# The Filipino family in a pandemic: A crosssectional study on the state of the household environment of COVID-19 patients in the Philippines

Katrina Nicole B. Abuda, Miguel A. Abad, Angela Nicole D. Abarca, Devann Ross O. Abayon, Harold Emman P. Abeleda, Patricia Nicole M. Abello, Vince Joshua L. Abne, Denise Michelle A. Abrilla, Daniella L. Agbayani, Jill Andrea S. Agreda, Leopoldo P. Sison, Jr., MD, MPH<sup>1</sup>, and Norbert Lingling D. Uy, MD, MSPH<sup>2</sup>

# **Abstract**

**Introduction** Under COVID-19 guidelines, families are spending extended hours together within a limited physical space, giving rise to a living situation that can bring families closer together and/or lead to conflicts. This study aimed to determine the current state of household cohesion and conflict among families with confirmed COVID-19 cases in the Philippines.

**Methods** This was a cross-sectional study using the COVID-19 Household Environment Scale (CHES) as a self-administered questionnaire among adult persons who belonged to households with at least one family member previously diagnosed or currently with COVID-19 in August and September 2021. Participants were recruited online using convenience and snowball sampling. The CHES is a 30-item tool which measures conflict and cohesion through the Conflict and Togetherness Subscales, respectively. **Results** The composite median values of 386 participants surveyed reveal scores that were clustered to the left for the Conflict Subscale and neutrality for the Togetherness Subscale.

**Conclusion** There is a general increase in household conflict and a non-significant change in togetherness among the surveyed families. The composite median values, if taken compoundly, imply the existence of more conflict and less togetherness.

Key words: COVID-19, family household, CHES

Correspondence:

Katrina Nicole B. Abuda, Department of Preventive and Community Medicine, College of Medicine, University of the East Ramon Magsaysay Memorial Medical Center, Inc., 64 Aurora Boulevard, Barangay Doña Imelda, Quezon City, PH 1113; Email: abudak5763@uerm.edu.ph; Telephone: 094 521 75820

OVID-19, as defined by the World Health Organization (WHO), is caused by a beta coronavirus called Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV2). The virus was described to be "highly contagious, can spread quickly, and must be considered capable of causing enormous health, economic, and societal impacts in any setting." The current health crisis has caused widespread social and economic disruption with grave consequences affecting individuals and sectors of society including families whose day-to-day living has been disrupted. With the panic and uncertainty surrounding coronavirus

<sup>&</sup>lt;sup>1</sup>Department of Preventive and Community Medicine, College of Medicine, University of the East Ramon Magsaysay Memorial Medical Center, Inc., Quezon City, PH

<sup>&</sup>lt;sup>2</sup>Department of Medicine, College of Medicine, University of the East Ramon Magsaysay Memorial Medical Center, Inc., Quezon City, PH

and the institution of lockdowns, families are left with no choice but to stay within the confines of their homes, with day-to-day activities that were previously conducted outside, such as school and work, being done at home. This situation coupled with the struggle to cope with the effects of the pandemic holds the potential to give rise to both family cohesion, as household members are given frequent opportunities to spend time and overcome struggles together, and family conflict, as they are collectively facing a stressful situation in an environment devoid of opportunities to spend time outside the home.<sup>2</sup> While there are a number of currently available tools aiming to measure the quality of family life such as the Family Environment Scale and the Family Life Questionnaire, most if not all fail to capture how quarantine and social distancing measures affect the unique household experiences of families in the COVID-19 pandemic.<sup>3,4</sup>

The general objective of this study was to determine the current state of household cohesion/togetherness and conflict among families with confirmed COVID-19 cases in the Philippines. The specific objectives were to: 1) determine the median values of household cohesion/togetherness and conflict among families with confirmed COVID-19 cases; 2) determine the median value of each item in each subscale; 3) classify the subscale items into the familial domains of Parenting, Work-Family Balance, Caregiving, Finances, Communication and Mutuality, Religion and Spirituality, Recreation, and Family Meals; and 4) highlight possible factors explaining the median values of the items in each familial domain.

#### **Methods**

This research employed a descriptive, cross-sectional design using a self-administered questionnaire describing the household environment of families of COVID-19 patients in the Philippine setting. All data were gathered between August and September of 2021. The study was approved by the UERMMMCI Ethics Review Committee.

Eligible participants included males and females aged 18-59 years old who belonged to families with at least one member who had tested positive for COVID-19, were residents of the Philippines, and were living in the same house as the patient who tested positive for COVID-19. Only one member from each qualified family, regardless of his or her familial role, represented the collective sentiments of all members

to avoid skewing and redundancy of data. Those who had another family member already approved as a participant were excluded from the study.

The sampling population was selected through a combination of convenience and snowball sampling. Convenience sampling was done through posting of online advertisements or posters in established COVID-19-related social media groups as well as through the researchers' personal social media profiles. The survey forms also included a closing statement encouraging the participants to send the survey to other qualified individuals outside of their household. Both symptomatic and asymptomatic cases were included in the study to reduce the risk of making exclusions that may lead to inaccurate notions about the severity of cases. There were no restrictions in terms of gender, occupation and socioeconomic status in the inclusion and exclusion criteria to ensure the representativeness of the sample. The computation of the sample size was done through OpenEpi using the formula for proportion and descriptive studies. The sample size was computed to be 384 with a 95% confidence interval, referenced with the total number of recorded COVID-19 cases in the Philippines at the time of writing the proposal.

