



Financial Distress and Indonesian Family Resilience during the COVID-19 Pandemic: A Case Study of a Muslim Family in Yogyakarta

Fatma Amilia^{a,*}

^aUniversitas Islam Negeri Sunan Kalijaga Yogyakarta, Indonesia

Keywords:

Family Resilience,
Financial Distress,
and COVID-19.

JEL Classification:

D14, I15, and Z13.

Article History:

Received: 17 July 2023

Revised: 6 November 2023

Accepted: 24 November 2023

Published: 5 December 2023



Abstract: The objective of this study is to find evidence of the relationship between financial distress and family resilience and to examine the factors driving such family resilience in Indonesia during the COVID-19 epidemic. The study revealed some significant variables in family resilience, namely maintaining a positive outlook, family connectivity, and facing difficulties. Additionally, the study showed that certain variables had no significant effect on family resilience, such as family spirituality (SK), ability to understand difficulties (KMK), and financial pressure index (ITK). These findings document that family resilience is not solely caused by financial problems but is more based on psychological factors.

Originality/Value: This paper contributes to the development of theoretical aspects related to family resilience and financial inclusion.

Citation:

Amilia, F., & Qoyum, A. (2023).
Financial distress and Indonesian family
resilience during the COVID-19
pandemic: A case study of a Muslim
family in Yogyakarta. *Global Review of
Islamic Economics and Business*, 11(1),
95-103.
<https://doi.org/10.14421/grieb.2023.111-06>

Introduction

Indonesia, the country with the fourth-biggest population in the world, also faces a severe problem in facing the COVID-19 pandemic. On March 2, 2020, Indonesia reported two first cases of COVID-19, which has increased to 84.882 as of 18 July 2020 (Annas et al., 2020). Unlike previous such crises, i.e., the Asian Financial Crisis of 1997/1998, and the Global Financial Crisis of 2007/2008, the COVID-19 pandemic is potentially creating a more severe crisis, since it has simultaneously affected the significant downturn in both demand and supply across the world (McBryde et al., 2020). The COVID-19 pandemic has created a crisis in any area of human life either in the primary sector, such as industry, agriculture, or tertiary sector such as the education sector, financial sector, healthcare sector, etc. (Nicola et al., 2020; Singh et al., 2020; Yezli & Khan, 2020).

Unfortunately, the COVID-19 crisis has not only affected developing countries but has also impacted developed countries, which, in some crises, typically have more resources (Asyary &

*Corresponding author.

✉ fatma.amilia@uin-suka.ac.id (F. Amilia).

doi <https://doi.org/10.14421/grieb.2023.111-06>



This is an open access article under the CC-BY-SA license

Veruswati, 2020). During the COVID-19 crisis, it is common for people to feel stressed and worried about fears of dying or ill, being excluded from society due to the quarantine program, or even losing their work (Pieh et al., 2020). These conditions in the long run will cause a social crisis in society, social inequality (Qian & Fan, 2020), trust problems (Kye & Hwang, 2020), including family resilience.

According to Stevenson et al. (2020), there are substantial works previously related to the issue of financial stress with family resilience. Overall, the study revealed that financial distress and economic crisis were found to be associated with family resilience, i.e., family well-being, family health, divorce cases, etc. (Ramadhana, 2020). Theoretically, changing patterns of employment, income level, and financial uncertainty will directly affect the relationship discord, relationship breakdown, and likelihood of delinquency for the children in the future (Stevenson et al., 2020; Sigala, 2020).

Although many kinds of literature discuss COVID-19 issues such as the study of Annas et al. (2020), Asyary & Veruswati (2020), Dioscoridi & Carrisi (2020), Mikolai et al. (2020), O'Connor et al. (2020), Tanoue et al. (2020), Tosepu et al. (2020), Laing (2020), and Ramadhan (2020), there is no study on the impact of COVID-19 on the family resilience. Therefore, the research has two main objectives. Firstly, the study will contribute to analyzing the current condition of the Indonesian family in the era of the COVID-19 pandemic, specifically in its financial distress and family resilience. Second, this study examines the factors driving such family resilience in Indonesia during the COVID-19 epidemic.

