessment of one’s life. The 6-point response scale ranged from 1 (=not good at all) to 6 (=very good).
Demographic variables. Seven demographic attributes were collected: Age; Gender; Religiosity: one item with a 4-point scale ranging from 1 (=secular) to 4 (=ultra-orthodox); Family income level: one item reporting the family income relative to the average income in each country with scale ranged from 1 (=much above average) to 5 (=much below average); Education: one item with a 5-point response scale ranged from 1 (=elementary school) to 5 (=master degree and above); Political attitudes: one item with a 5-point scale ranged from 1 (=extreme left) to 5 (=extreme right); The size of the community: one item with different scales across the countries: in Israel and the Philippines a 5-point scale ranged from 1 (=up to 1,000 residents) to 5 (=50,000 and above); in Brazil a 9-point scale ranged from 1 (=up to 500 residents) to 9 (=1,000,000 and above); The number of children: one item with a 5-point scale ranged from 1 (=no children) to 5 (=four children and more); Economic difficulties: one item “Are you or your family experiencing financial difficulties due to COVID-19 crisis (such as unemployment, downsizing business operations, and others).” The scale ranged from 1 (=not at all) to 5 (=very much).

Results

First we computed Pearson correlations among the research variables, across the three countries (Table 2). Results indicated that the significance of correlations was not entirely consistent across the three countries, as detailed below: (a) Sense of danger was significantly and negatively correlated with IR and well-being in Israel and Brazil but not in the Philippines. (b) The correlation between sense of danger and CR was significantly negative in the Philippines but not in Israel and Brazil. (c) The correlation between sense of danger and NR was significantly negative in Brazil and the Philippines but not in Israel. (d) The correlation between IR and economic difficulties was significantly negative in Brazil, but not in the other two samples. (e) Still, overall, the correlations among the research variables across the three countries tended to show similarity regarding direction of the correlations, as well as their significance. Specifically, none of the correlations was found to show different directions across the three countries.

Next, since our study is a cross-cultural one, and to examine whether our subjects understood similarly the meaning of the scales, we have performed comparisons of equivalence of invariance (Milfont & Fischer, 2010) regarding the five measurement tools. Result indicated that NR did not achieve per-country model fit, CR did not achieve baseline invariance, and distress symptoms only reached baseline invariance (see Table 3).

General Linear Models (GLMs) along with Least Significance Differences (LSD) post hoc analyses were employed to examine the differences between
the three samples concerning the following variables: Sense of danger and distress symptoms (our distress indicators of the psychological effect of COVID-19 pandemic); individual, community, and NR; well-being, and economic difficulties due to the pandemic crisis (Table 4). Results indicated significant differences among the three samples regarding all these seven examined variables.

**Prediction of COVID-19 Effects**

Three path analyses were employed to examine a model in which four psychological variables (individual, community, NR, and well-being) and four demographic variables (age, gender, economic difficulties, and family income) predicted sense of danger and distress symptoms, in each of the three samples (Figure 1). Table 5 presents the impact of the eight predicting variables, controlled for each other, on the two predicted variables, controlled for
each other. IR and well-being were the best significant predictors of distress symptoms across the three countries and the best predictors of sense of danger in Israel and Brazil (but not in the Philippines). The higher the IR and well-being, the lower sense of danger and distress symptoms. Overall, the role of IR and well-being as predictors of distress was similar across the three countries. CR did not significantly predict distress symptoms in all samples, and did not significantly predict sense of danger in Israel and Brazil, yet it significantly negatively predicted sense of danger in the Philippines.
NR significantly negatively predicted both distress indicators in Brazil, only distress symptoms in the Philippines, and none of the two in Israel. Age significantly negatively predicted both distress indicators in Israel and the Philippines but not in Brazil: Older people reported lower levels of sense of danger and distress symptoms. Compared with men the women of all three samples reported a higher level of distress symptoms. However, similar patterns of results for the sense of danger variable were found only for the Filipino and Israeli, but not for the Brazilian sample. Note, however, that the distribution of men and women was not even in the Brazilian and the Philippine samples. Economic difficulties due to the pandemic crisis significantly and positively predicted both distress indicators in the Philippines and Israel, but only distress symptoms in Brazil. Average family income significantly negatively predicted sense of danger in Israel and Brazil but not in the Philippines. Surprisingly, it also significantly positively predicted distress symptoms in the Philippines. Overall, the nine predictors explained 20% of

**Figure 1.** General model of path analysis of psychological and demographic variables predicting sense of danger and distress symptoms.
the variance (Brazil) or 14% (the Philippines and Israel) of sense of danger variable, as well as 41% (Brazil), 33% (the Philippines), and 30% (Israel) of the distress symptoms variation.