The COVID-19 Household Environment Scale (CHES) is a tool to assess the effect of social distancing within families on household conflict and household togetherness.<sup>2</sup> The CHES is divided into two sections, with Section 1 consisting of 25 descriptive items aiming to describe individual characteristics (age and gender), household characteristics (number of people in the home), and household exposure to COVID-19 (whether any member of the family tested positive for COVID-19 and job loss due to the pandemic). Section 2 measures family conflict and cohesion/togetherness using the Household Conflict and Household Togetherness Subscales, each with 15 items. Questions aimed to describe the state of conflict and togetherness in terms of varied household activities before and during social distancing. For each statement indicating a specific household activity, the participants were instructed to describe the extent of conflict or togetherness relative to pre-pandemic times through the options "much less than before", "a little less than before", "the same as before", "a little more than before", and "much more than before". Participants were also asked to indicate if a statement did not apply to their household or if they preferred not to answer it. The two subscales test

for household conflict ( $\alpha = 0.847$ ) and household cohesion ( $\alpha = 0.847$ ). Confirmatory factor analysis showed the following values: root mean square error of approximation (RMSEA) = 0.057, comparative fit index (CFI) = 0.729, Tucker-Lewis Index (TLI) = 0.708, and standardized root mean squared residual (SRMR) = 0.098.

The researchers utilized *Google Forms* as the medium for dissemination of the self-administered questionnaire. The duration of participation in the study was only the time the participants were answering the questionnaire and no further engagement was initiated beyond this. Messaging applications were also used to explain the details of the study to interested participants who needed further clarification. Before answering the virtual questionnaire, the participants were asked to sign an informed consent form consisting of a single page with information on the research and the request for authorization to use data.

The scores for each item in the Togetherness Scale were coded into numerical values of 1 to 5 (1 for "much less than before" and 5 for "much more than before") while items in the Conflict Scale were reverse coded. The median values of the composite scores of each subscale and the composite scores of the items in each subscale were obtained. In analyzing the data, the score of 3 which implies neutrality was set as the reference point against which the median values were compared, such that a score below 3 would indicate more conflict and less togetherness and a score above 3 would suggest more togetherness and less conflict

relative to before the COVID-19 diagnosis in the household.

#### Results

CHES was administered to 386 participants, of which 222 (57.5%) belonged to the 18-24 year-old group, 101 (26%) to the 25-31 year-old age group, with the rest distributed among the other age groups. Two hundred eighty (72.5%) respondents were female, 99 (25.6%) male, and 7 (1.8%) non-binary. Among them, 275 (71.2%) were college graduates, 54 (13.9%) high school graduates, and 57 (14.7%) post-graduates. Fifty-three families (13.7%) did not own their home. As seen in Table 1, 57 (14.8%) families had at least one adult member who required caregiving, 19 (4.9%) families had at least one child with a disability or special healthcare need, 110 (28.5%) families had at least one member who required hospitalization when he/she had COVID-19, and 125 (32.4%) families had at least one member who stopped working because of COVID-19. Sixty-nine (17.9%) families have had a member pass away from COVID-19 and/or its related complications, 106 (27.5%) families had a member working in healthcare with direct patient contact currently residing in the home, and 205 (53.1%) families had a member working in a job considered to be at a high risk of contracting COVID-19.

Table 2 shows the composite medians and percentage of each answer. Around 90% answered "same as before" and "a little more than before" in the

**Table 1.** Descriptive statistics of household background.

Characteristics	Mean ± SD	Range of scores (min, max)
No. of people living in the home	$5.5 \pm 3.00$	1, 42
No. of bedrooms in the home	$3.6 \pm 1.69$	0, 12
Time practicing social distancing	$2.6 \pm 1.10$	1, 4
No. of family members who tested positive for COVID-19	$2.3 \pm 1.66$	1, 12
No. of COVID-19 (+) family members with symptoms	$2.0 \pm 1.55$	0, 12
No. of people who are not members of the family	$0.5 \pm 1.10$	0, 7
No. of adults $\geq 65 \text{ y/o}$	$0.5 \pm 0.78$	0, 5
No. of adults requiring caregiving	$0.2 \pm 0.50$	0, 3
No. of children < 5y/o	$0.2 \pm 0.51$	0, 3
No. of children 5-11 y/o	$0.2 \pm 0.55$	0, 3
No. of children 12-18 y/o	$0.4 \pm 0.69$	0, 4
No. of children with special healthcare needs	$0.1 \pm 0.23$	0, 2
No. of members who required hospitalization	$0.4 \pm 0.64$	0, 4
No. of adults working from home	$1.4 \pm 1.32$	0, 10
No. of adults who stopped working due to COVID-19	$0.5 \pm 0.89$	0, 5

Conflict Subscale and 80% answered "same as before" and "a little more than before" in the Togetherness Subscale. The composite median for the Conflict Subscale is clustered to the left of the reference score of 3 while the composite median for the Togetherness Subscale indicated neutrality. The percentages of answers for each subscale denote a rough estimate. Table 3 shows the composite median scores for each item on the Conflict and Togetherness Subscales. Most answers to items in the Conflict Subscale showed scores that were clustered to the left, except for a few items indicating neutrality. On the other hand, the Togetherness Subscale shows a neutral tendency for most items while the others leaned towards the positive side except for "involvement in children's education".