Literature Review

Resilience is defined as the ability to withstand and rebound from crisis and adversity. Hence, here, family resilience is the process that enables the family to surmount from the crisis either economic or social crises, and also persistent stresses (Walsh, 1996). Family resilience can be categorized as good condition if the family can survive some different challenges, constraints, and resources, including financial distress (Stevenson et al., 2020). Some cases of challenges such as divorce, remarriage, retirement, sudden job loss, or untimely death of a critical family member. How a family deals with such challenges is crucial for individual and family recovery. Interventions to strengthen family resilience have timely relevance for weathering the rapid social changes and uncertainties facing families today.

Family resiliency becomes important for the individual or member of the family since it will have a direct impact on the future well-being of the whole family, including its education, career, etc. Therefore, measuring family resilience can be seen as one of the most critical issues in society. According to Walsh (1996), many factors determine family resilience, such as family economic resources and social support. In addition, Nicola et al. (2020) argue that crisis such as COVID-19 also has an impact on family resilience. COVID-19 crisis, according to many previous studies ((Stevenson et al., 2020; Sigala, 2020), will affect financial resistance. Hence, we opine that financial distress will also reduce the quality of family resilience.

To the best of the author's knowledge, there is some study on the impact of the COVID-19 pandemic on socio-economic (Mikolai et al., 2020; Nicola et al., 2020; Yezli & Khan, 2020; Qian & Fan, 2020; Kumar et al., 2020; Goutte et al., 2020), but very few of previous research focus on the issue of COVID-19 and family resilience. Tanoue et al. (2020) study on the mental health of families during the COVID-19 pandemic revealed that people with COVID-19 patients tend to have higher psychological distress than those without. Pieh et al. (2020) discuss the impact of age, gender, income, work, and physical activity on mental health during coronavirus disease (COVID-19), using an online survey, found that there is an increase in depressive symptoms and anxieties symptoms during the COVID-19 pandemic. The same result was also documented by Ramadhana (2020) in the case of Indonesian families. There is also another study that focuses on the issue of COVID-19 and its relationship with Social trust in the midst of the pandemic crisis, conducted by Kye and Hwang (2020). This study revealed, the trust of the society for the government increased in COVID-19 pandemic. Hence, this study is urgent in filling the ongoing debates related to the impact of COVID-19 on the family issues, specifically, on family resilience. In addition, the study also cover two important aspect on resilience namely in financial distress aspect and family resilience simultaneously with some factors such as religiosity, social support, education level, family well-being, trust to the government, and also attitude.

Coyle et al. (2009) examined the function of the family in protecting the family from the negative effects of alcohol abuse in America and Canada. The measurement of the family assessment instrument (FAM II; Skinner et al., 2000) which includes 5 family survival factors (Walsh, 1998) was applied to a sample of 674 families. *The hierarchical approach* (Ward, 1963) was used to identify all possible family function variables groupings and *multivariate variance analysis* (MANOVA). The results found that family functions include: the role of adaptability, cohesion, communication, problem-solving, and beliefs or values related to parenting, children's perceptions of teacher care, and race. These results support the important factors of family resilience expressed by (Walsh, 1998).

Huber et al. (2010) investigated the relationship between mid-life marital satisfaction and three main protective factors (adaptive judgment, compensatory experience, and social support) that are operationally defined by the family adaptation model that contributes to family resilience. A total of 239 pairs of volunteers between the ages of 45 and 65, whose youngest child was 18 years old and had graduated from high school, were sampled. The data was then analyzed using linear regression. The results show that there is a significant positive relationship between the criterion variables (re-establishing marital relations and maintaining kinship with the older and younger generations) and predictor variables (adaptive judgment, compensatory experience, and social support) so that this strengthens the ability to face the challenges of part-time old marriage.