**Discussion**

COVID-19 pandemic has taken millions of lives worldwide, placed millions of people in great danger, and has dramatically increased mental health...
concerns (Fiorillo & Gorwood, 2020; United Nations, 2020; World Health Organization [WHO], 2020a). In great adversities like this pandemic, it is imperative to understand the factors that could protect people from its psychological consequences across different cultural contexts. Understanding the similarities, as well as the differences, between different cultures, may help to develop efficient countermeasures, tailored to each culture, and may help in guiding efficient health policy to foster people’s ability to cope with the hardship in each culture.

We explored the predictors of sense of danger and distress symptoms across three countries under the assumption that individual, community, and national resilience would significantly and negatively predict both distress indicators in all three countries. We further predicted that IR and well-being would be the strongest predictors of the distress indicators. Furthermore, we aimed at identifying any difference in terms of the studied variables across the three countries.

The path analyses partially confirmed our first hypothesis: two out of three modes of resilience significantly and negatively predicted the distress indicators in most cases. Consistent with extant literature, IR significantly negatively predicted distress symptoms in all three countries (Kimhi et al., 2020; Hjemdal et al., 2011). However, IR significantly and negatively predicted sense of danger in Israel and Brazil but not in the Philippines. Yet, and not in line with our first hypothesis, CR did not predict distress symptoms in all three countries and it significantly and negatively predicted sense of danger only in the Philippines. Since the Philippines is characterized by a highly collectivistic culture (Aruta et al., 2019; Roxas et al., 2019), Filipinos’ safety and well-being may be more closely associated with socially-oriented constructs such as CR. Although Israel and Brazil may also be considered collectivistic cultures, we believe that East Asians, like Filipinos, have greater levels of collectivism which might explain these differences (Aruta et al., 2019; Roxas et al., 2019). Moreover, NR did not significantly predict any of the distress indicators in Israel, result which was also not in line with our first prediction. Importantly, lately Israel has suffered two concurrent major crises, the global coronavirus crisis co-occurred with a major political crisis, which started about a year before the pandemic eruption. During the months between April 2019 and March 2020, three rounds of elections were held without a clear-cut result. Note that the third round of elections was held at the beginning of the pandemic in Israel, and relatively short time before the current data was gathered. We assume that, at that stage of the pandemic, NR in Israel was more affected by the political crisis than by the pandemic itself, and thus did not correlate with the distress indicators. As
predicted, NR was significantly and negatively associated with distress symptoms in Brazil and the Philippines, confirming previous studies (Kimhi & Eshel, 2019). Conversely, NR predicted sense of danger only in Brazil. possible explanation for this finding concerns the unique political circumstances in Brazil. Brazil has been going through a political crisis since 2013, characterized by political polarization and anti-establishment sentiments, creating distrust in institutions and government, and dividing the population. In addition, the Brazilian Federal Government response to COVID-19 has been problematic (The Lancet, 2020), increasing division and misinformation, and making it more difficult to create the synergy necessary to fight the pandemic (King & Da Fonseca, 2021). This division may suggest that those who distrust the government feel more threatened by the pandemic while those that trust the government feel safer. Additional research comparing different cultures is needed to examine the role of NR and coping with large scale pandemic, such as COVID-19.

Partially confirming our second hypothesis, we found that IR and well-being were the best predictors of distress symptoms in all countries, and served as good predictors of the sense of danger in Israel and Brazil, but not in the Philippines. In line with recent findings, participants with higher levels of IR experienced lower anxiety and depression (Barzilay et al., 2020). This may suggest that IR and well-being may serve as protective factors against distress and sense of danger in times of great adversities like COVID-19 crisis.