#### Discussion

The analysis of data reveals a general increase in household conflict among families with at least one member who was diagnosed with COVID-19 in terms of the activities described in the Conflict Subscale. On the other hand, a generally neutral response is observed for the items in the Togetherness Subscale, reflecting a non-significant change in togetherness relative to the described activities in the said subscale. The medians of both datasets, if taken as a composite value, are clustered in the lower end of the scale, implying the existence of more conflict and less togetherness among the household members of the surveyed participants.

A plausible explanation for these findings would be the characteristics of the sample such as having adult family members requiring caregiving, members with disabilities or a special healthcare need, members requiring hospitalization due to COVID-19, and family members who stopped working because of the pandemic. Furthermore, the results reveal that some families had already lost a family member due to COVID-19 and/or its related complications,

Table 2. Descriptive statistics of subscale composite medians.

Scale	Median	Answers (%)					
		5/1	4/2	3/3	2/4	1/5	
Conflict*	2	6.8	-	55	36	2.6	
Togetherness**	3	1.8	8.6	46.1	38.9	4.6	

<sup>\* 5 -</sup> much less than before; 4 - a little less than before; 3 - the same as before; 2 - a little more than before;

**Table 3.** Comparison of median scores of items under the Conflict and Togetherness Subscales.

Conflict		Togetherness	
Spending leisure time together	3.00	Spending leisure time together	3.00
Parenting or childcare	1.00	Engaging in conversation	3.00
Children's schoolwork	1.00	Involvement in children's education	3.50
Decisions about health	1.00	Doing fitness activities together	2.00
Decisions about going out	3.00	Facing challenges together	4.00
Decisions about visitors	3.00	Helping each other	4.00
Home maintenance	2.00	Sharing household tasks	3.00
Personal hygiene	1.00	Running errands together	3.00
Food	2.00	Eating together	4.00
Work or employment	2.50	Showing concern/support	3.00
Finances	2.00	Showing affection	0.00
Privacy or personal space	3.00	Physical intimacy	3.00
News or social media	2.00	Sharing religious/spiritual activities	3.00
Alcohol, tobacco, drug use	0.00	Sharing material resources	3.00
Politics	2.00	Helping others together	3.00

<sup>1 -</sup> much more than before

<sup>\*\* 1 -</sup> much less than before; 2 - a little less than before; 3 - the same as before; 4 - a little more than before;

<sup>5 -</sup> much more than before

were living with family members working in healthcare or working in jobs that are at high-risk for contracting COVID-19. All such factors, in the context of stringent social distancing and quarantine measures, may be considered as potential sources of social disharmony as these may undeniably lead to disruption of life and financial difficulties, and predispose family members to feelings of anxiety, depression, and fear.<sup>2,5</sup> Under the prescribed health protocols, family members are required to stay within the limited physical space of their home for extended periods of time, inevitably leading to more frequent interactions. Certainly, however, frequent interactions do not necessarily equate to an increased quality of familial relations as this would be defined by the nature of interactions they have. While family members have more opportunities to spend time with each other, they are also highly susceptible to conflict as they are together for longer periods of time while facing a stressful event.2

Although the previously mentioned generalities are important in grasping the overall nature of the responses, it was deemed necessary by the researchers to explore certain domains covered by the items in the data collection questionnaire to gain a deeper understanding of the results. Hence, the succeeding paragraphs will expound on the familial domains specified in the specific objectives: Parenting, Work-Family Balance, Caregiving, Finances, and sources of family support in stressful life circumstances including Communication and Mutuality, Religion and Spirituality, Recreation, and Family Meals. For discussion purposes, the items in each subscale were classified by the researchers into these familial domains, as shown in Table 4, in accordance with the study's specific objectives. The survey items "alcohol, tobacco and drug use" from the Conflict Subscale, and "physical intimacy" from the Togetherness Subscale were excluded as majority of the participants answered either "does not apply to my household" or "I prefer not to answer" to these questions.

### **Parenting**

The rapid spread of COVID-19 prompted measures such as community quarantine and school closures to prevent the further transmission of the virus, resulting in an increase in parenting stress associated with financial strain and lack of educational services.<sup>6,7</sup> The results are aligned with sociological

perspectives in parenting which point to a double burden of work, childcare duties, and daily routines for other family members that resulted from the closure of schools during lockdowns. The parents, especially the mothers, were compelled to manage the demands of their work along with additional responsibilities in relation to children's schoolwork and welfare, and other household routines amid the quarantine and recovery period. Thus, the parents were likely to experience scarcity of time, most likely affecting other aspects of parenting especially the children's school work.<sup>8,9</sup>

The stay-at-home restrictions and isolation in health facilities caused a sudden change in the routine of both the parents and their children including the limitation on social contacts and leisure activities outdoors, thus, causing a conflict in restructuring daily life. The significant reduction in the social interaction among children also exacerbated loneliness. This resulted in a shift to digital recreation, increasing the risk of gaming addiction, reduction in family interaction, change in behavior, and poor school performance among children if parental supervision failed. The data present no change in conflict and togetherness in the aspect of "spending leisure time together" suggesting that parents were able to adapt, understand, and utilize the shift to digital leisure and communication which possibly strengthened family relationships, parent-child interactions, and understanding of their children's interests.8,10,11 This interpretation is supported by an increase in togetherness in the aspect of "showing concern/ support" and "facing challenges together".