McDermott et al. (2010) examined parental reports that family resilience can predict *post-traumatic stress disorder* (PTSD) caused by childhood problems and general emotional symptoms apart from a variety of variables including event-related factors, the child's previous mental illness, and social attachments. Instruments such as *the family resilience measure* (FRM), PTSD reaction index, and strengths, and difficulties questionnaire (SDQ). A total of 568 children and their parents were sampled. The results showed that lower family survival scores were associated with children's emotional problems present on the SDQ and longer duration of the child's prior mental health but prior mental illness was not a significant predictor of child PTSD in the multivariate model. In contrast, Power et al. (2015) explored the concept of family resilience where parents have a mental illness. A total of 11 adults with parents with mental illness were sampled. The research method uses in-depth interviews. The results show that a parent's mental illness has the potential to create stress and confusion for families and that many social and cultural barriers make it difficult for families to acknowledge and talk openly about mental illness.

Tancred and Greeff (2011) identified and explained the quality of resilience in families after losing a child. A biographical questionnaire was used to collect data regarding causes of death, family composition, marital status, income, gender, age, occupation, and level of education. The family sense of coherence scale (FSOC) instrument is used to measure a family's sense of coherence related to the internal and external environment (the dependent variable) which is used to measure the level of family adaptation. The family crisis-oriented personal evaluation scale (F-COPES) instrument, the family hardiness index (FHI) instrument, and the relative and friend support index (RFS) instrument are used to measure the extent to which families use support from friends and family. A total of 89 bereaved parents and 67 siblings from 89 families in Belgium were sampled. The results show that family strength in general, and commitment in particular help families adapt after loss.

Kaya and Arici (2012) adapted the Sixbey (2005) family resilience assessment scale (FRAS) instrument for the Turkish case and examined the properties of this psychometric. A total of 433 students were sampled. Data were analyzed using confirmatory factor analysis (CFA). The results show that the structural model of FRAS is suitable for Turkish culture and is valid and reliable for the field of psychology. In addition, Chew and Haase (2016) examined the psychometric properties of Sixbey (2005) among adolescents with epilepsy in Singapore. Sixbey's (2005) FRAS instrument was used to measure the construct of family resilience. A total of 152 adolescents with epilepsy aged between 13-16 years were sampled. The results show that family resilience is significantly related to higher levels of self-esteem. The FRAS scale is a valid and reliable scale for assessing the construction of family resilience among adolescents with epilepsy in Singapore.

Rocchi et al. (2017) investigated the family resilience of chronic disease patients by adapting and validating the Italian version of FRAS (Sixbey, 2005). A total of 421 Italian adolescents (129 chronic disease patients and 292 of their relatives) were sampled. The data were analyzed using principal component analysis (PCA) and confirmatory factor analysis (CFA) was used to investigate the suitability of the predetermined domains. The results showed that the shape short version of the Italian

version of FRAS has proven valid for assessing family resilience in Italy when facing chronic disease challenges, in contrast to [Isaacs et al. \(2018\)](#) who described the process of adapting 54 FRAS items to African cases and examined the properties of this psychometric. applied to 82 pilot samples and 656 research samples. The results indicated that the English version of FRAS needed further analysis.

[Deist and Greeff \(2015\)](#) examined the factors that influence family resilience in families caring for parents with dementia. The instrument family attachment changeability index 8 (FACI 8) is used to measure family adaptation (the dependent variable). A total of 47 families where adolescent children care for parents with dementia were sampled. Data were analyzed using a mixed-method approach, namely thematic context analysis (qualitative approach) and analysis of variance (ANOVA), Pearson product-moment correlation, and best subsets multiple regression analysis. The results show that acceptance, optimism, positive communication patterns, family connectedness, spirituality, social support, economic resources, and effective symptom management help these families adapt to the burden of caring for parents with dementia.