We found that younger participants reported higher levels of distress and sense of danger in Israel and the Philippines but not in Brazil. Compared to males, females in all countries reported greater levels of both distress indicators. Similar results were recently reported in Italy (Forte et al., 2020). Economic difficulties positively predicted distress in all three countries but only predicted sense of danger in Israel. The overall pattern of findings suggests that individuals from different cultural backgrounds may respond differently to the threat posed by COVID-19 pandemic, yet, certain demographic characteristics, such as being female, younger, and economically disadvantaged, may serve as risk factors and their link to distress indicators may be more general.

**Cross-Country Differences**

The participants in the three countries significantly differed in terms of the following variables: sense of danger, distress symptoms, IR, well-being, CR, NR, and economic difficulties. In terms of the psychological effects of COVID-19 crisis, results suggested that participants from the Philippines and
Brazil experienced more severe psychological impacts in comparison with the Israeli participants. Our results showed that among the three countries, Filipinos experienced the highest level of sense of danger, followed by Brazilians, while Israelis reported the lowest level. Furthermore, Brazilians have reported the highest distress symptoms followed by Filipinos while Israelis showed the lowest level.

Consistent with recent research, COVID-19 outbreak has resulted in mental health concerns including depression, anxiety, trauma, stress, insomnia, and excessive fear across the globe (Torales et al., 2020). The cognitive appraisal theory proposed that the impact of threats may be based both on objective characteristics (severity of exposure to threats and economic impact) and people’s subjective interpretation of the event (Lazarus & Folkman, 1984). Thus the above findings may be explained by the fact that, compared to Israel, Brazil and the Philippines had a greater number of COVID-19 cases at the study time. According to WHO (2020b), Israel had 110,000 confirmed cases, 885 deaths, and zero new cases per day (Israel population is 9.1 million), the Philippines had 213,000 confirmed cases, more than 3,400 deaths, and more than 3,500 new cases per day (the Philippine population is 106.7 million), and Brazil, had 330,000 confirmed cases, 21,000 deaths, and 20,000 new cases per day (the Brazilian population is 209.5 million). The greater numbers of confirmed cases, and in particular the greater percentage of the new cases per day in the Philippines and Brazil may be due, in part, to their more limited economic capacity. Developing countries, like the Philippines and Brazil, may have less capacity and fewer resources to respond to the challenges raised by the pandemic, leading to greater consequences to people’s mental health (Mamun & Ullah, 2020). Drawing from the cognitive appraisal theory, we also note that the subjective interpretation of the threat (Lazarus & Folkman, 1984) may explain, in part, the sense of danger and distress differences across the three countries, confirming previous research (Kimhi et al., 2018).

Other notable variation across the three countries were the differences in terms of IR and well-being. While Israel and Brazil have comparable levels of IR and well-being, the Philippines tend to have significantly higher ratings. Based on a global index of sustainable well-being, the Philippines has consistently ranked as one of the top countries in terms of happiness and well-being (The Happy Planet Index, 2016). However, there is a possibility that some of our findings may reflect the modes of expression typical of each culture and not the condition of the participants, therefore further research is needed.

Nevertheless, one should take into consideration that COVID-19 damage in the three countries was different: In Brazil and the Philippines, the process...
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is far from successful. In the context of COVID-19, the Philippines and Brazil have not been managing the crisis well as indicated by record-high COVID-19 cases and deaths and by huge economic losses. Israel, on the other hand, have been more effective in terms of COVID management.

There are significant differences across the three countries in NR. Israelis reported the highest levels of NR, followed by Filipinos, and then by Brazilians. Given that NR involves people’s perception of their respective country’s capacity to withstand adversities and keep its social fabric intact (Kimhi & Eshel, 2019; Kimhi et al., 2020), preventing information from the public in the Philippines and Brazil (WHO, 2020b) may have led their citizens to lower perceptions of NR. Furthermore, CR ratings by participants in Brazil appeared significantly lower than those in Israel and the Philippines. The lower perception of CR in Brazil may be due to the high political polarization and anti-establishment sentiments which may have depleted trust in public institutions, not only at the national but also at the community level, resulting in lower levels of CR (King & Da Fonseca, 2021). An alternative explanation to this cross-cultural diversity may be based on the many differences between the types of communities in the three countries studied, for example, a large metropolitan city such as Manila may significantly differ from a small city in Israel. An additional explanation for the difference is the difference in religion among the countries. For example, two recent studies that have been conducted in Israel pointed to the striking difference in national resilience between Jews and Arab (which most of them are Christians or Muslims) citizens of Israel (Kimhi et al., 2020; Marciano et al., 2020).