# Work-Family Balance

The COVID-19 pandemic caused alterations in the daily living of families that changed their family dynamics within the household environment.<sup>6</sup> The findings suggest that the COVID-19 pandemic caused an increase in conflict in relation to "home maintenance", and "work or employment", while there was no change in conflict in relation to "spending leisure time together" under the domain of Work-Family Balance.

The increasing demands from both family and work responsibilities amid the pandemic posed a significant familial conflict following possible contentions of the different roles of the family members. This is consistent with comparable literature which argues

 Table 4. Relation of items in the Conflict and Togetherness Subscales with specific domains.

Domain	Conflict Subscale	Togetherness Subscale
Parenting	Spending leisure time together Parenting or childcare Children's schoolwork Work or employment Finances	Spending leisure time together Doing fitness activities together Involvement in children's education Facing challenges together Helping each other Eating together Showing concern/support, Showing affection Physical intimacy
Work-family balance	Spending leisure time together Home maintenance Work or employment Finances	Spending leisure time together Doing fitness activities together Involvement in children's education Facing challenges together Sharing household tasks Running errands together Eating together Physical intimacy Helping others together
Caregiving	Parenting or childcare Decisions about health Personal hygiene Finances	Involvement in children's education Helping each other Showing concern/support, Showing affection Helping others together
Finances	Home maintenance Personal hygiene Food Work or employment Finances Alcohol, tobacco & drug use	Sharing material resources
Communication and mutuality	Decisions about health Decisions about going out Decisions about visitors Finances Privacy or personal space News or social media Politics	Engaging in conversation Eating together Showing concern or support Showing affection Physical intimacy Sharing material resources Helping others together
Religion and spirituality		Sharing religious or spiritual activities
Recreation	Spending leisure time together Decisions about going out Decisions about visitors Finances News or social media Alcohol, tobacco, and drug use	Spending leisure time together Doing fitness activities together Running errands together Eating together
Family meals	Food Finances	Eating together

that the growing expectations required of them contribute to role conflict. <sup>12</sup> As the interplay between the two took place within the household especially during the lockdown period, it made separation of the roles difficult, with no clear boundaries between work and personal life, thus further increasing stress and enhancing proliferation of role conflict. Additionally, families who are economically disadvantaged because their current work or employment was affected by pandemic-related work dismissals were more likely to present with increasing stress levels and inter-role issues. Recent research has also shown that mothers continue to struggle with juggling work and family responsibilities while they are working from home. <sup>13,14</sup>

Family togetherness in general may promote rediscovery of basic family values, reconciliation, and bring about improvement in the emotional and psychological states of families. However, given the drastic changes that families went through during the pandemic such as financial insecurity, unemployment, suboptimal work/home environment, and family responsibilities, a sense of familial charity was eroded. On the opposite subscale, the data show that there was decreasing togetherness in relation to "involvement in children's education" while there was no change in relation to "running errands together" and "helping others together" under the work-family balance domain.

The findings of the study are consistent with similar research that parents consider juggling both their workload and parental tasks of home-school supervision frustrating.15 Moreover, parents and adolescents are faced with more daily hassles in school and work and additional tasks such as homeschooling which may contribute to the likelihood of parental disengagement from supervising children's education. Spouses may also have no sufficient time together during the pandemic as they were constantly attending to work demands and parental roles. The impact of the pandemic also complicated marital relationships, giving way to intensified parental vulnerabilities, making it more difficult to effectively maintain relationship satisfaction. Couples may have reduced physical contact and intimacy following the changes of their work schedules, especially among frontline workers who are expected to practice social distancing at home.<sup>16</sup>

# Caregiving

The COVID-19 pandemic has transformed the ways people interact with one another. Two groups

that are significantly affected by this are those needing care and those providing the care needed. This study suggests that the COVID-19 crisis has caused an increase in conflict regarding "parenting/childcare", "decisions about health", and "personal hygiene" under the caregiving domain. On the opposite subscale, there is less togetherness in relation to "involvement in children's education" but more togetherness in "helping each other" and "showing concern/support".

With the closure of schools, children were forced to stay at home and parents had to adjust their daily routines to incorporate childcare and homeschooling. This may have compromised their time to tend to their own well-being to meet the caregiving demands of their children. 18 Parenting stress during the pandemic could reduce the quality of parent-child relationship which may heighten emotional and behavioral problems in children. For those laid off from work, their ability to provide for the needs of their children was affected and was associated with depressive symptoms, stress, and negative interaction with their children. 19,20 Furthermore, transitioning from the traditional faceto-face learning to online learning has been difficult not only for the educators and students but for the parents as well. Homeschooling requires that parents support and guide their child in the learning process. However, this is challenging for those parents who are working and are unable to cater to such needs.<sup>21</sup>

Aside from parenting stress brought about by balancing work and childcare, families also had to think of ways to protect themselves from the virus. Without an effective treatment available for COVID-19, one of the best things to do to prevent the spread of the virus is through handwashing. People are becoming more conscious about their health, and this is evident in one study wherein the frequency of handwashing during the COVID-19 pandemic has significantly increased compared to the pre-pandemic years as well as the circumstances when hand washing is done.<sup>22</sup> Aside from handwashing, staying at home is the best option to protect health. However, such limitations are associated with negative psychological effects, poor physical activity, disrupted sleeping patterns, and unhealthy eating behaviors. 23,24