[Li et al. \(2018\)](#) examined the relationship between family survival, breast cancer survivorship, and primary caregiver burden, and examined whether breast cancer survivorship played a mediating role in the relationship between family survival and caregiver burden. The instrument used was the Chinese version of the Zarit caregiver burden interview (CZBI) to measure the burden felt by caregivers in providing informal care both at the hospital and at home (as the dependent variable), 10 items Connor-Davidson resilience scale (CD-RISC10) Chinese version to measure the individual resilience of survivors (as a mediating variable), the Chinese version of FRAS 32 items to measure family resilience. The covariates used are information related to social demographics. A total of 108 pairs of early-stage breast cancer survivors and their caregivers were used as samples. The mediating effect of individual resilience was estimated using the bootstrap method. The results show that caregiver burden is significantly negatively related to family resilience and individual resilience with breast cancer. Individual resilience mediates the relationship between family resilience and caregiver burden.

[Ruisoto et al. \(2020\)](#) examined changes in family resilience in families participating in the Family Competency Program. To measure resilience, one of the instrument scales consisting of two different complementary questionnaires was used: one for adolescents and one for parents. The items used are taken from the family strengths/resilience scale developed by Karol Kumpfer and Carl Dunst for the American Humane Association (1997). The family vulnerability index (FVI) based on parents' employment status, parents' educational level, and family structure was used in this study. Families that get the Family Competency Program consist of the pre-stage: family = 81; parents = 91; youth = 81, and headings: family = 69; parents = 70; adolescents = 68. To test the significance of the difference between the experimental group and the control group related to resistance, it was analyzed using ANOVA. The results show that there is a positive influence in terms of increasing family resilience through program participation. There is no relationship between family resilience and family vulnerability.

[Burgette \(2022\)](#) examined the relationship between family resilience and connection and the probability of a child having dental caries was reported by caregivers. The family resilience and connection index (FRCI) instrument is used to measure family resilience and connections. The observed sample is the result of a national survey of children's health aged 6 to 17 years in 2016. The results show that children who live in families with higher levels of resilience and connection have a lower likelihood of developing dental caries as reported by their caregivers. Policies and programs that increase resilience and family relationships have the potential to reduce dental caries in school-age children.

Method

This study examines the impact of the COVID-19 pandemic on financial distress and family resilience amongst Muslim households in Jogjakarta. The sample of this study is the household in 5 districts of Jogjakarta, in which the total sample is 1000 samples, 200 samples in each region, i.e. Sleman, Kota Jogja, Bantul, Kulonprogo, and Gunung Kidul. Survey research using a self-administered questionnaire has been employed as the main approach for data collection. In terms of analysis purposes, Structural Equation Modeling-Partial Least Square (SEM-PLS), AMOS 24 has been used for measuring the hypothesized relationship among construct variables.

Finding and Discussions

This study examines what are the factors that influence family resilience in Indonesia. In this study, the dependent variable used is Family Resilience (KK), and the independent variables are Maintenance of a Positive View (PPP), Family Connectivity (KTK), Family Spirituality (SK), Ability to Understand Difficulties (KMK), Financial Pressure Index (ITK), and Facing Difficulties (MK). There are 2 moderating variables used in this study, namely the Level of Religiosity (TR) and the Flexibility of Islamic Marriage (FPI). Figure 1 shows an overview of the framework that will be carried out in this study.