Compared to Israel, higher levels of both distress indicators, and lower levels of NR in the two other countries may indicate the impact of the lower economic capacity of both other countries, leading to lower capabilities and preparedness in times of great adversities. Previous research has indicated that the impact of disasters and adversities tends to be more amplified in developing countries due to lack of resources for response and preparedness (Dasgupta et al., 2009). The findings of the present research suggest that this may also apply to the psychological consequences of COVID-19 crisis.

Lastly, our findings revealed that, compared to the Philippines and Brazil, Israelis reported a significantly higher level of economic difficulties. This finding is unexpected given that countries like Brazil and the Philippines, that have average income considerably lower than Israel, might have been expected to report greater economic struggles. The impact of the closure of the economy due to the lockdowns may directly be felt and observed by people from more developed countries such as Israel, due to greater changes in their economic performance. In contrast, people from developing countries like Brazil and the Philippines may have experienced the lockdown
impact to a lesser extent, considering their long-term exposure to economic difficulties.

**Limitations and Future Research**

The limitations of the present research offer opportunities for future studies. First, the participants in Brazil and the Philippines were recruited using snowball sampling. Hence, we cannot claim that the samples were representative of each country. Future studies may replicate the research using more representative samples, controlling for the relative distributions in the population of demographic variables such as gender, age, economic status, and others. In addition, international comparisons may be broadened to include more countries and wider cultural groups. Second, the associations among the variables were measured by correlations and did not allow the inference of causality. Third, the data were collected at different stages of the lockdown in each country. Future research may measure distress and sense of danger across different points of time during the crisis. Fourth, while IR and WB attained metric level invariance, distress (configural only), NR, and CR did not achieve invariance. Accordingly, the results for these two scales should be taken with caution and further research is required as to the cross-cultural comparison concerning them. Nonetheless, the present study may be considered as pioneering research, since it is the first known research that has offered insights into how the three modes of resilience, well-being, and demographic variables predict distress indicators across countries during COVID-19 crisis.

**Conclusion and Implications: Policy Lessons and Conclusions**

Our findings offer several important implications for health policies during COVID-19 pandemic and other forms of adversity. First, policies that aim to alleviate the deleterious psychological impact of COVID-19 pandemic should consider the cultural nuances that exist in every country. However, the findings of the present study indicate that while the impact of individual, community, and national resilience on distress indicators may differ across cultures (and possibly this finding may also apply to different cultural groups within each country), there are numerous similarities that contribute to the overall understanding of the impacts of COVID-19 on societies at large. Second, our findings show that people’s perception of the capacity of the local community and the larger society and its institutions significantly contributes to protecting people from psychological distress. Therefore, local and national governments should consider strengthening their capabilities to
respond to adversities. Public perception of public institutions as capable of managing the impact of adversities such as COVID-19 crisis is likely to increase people’s sense of safety, as well as their psychological stability, thus protecting them from future psychological and health effects of the distress symptoms. Third, beyond the differentiation among the countries, more general effects of several demographic variables emerged. In agreement with former studies (Kimhi et al., 2020), we found that females and younger people are more prone to psychological distress in times of adversity. Thus, caregivers, as well as decision-makers, should be aware of this tendency and take it into account in designing effective policies for response mechanisms. Finally, our findings suggest that people who face financial difficulties due to the pandemic experience greater psychological distress. Therefore, it is suggested that providing financial aid to citizens who are most economically affected by COVID-19 crisis may not only serve as economic protection but also as a psychological safety net to prevent future psychological as well as physical deterioration.

**Ethical Approval**

Ethical approval for this research was waived by the authors institute/s IRB: (a) Brazil: CONEP (Brazilian National Board of Research Ethics, res. 510/2016-CNS); (b) The Philippines: Ethical approval of the university administrator of the Cavite State University-General Trias Campus; (c) Israel: Approval of the IRB of Tel Aviv University.

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