# **Finances**

The COVID 19 pandemic caused a depression in the global and local economy with unprecedented

unemployment.16 About 32.4% of the participants had at least one family member who stopped working because of COVID-19. Combining unemployment with the stringent government protocols and lockdowns, labor income loss and family business shutdowns being on an all-time high had a direct impact on the financial domain of Filipino households.<sup>25</sup> In economically vulnerable households, having a COVID-19 positive member caused higher levels of stress to the parents and a decrease in optimism.<sup>19</sup> The stress brought by the pandemic-induced financial constraint increased the risk that parents would lose their temper and yell at their children. This may indirectly cause the children to be behaviorally noncompliant thereby provoking more conflict in the household environment.19 The challenge of a loss or decrease in family income was heavily manifested by the lack of food security which was worsened by community quarantine and lockdown protocols. Household food insecurity increased conflicts in the household. The scarcity and low quality of food may cause the breadwinner to develop stress, anxiety and depression.<sup>26</sup> In a pandemic, the priority for the budget is directed to the food supply with little to no allocation for personal hygiene, home maintenance, and vices. The sudden loss of financial support for these items may cause a sudden change in the usual activity and routine of members. The unprecedented nature of these losses may potentially disrupt the family dynamic and perpetrate conflict. Future studies can look further into the contribution of these items to the increase in conflict in household environments during a crisis.

In addition, the data analysis shows that the pandemic-induced financial turmoil may cause the general decrease in togetherness in the household environment. This imposed risks on the different types of familial relationships breaching the cohesion in the household environment under the domain of sharing material resources. Financial stress is known to cause a compromise in a breadwinner's mental health care, which is strongly exhibited by mothers in low-income households.<sup>27</sup> In addition, crises such as pandemics may aggravate pre-existing marital problems or create new ones due to the stress of losing a source of income.<sup>28</sup> Adverse family situations such as financial stress may cause poor sibling relationships from elevated aggression and poor anger management.<sup>29</sup> In addition, for the demographics where there are appointed caregivers in the family, there is evidence that the economic constraint brings distress to the caregiver.<sup>30</sup>

#### Communication and mutuality

Effective communication is necessary to form a harmonious relationships among family members and is crucial in fostering interpersonal commitment and trust.31,32 It is undeniable, however, that the various changes brought about by the pandemic have led to potential changes in familial interaction. The reported findings denote an increased conflict in "decisions about health", "news or social media", and "politics", whereas neutral responses were noted for "decisions about going out", "decisions about visitors", and "privacy or personal space". Data from the opposite subscale, on the other hand, revealed a general increase in togetherness with respect to "facing challenges together", "helping each other", "sharing household tasks", and "showing concern or support" while there was no change in "engaging in conversation", "eating together", "showing affection", "sharing material resources", and "helping others together".

In the advent of this pandemic, there is a collision of family, work, and survival demands leading to changes in relational interdependence.<sup>33</sup> Recent studies have cited the occurrence of relational disruptions and uncertainties amid the ambiguities of the COVID-19 pandemic.<sup>34,35</sup> One study revealed that increased time spent together during the lockdown increased the likelihood of partner interference which subsequently caused individuals to view their relationships as turbulent.<sup>36</sup> Such experiences have the potential to bring about negative emotional and cognitive experiences which would inevitably affect how families communicate their frustrations, needs, and worries.<sup>37</sup>

It is interesting to note that responses in majority of the items leaned towards generally positive and neutral responses in terms of communication and mutuality despite numerous factors that have the potential to generate conflict. It can be surmised that the opportunities presented by the pandemic for families to spend time and overcome challenges together sets forth a household situation conducive for the creation of closer relationships.<sup>2</sup>

# Religion and spirituality

The effects of the COVID-19 pandemic seem to aggravate mental health issues such as anxiety and

fear. 38 Strengthening religious and spiritual beliefs may reduce the negative effects of prolonged lockdowns. The findings suggest that the effect of the pandemic did not change togetherness in relation to "sharing religious/spiritual activities" under the religion and spirituality domain. Filipinos are known for their strong religious faith and even in the middle of a pandemic, their faith remains steadfast. 38 Even during a pandemic, Christian Filipino families found ways to practice their faith by adapting to and utilizing other means to express their spirituality such as attending online masses and church services conducted via the different social media platforms, reading daily devotionals which can easily be downloaded through mobile devices, and praying together as a family, now more than ever, especially for COVID-stricken families. These only imply that with or without the pandemic, the Filipino faith has proven to be consistent in transcending limitations and spiritual challenges to make sure that their religion and spirituality are always recognized and practiced in whatever circumstance they are in. These, in effect, give meaning, purpose, and constitute overall supportive family relationships.

### Recreation

The COVID-19 pandemic necessitated guidelines and restrictions on daily and recreational activities alike. The opportunity to engage in recreational activities has been limited since the beginning of the series of lockdowns in March 2020. The limitations created opportunities to produce new ways of engaging in recreational activities while still observing the safety protocols and guidelines. For the conflict subscale, the change in recreation was measured through the items "spending leisure time together," "decisions about going out," "decisions about visitors," and "news and social media." Results show that there were no significant changes in the items except "news and social media" which had an increase in conflict. On the other hand, there was no significant change in any of the items in the recreation domain under the togetherness subscale.