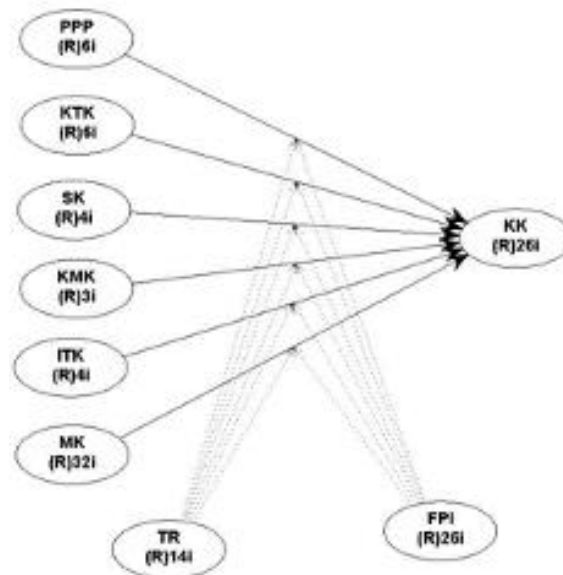


Figure 1. Research Framework

Based on the results in Table 1, it can be seen that the variable maintaining a positive outlook has a positive value and has a significant influence on the family resilience variable, this means that families need resilience through processes such as various humor or rituals and family routines that have a good impact. The results of this study support research conducted by Power et al. (2015) and Park et al., (2020) which states that resilient families are more resilient individually and experience less anxiety in dealing with security tensions because resilience tends to be about maintaining a balance between stress/distress and optimism and strength in their families. Based on the results in Table 1, it can be seen that the family connectedness variable is positive and has a significant influence on the family resilience variable. These results indicate that communication and the involvement of each family member in their daily activities have the potential to strengthen family relationships. The results of this study support the research by Deist and Greeff (2015) stating that acceptance, optimism, positive communication patterns, family connectedness, spirituality, social support, economic resources, and effective symptom management help families strengthen family resilience.

Based on Table 1, it can be seen that the family spirituality variable does not have a significant effect on family resilience. This means that a high level of worship in the family does not affect family resilience. However, research conducted by Khan et al. (2020) contradicts this research which states that social, religious, economic, and ecological elements as a whole influence family resilience. While the variable ability to interpret difficulties does not have a significant effect on family resilience. This shows that no matter how the family understands the difficulties, there will be no impact on resilience. If family members see difficulties as challenges, then this can help the family to survive and maintain family resilience. The results of this study support the research of Tancred and Greeff (2011) who tried to identify and explain the quality of resilience in families after losing a child with the results showing that family strength in general, and commitment in particular help families adapt after loss.

Table 1. Estimation Results

	Coefficient	P-Value	Signs	Significant
PPP	0.287	<0.001	+	Significant
KTK	0.346	<0.001	+	Significant
SK	-0.082	0.152	-	No Significant
KMK	0.091	0.128	+	No Significant
ITK	0.075	0.174	+	No Significant
MK	0.412	<0.001	+	Significant
TR*PPP	-0.496	<0.001	-	Significant
TR*KTK	0.379	<0.001	+	Significant
TR*SK	0.049	0.272	+	No Significant
TR*KMK	-0.353	<0.001	-	Significant
TR*ITK	0.015	0.425	+	No Significant
TR*MK	0.248	<0.001	+	Significant
FPI*PPP	0.261	<0.001	+	Significant
FPI*KTK	0.289	<0.001	+	Significant
FPI*SK	0.045	0.288	+	No Significant
FPI*KMK	0.473	<0.001	+	Significant
FPI*ITK	0.093	0.122	+	No Significant

In addition, this research also revealed that the financial pressure index variable does not have a significant effect on family resilience. This means that economic status and patterns in managing finances have nothing to do with family resilience. However, the results of this study contradict the previous research by [Yang et al. \(2020\)](#) who studied Chinese rural residents with research results showing that rural families with more physical and financial capital will be more resilient in their family resilience. In addition, the variable of facing difficulties has a positive value and has a significant influence on family resilience. The results of this study indicate that when a family faces a problem, there is a potential for damage to the family's resilience. So that when families face problems they need communication or problem-solving in order to strengthen family resilience, this is in accordance with the Walsh family resilience questionnaire (WRFQ) which states the theory of a three-factor structure consisting of belief systems, organizational patterns, and communication/problem solving ([Walsh, 2016](#)).

The finding above is consistent with the study of [Khan et al. \(2020\)](#) who investigated the relationship between family resilience, anxiety, and individual adolescent resilience in times of ongoing security threats. The instruments used are demographic instruments in the form of age, gender, and education, the exposure to security threats instrument to measure exposure to security incidents, the differentiation of self-inventory (DSI) and adolescents, Connor-Davidson resilience scale (CD-RISC) used to measure individual resilience, and FRAS is used to measure family resilience. A total of 89 pairs of parents and their teenage children who were hit by a rocket attack in 13 years on the Gaza-Palestinian border were sampled. The data were then analyzed using two hierarchical regressions. The results show that family resilience is a collective product of a shared and interactive process. In addition, it also supports the study from ([Sadia et al., 2020](#)) who developed constructs and themes to assess family resilience in flood-affected areas in Khyber Pakhtunkhwa Pakistan. The Walsh Family Resilience Questionnaire (WFRQ) was used to measure family resilience. The analytical method used is the content analysis approach. The results show that social, religious, economic, and ecological elements as a whole influence family resilience. [Yang et al. \(2020\)](#) examined the resilience status of families in rural China from a sustainable livelihood perspective. The instrument used is perceived family resilience (PFR) to measure family resilience. A total of 550 individuals in Hubei China were sampled. Latent profile analysis (LPA) was used to identify the categories of PFR and regression mixture modeling (RMM) was used to assess the causal relationship between individual PFR categories and their covariates. The results show that rural families with more natural, physical, social, and human resources are more likely to be resilient (more resilient) because they are more adaptive. Likewise, gender, marital status, and age have a significant effect on PFR.

Conclusion

Family resilience among Muslims is an important issue in society. The quality of the family will ensure the sustainability of society. Hence, this study aims to find the relationship between financial distress and family resilience, and also, examines the factors driving such family resilience in Indonesia during the COVID-19 epidemic. This study revealed that there are some significant variables in family resilience, namely; maintaining a positive outlook, Family Connectivity, and Facing Difficulties. In addition, the study also evidenced that some variable has no significant effect on family resilience, such as Family Spirituality (SK), Ability to Understand Difficulties (KMK), and Financial Pressure Index (ITK). This finding documented that family resilience is not caused by the financial problem but, is more based on the psychological problem. Therefore, it is very important for the policymakers to improve the consultancy and counseling program focused on the marriage program.

Acknowledgment

This Research is funded by Lembaga Penelitian dan Pengabdian Masyarakat (LPPM) UIN Sunan Kalijaga Yogyakarta, Indonesia.