Many families were quarantined together in one household, so they had more opportunity to share meals together. A previous study has found that more importance is now put on family involvement during mealtimes compared to ease of preparation.<sup>39</sup> The pandemic also highlighted the importance of

a healthy lifestyle and physical well-being. Despite the work-from-home and distance learning set-up, students, as well as parents, were encouraged to still engage in physical activity. Despite the guidelines and restrictions, families have been able to maintain activities they would do together pre-pandemic. Conversely, the shift of most activities to being virtual has resulted in increased screen time, which not only caused eye strain and fatigue but may further decrease physical activity of a family. Prolonged hours of social media use have been associated with feelings of loneliness and stress, which can potentially cause conflict within a family. 1

Spending time together as a family has its advantages and disadvantages. The shift to a work-from-home setting allows parents more time with their children to do more activities together. Stressors associated with quarantine, isolation, and the pandemic can negatively affect parents' mental health and their capabilities to take care and support their families. A parent's own fears and anxieties can affect a child's mental health, which may bring about conflict and disruption of family dynamics.<sup>42</sup> Conflict may also stem from different situations such as making decisions about going out and accepting visitors. When deciding, families consider the risk for exposure to COVID-19. Families consider the time spent in a certain place, the distance they are from potential sources of the virus, and the concentration of the virus in an area.43

#### Family meals

With the imposed lockdown restrictions, families spent more time together within confined spaces most especially among COVID-stricken families who could not afford to provide themselves with ideal isolation environments and were forced to stay together within the available confined space. The findings suggest that there was no change in togetherness in relation to "eating together" under the family meals domain. Family mealtimes seem to provide a means for members of the family to stay intact amidst the pandemic as this is an opportunity for members of the family to check in with one another while enjoying each other's company. Additionally, household activities such as family meals contribute to maintaining the same feeling of normalcy. During these times, members of the family can adapt to the

feeling of connectedness, unity, and security.<sup>28</sup> On the other hand, maintaining the routine of family mealtimes especially in COVID-19-stricken families was difficult.

#### Conclusion

The findings reveal a general increase in household conflict and a non-significant change in togetherness among the surveyed families. Discussion of possible factors is made regarding the findings derived from all survey items which were classified into the relational domains of parenting, work-family balance, caregiving, finances, communication and mutuality, religion and spirituality, recreation, and family meals. The composite median values imply the existence of more conflict and less togetherness in terms of the activities described under both Conflict and Togetherness Subscales.

# Limitations, implications, and areas for future research

The findings of this study may serve as a guide in assessing the influence of the COVID-19 pandemic on the family household environment. However, this research is largely descriptive and utilizes a crosssectional design, and hence, will not be useful for hypothesis testing due to confounding variables that may not be accurately measured and accounted for. A limitation of this study is the inherent implication of confounding factors such as socio-economic distinction among participants, recency of diagnosis, and difference in symptom severity. The socioeconomic standing of the participants may have been a significant factor affecting the levels of stress among families, and thus, a substantial distinction in terms of socioeconomic standing may affect the consistency of results. On the other hand, the recency of diagnosis could have predisposed some families to higher levels of stress given the assumption that the more recent stressful events are, the more likely they are to be recalled and elicit negative emotions. The participants were advised that they had the freedom to withdraw should any such situations arise. A difference in the severity of symptomatology among participants may have also brought about a disparity in terms of the overall impact of the disease. The presence of these factors in the study might have resulted in less favorable

responses. Due to practical constraints, however, the participants were recruited through both snowball and convenience sampling which made it difficult to control these confounders.

Finally, this paper only captures a descriptive overview of the results gathered from the utilized questionnaire and may not be able to provide an in-depth understanding of how families come to understand and act on their current situation in the context of the COVID-19 pandemic. Nevertheless, the research findings have the potential to serve as a relevant springboard for future researchers who would decide to pursue studies examining similar or closely-related variables.

#### References

- 1. Nanavare R. Early COVID-19 disease is driven by replication of virus and late disease is driven by a dysregulated immune/inflammatory response. J Med Sci Clin Res [Internet]. 2021 Sep; 09(09): 55-7. doi: https://dx.doi.org/10.18535/jmscr/v9i9.11
- 2. Behar-Zusman V, Chavez JV, Gattamorta K. Developing a measure of the impact of COVID-19 social distancing on household conflict and cohesion. Fam Process [Internet]. 2020; 59(3): 1045–59. doi: 10.1111/famp.12579
- 3. Lanz M, Maino E. Family environment scale. In: Encyclopedia of Quality of Life and Well-Being Research [Internet]. Springer: Dordrecht. 2014; 2170–3. Available from: http://hdl.handle.net/10807/56722
- 4. Foxcroft DR, Lowe G. Adolescent drinking, smoking and other substance use involvement: Links with perceived family life. J Adolesc [Internet]. 1995;18(2):159–77. doi: https://doi.org/10.1006/jado.1995.1011
- 5. Brooks SK, Webster RK, Smith LE, et al. The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. The Lancet [Internet]. 2020; 395(10227): 912–20. doi: https://doi.org/10.1016/S0140-6736(20)30460-8
- Brown SM, Doom JR, Lechuga-Pen S, Watamura SE, Koppels T. Stress and parenting during the global COVID-19 pandemic. Child Abuse Negl [Internet]. 2020; 110(2). doi: 10.1016/j.chiabu.2020.104699. Epub 2020 Aug 20.
- 7. Hiraoka D, Tomoda A. Relationship between parenting stress and school closures due to the COVID-19 pandemic. Psychiatr Clin Neurosci 2020 Sep; 74(9): 497-8. doi: 10.1111/pcn.13088. Epub 2020 Jul 3.
- 8. Mutz M, Reimers AK. Leisure time sports and exercise activities during the COVID-19 pandemic: A survey of working parents. Ger J Exerc Sport Res [Internet]. 2021; 51(3): 384–9. doi: 10.1007/s12662-021-00730-w. Epub 2021 Jun 30.