References

- Annas, S., Pratama, M. I., Rifandi, M., Sanusi, W., & Side, S. (2020). Stability analysis and numerical simulation of SEIR model for pandemic COVID-19 spread in Indonesia. *Chaos, Solitons & Fractals*, 139, 110072. <https://doi.org/10.1016/j.chaos.2020.110072>
- Asyary, A., & Veruswati, M. (2020). Sunlight exposure increased COVID-19 recovery rates: A study in the central pandemic area of Indonesia. *Science of the Total Environment*, 729, 139016. <https://doi.org/10.1016/j.scitotenv.2020.139016>
- Burgette, J. M. (2022). Family resilience and connection is associated with dental caries in us children. *JDR Clinical and Translational Research*, 7(1), 61–70. <https://doi.org/10.1177/2380084420982250>
- Chew, J., & Haase, A. M. (2016). Psychometric properties of the family resilience assessment scale: A Singaporean perspective. *Epilepsy & Behavior*, 61, 112–119. <https://doi.org/10.1016/j.yebeh.2016.05.015>
- Coyle, J. P., Nochajski, T., Maguin, E., Safyer, A., DeWit, D., & Macdonald, S. (2009). An exploratory study of the nature of family resilience in families affected by parental alcohol abuse. *Journal of Family Issues*, 30(12), 1606–1623. <https://doi.org/10.1177/0192513X09339478>
- Deist, M., & Greeff, A. P. (2015). Resilience in families caring for a family member diagnosed with dementia. *Educational Gerontology*, 41(2), 93–105. <https://doi.org/10.1080/03601277.2014.942146>
- Dioscoridi, L., & Carrisi, C. (2020). COVID-19 exposure risk for family members of healthcare workers: An observational study. *International Journal of Infectious Diseases*. <https://doi.org/10.1016/j.ijid.2020.06.106>
- Goutte, S., Péran, T., & Porcher, T. (2020). The role of economic structural factors in determining pandemic mortality rates: Evidence from the COVID-19 outbreak in France. *Research in International Business and Finance*, 54, 101281. <https://doi.org/10.1016/j.ribaf.2020.101281>
- Huber, C. H., Navarro, R. L., Womble, M. W., & Mumme, F. L. (2010). Family resilience and midlife marital satisfaction. *The Family Journal: Counseling and Therapy for Couples and Families*, 18(2), 136–145. <https://doi.org/10.1177/1066480710364477>
- Isaacs, A. N., Enticott, J., Meadows, G., & Inder, B. (2018). Lower income levels in Australia are strongly associated with elevated psychological distress: Implications for healthcare and other policy areas. *Frontiers in Psychiatry*, 9, 536. <https://doi.org/10.3389/fpsy.2018.00536>
- Kaya, M., & Arici, N. (2012). Turkish version of shortened family resiliency scale (FRAS): The study of validity and reliability. *Procedia - Social and Behavioral Sciences*, 55, 512–520. <https://doi.org/10.1016/j.sbspro.2012.09.531>
- Khan, A. H., Sultana, M. S., Hossain, S., Hasan, M. T., Ahmed, H. U., & Sikder, M. T. (2020). The impact of COVID-19 pandemic on mental health & wellbeing among home-quarantined Bangladeshi students: A cross-sectional pilot study. *Journal of Affective Disorders*, 277, 121–128. <https://doi.org/10.1016/j.jad.2020.07.135>