- 9. Spinelli M, Lionetti F, Setti A, Fasolo M. Parenting stress during the COVID-19 outbreak: Socioeconomic and environmental risk factors and implications for children's emotion regulation. Fam Process [Internet]. 2020 Jun; 60(2): 639–53. doi: 10.1111/famp.12601
- Romero E, López-Romero L, Domínguez-Álvarez B, Villar P, Gómez-Fraguela JA. Testing the effects of COVID-19 confinement in Spanish children: The role of parents' distress, emotional problems and specific parenting. Int J Environ Res Public Health [Internet]. 2020; 17(19): 6975. doi: doi: 10.3390/ijerph17196975
- 11. Hammons AJ, Robart R. Family food environment during the COVID-19 pandemic: A qualitative study. Children (Basel) [Internet]. 2021; 8(5): 354. doi: 10.3390/children8050354
- 12. Greenglass ER. Proactive coping, resources and burnout: implications for occupational stress. In: New Horizons in Management: Research Companion to Organizational Health Psychology [Internet]. 2005; 503(2). doi: https://doi.org/10.4337/9781845423308.00043
- 13. Nash M, Churchill B. Caring during COVID-19: A gendered analysis of Australian university responses to managing remote working and caring responsibilities. Gend Work Organ [Internet]. 2020; 27(5): 833-46. doi: 10.1111/gwao.12484
- 14. Bahn K, Cohen J, Meulen Rodgers Y. A feminist perspective on COVID-19 and the value of care work globally. Gend Work Organ [Internet]. 2020 May; 27(5): 695-9. doi: 10.1111/gwao.12459
- 15. Pokhrel S, Chhetri R. A literature review on impact of COVID-19 pandemic on teaching and learning. High Educ Future [Internet]. 2021; 8(1): 133–41. doi: 10.1177/2347631120983481
- 16. Marquez C. DOLE says only 3.3M jobs lost to coronavirus pandemic. INQUIRER.net [Internet]. 2020 Aug 21 [cited 2020 Sep 6]. Available at: https://newsinfo.inquirer.net/1325210/dole-says-only-3-3m-jobs-lost-to-coronavirus-pandemic
- 17. Bergmann M, Wagner M. The impact of COVID-19 on informal caregiving and care receiving across Europe during the first phase of the pandemic. Front Public Health [Internet]. 2021 Jun. doi: https://doi.org/10.3389/fpubh.2021.673874
- 18. Russell BS, Hutchison M, Tambling R, Tomkunas AJ, Horton AL. Initial challenges of caregiving during COVID-19: Caregiver burden, mental health, and the parent-child relationship. Child Psychiatr Hum Dev [Internet]. 2020 Oct; 51(5): 671–82. doi: 10.1007/s10578-020-01037-x
- 19. Kalil A, Mayer S, Shah R. Impact of the COVID-19 crisis on family dynamics in economically vulnerable households. University of Chicago, Becker Friedman Institute for Economics Working Paper No. 2020-143. 2020 Oct. Available from: SSRN: https://ssrn.com/abstract=3706339 or http://dx.doi.org/10.2139/ssrn.3706339

- 20. Horton B. Parents struggle with homeschooling as they complain 'maths has changed' on first day of closures [Internet]. The Telegraph [Internet]. 2021 [cited 2021 Oct 16]. Available from: https://www.telegraph.co.uk/news/2020/03/23/parents-struggle-homeschooling-complain-maths-has-changed-first/.
- 21. Tee ML, Tee CA, Anlacan JP, et al. Psychological impact of COVID-19 pandemic in the Philippines. J Affect Disord [Internet]. 2020 Dec; 277: 379–91. doi: 10.1016/j. jad.2020.08.043
- 22. Glabska D, Skolmowska D, Guzek D. Population-based study of the influence of the COVID-19 pandemic on hand hygiene behaviors—Polish adolescents' COVID-19 experience (PLACE-19) study. Sustainability [Internet]. 2020; 12(12): 4930. doi: https://doi.org/10.3390/su12124930
- 23. Rodríguez MÁ, Crespo I, Olmedillas H. Exercising in times of COVID-19: What do experts recommend doing within four walls? Rev Esp Cardiol (Engl Ed) [Internet]. 2020 Jul; 73(7): 527-9. doi: 10.1016/j.rec.2020.04.001. Epub 2020 Apr 8. Erratum in: Rev Esp Cardiol (Engl Ed). 2021 Apr; 74(4): 366.
- 24. Cardi V, Albano G, Gentili C, Sudulich L. The impact of emotion regulation and mental health difficulties on health behaviours during COVID-19. J Psychiatr Res [Internet]. 2021; 143: 409–15. doi: 10.1016/j.jpsychires.2021.10.001. Epub 2021 Oct 11.
- 25. COVID-19 impacts on low income families in the Philippines World Bank [Internet]. [Cited 2021 Sep 28]. Available from: https://www.worldbank.org/en/country/philippines/brief/covid-19-impacts-on-low-incomefamilies-in-the-philippines.
- Black M. Household food insecurities: Threats to children's well-being. American Psychological Association [Internet].
   2012 Jun [cited 2021 Oct 18]. Available from: https://www.apa.org/pi/ses/resources/indicator/2012/06/household-food-insecurities.
- 27. Prime H, Wade M, Browne DT. Risk and resilience in family well-being during the COVID-19 pandemic. Am Psychol [Internet]. 2020 Jul-Aug; 75(5): 631-43. doi: 10.1037/amp0000660
- 28. Cohan CL. Family transitions following natural and terrorist disaster: Hurricane Hugo and the September 11 terrorist attack. In: Miller T (ed). Handbook of Stressful Transitions Across the Lifespan [Internet]. Springer: New York, NY. 2009; 149–64. doi: https://doi.org/10.1007/978-1-4419-0748-6\_8
- 29. Tippett N, Wolke D. Aggression between siblings: Associations with the home environment and peer bullying. Aggress Behav [Internet]. 2014 Jan; 41(1): 14–24. doi: 10.1002/ab.21557
- 30. Ponnet K. Financial stress, parent functioning and adolescent problem behavior: An actor-partner interdependence approach to family stress processes in low-, middle-, and high-income families. J Youth Adolesc [Internet]. 2014 Oct; 43(10): 1752–69. doi: 10.1007/s10964-014-0159-y

- Barker RT, Gower K. Strategic application of storytelling in organizations: Toward effective communication in a diverse world. J Business Comm [Internet]. 1973; 47(3): 295-312. doi: https://doi.org/10.1177/0021943610369782
- 32. Ades A. The quality of family interpersonal communication during COVID-19. The Open Public Health J [Internet]. 2021; 14(1): 304–10. doi: 10.2174/1874944502114010304
- Zajacova A, Jehn A, Stackhouse M, Denice P, Ramos H. Changes in health behaviours during early COVID-19 and socio-demographic disparities: A cross-sectional analysis. Can J Public Health [Internet]. 2020 Dec; 111(6): 953-62. Published online 2020 Nov 10. doi: 10.17269/s41997-020-00434-y
- 34. Hernandez RA, Colaner C. "This is not the hill to die on. Even if we literally could die on this hill": Examining communication ecologies of uncertainty and family communication about COVID-19. Am Behav Sci [Internet]. 2021; 65(7): 956–75. doi: https://doi.org/10.1177/0002764221992840
- 35. Monk JK, Ogolsky BG. Contextual relational uncertainty model: Understanding ambiguity in a changing sociopolitical context of marriage. J Fam Theory Rev [Internet]. 2019; 11(2): 243–61. doi: https://doi.org/10.1111/jftr.12325
- Knoster K, Howard HA, Goodboy AK, Dillow MR. Spousal interference and relational turbulence during the COVID-19 pandemic. Communication Research Reports [Internet]. 2020; 37(5): 254–62. doi: https://doi.org/10. 1080/08824096.2020.1841621

- 37. Solomon DH, Knobloch LK, Theiss JA, McLaren RM. Relational turbulence theory: Explaining variation in subjective experiences and communication within romantic relationships. Hum Comm Res [Internet]. 2016; 42(4): 507–32. doi: https://doi.org/10.1111/hcre.12091
- 38. Banerjee D. The COVID-19 outbreak: Crucial role the psychiatrists can play. Asian J Psychiatr [Internet]. 2020 Apr; 50: 102014. doi: 10.1016/j.ajp.2020.102014
- 39. Snuggs S, McGregor S. Food and meal decision making in lockdown: How and who has COVID-19 affected? Food Qual Prefer [Internet]. 2021 Apr; 89: 104145. doi: 10.1016/j.foodqual.2020.104145. Epub 2020 Nov 25.
- Ding Y, Ding S, Niu J. The impact of COVID-19 on college students' physical activity: A protocol for systematic review and meta analysis. Medicine (Baltimore) [Internet]. 2021 Sep 3; 100(35): e27111. doi: 10.1097/ MD.00000000000027111
- 41. Pennington N. Communication outside of the home through social media during COVID-19. Comput Hum Behav [Internet]. 2021; 4: 100118. doi: 10.1016/j.chbr.2021.100118
- 42. Rousseau C, Miconi D. Protecting youth mental health during the COVID-19 pandemic: A challenging engagement and learning process. J Am Acad Child Adolesc Psychiatr [Internet]. 2020 Nov; 59(11): 1203–7. doi: 10.1016/j.jaac.2020.08.007
- 43. Fischhoff B. Making decisions in a COVID-19 world. JAMA [Internet]. 2020; 324(2): 139-40. doi: 10.1001/jama.2020.10178