- Kumar, A., Rani, P., Kumar, R., Sharma, V., & Purohit, S. R. (2020). Data-driven modelling and prediction of COVID-19 infection in India and correlation analysis of the virus transmission with socio-economic factors. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, *14*(5), 1231–1240. <https://doi.org/10.1016/j.dsx.2020.07.008>
- Kye, B., & Hwang, S.-J. (2020). Social trust in the midst of pandemic crisis: Implications from COVID-19 of South Korea. *Research in Social Stratification and Mobility*, *68*, 100523. <https://doi.org/10.1016/j.rssm.2020.100523>
- Laing, T. (2020). The economic impact of the Coronavirus 2019 (Covid-2019): Implications for the mining industry. *The Extractive Industries and Society*, *7*(2), 580–582. <https://doi.org/10.1016/j.exis.2020.04.003>
- Li, T., Horton, R. M., Bader, D. A., Liu, F., Sun, Q., & Kinney, P. L. (2018). Long-term projections of temperature-related mortality risks for ischemic stroke, hemorrhagic stroke, and acute ischemic heart disease under changing climate in Beijing, China. *Environment International*, *112*, 1–9. <https://doi.org/10.1016/j.envint.2017.12.006>
- McBryde, E. S., Meehan, M. T., Adegboye, O. A., Adekunle, A. I., Caldwell, J. M., Pak, A., Rojas, D. P., Williams, B. M., & Trauer, J. M. (2020). Role of modelling in COVID-19 policy development. *Paediatric Respiratory Reviews*. <https://doi.org/10.1016/j.prrv.2020.06.013>
- McDermott, B. M., Cobham, V. E., Berry, H., & Stallman, H. M. (2010). Vulnerability factors for disaster-induced child post-traumatic stress disorder: The case for low family resilience and previous mental illness. *Australian and New Zealand Journal of Psychiatry*, *44*, 384–389. <https://doi.org/10.3109/00048670903489916>
- Mikolai, J., Keenan, K., & Kulu, H. (2020). Intersecting household level health and socio-economic vulnerabilities and the COVID-19 crisis: An analysis from the UK. *SSM - Population Health*, 100628. <https://doi.org/10.1016/j.ssmph.2020.100628>
- Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., Iosifidis, C., Agha, M., & Agha, R. (2020). The socio-economic implications of the coronavirus pandemic (COVID-19): A review. *International Journal of Surgery*, *78*, 185–193. <https://doi.org/10.1016/j.ijssu.2020.04.018>
- O'Connor, C. M., Anoushiravani, A. A., DiCaprio, M. R., Healy, W. L., & Iorio, R. (2020). Economic recovery after the COVID-19 pandemic: Resuming elective orthopedic surgery and total joint arthroplasty. *The Journal of Arthroplasty*, *35*(7), S32–S36. <https://doi.org/10.1016/j.arth.2020.04.038>
- Park, C. L., Russell, B. S., Fendrich, M., Finkelstein-Fox, L., Hutchison, M., & Becker, J. (2020). Americans' COVID-19 stress, coping, and adherence to CDC guidelines. *Journal of General Internal Medicine*, *35*(8), 2296–2303. <https://doi.org/10.1007/s11606-020-05898-9>
- Pieh, C., Budimir, S., & Probst, T. (2020). The effect of age, gender, income, work, and physical activity on mental health during coronavirus disease (COVID-19) lockdown in Austria. *Journal of Psychosomatic Research*, *136*, 110186. <https://doi.org/10.1016/j.jpsychores.2020.110186>
- Power, M. C., Kioumourtzoglou, M. A., Hart, J. E., Okereke, O. I., Laden, F., & Weiskopf, M. G. (2015). The relation between past exposure to fine particulate air pollution and prevalent anxiety: Observational cohort study. *BMJ*, h1111. <https://doi.org/10.1136/bmj.h1111>
- Singh, R. P., Kataria, R., & Haq, M. F. U. (2020). Letter to the editor in response to: COVID-19 pandemic and challenges for socio-economic issues, healthcare and national programs in India (Gopalan and Misra). *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, *14*(5), 841–842. <https://doi.org/10.1016/j.dsx.2020.06.019>
- Qian, Y., & Fan, W. (2020). Who loses income during the COVID-19 outbreak? Evidence from China. *Research in Social Stratification and Mobility*, *68*, 100522. <https://doi.org/10.1016/j.rssm.2020.100522>
- Ramadhana, M. R. (2020). A dataset for emotional reactions and family resilience during COVID-19 isolation period among Indonesian families. *Data in Brief*, *31*, 105946. <https://doi.org/10.1016/j.dib.2020.105946>
- Rocchi, M., Pelletier, L., Cheung, S., Baxter, D., & Beaudry, S. (2017). Assessing need-supportive and need-thwarting interpersonal behaviours: The interpersonal behaviours questionnaire (IBQ). *Personality and Individual Differences*, *104*, 423–433. <https://doi.org/10.1016/j.paid.2016.08.034>

- Ruisoto, P., Contador, I., Fernández-Calvo, B., Serra, L., Jenaro, C., Flores, N., Ramos, F., & Rivera-Navarro, J. (2020). Mediating effect of social support on the relationship between resilience and burden in caregivers of people with dementia. *Archives of Gerontology and Geriatrics*, *86*, 103952. <https://doi.org/10.1016/j.archger.2019.103952>
- Sadia, H., Srisatidnarakul, B., & Liaw, J. J. (2020). Exploring the experiences of flood-affected families to develop constructs and themes for family resilience assessment scale. *International Journal of Disaster Risk Reduction*, *46*, 1–10. <https://doi.org/10.1016/j.ijdrr.2020.101500>
- Sigala, M. (2020). Tourism and COVID-19: Impacts and implications for advancing and resetting industry and research. *Journal of Business Research*, *117*, 312–321. <https://doi.org/10.1016/j.jbusres.2020.06.015>
- Sixbey, M. T. (2005). *Development of the family resilience assessment scale to identify family resilience construct*. University of Florida.
- Skinner, H., Steinhauer, P., & Sitarenios, G. (2000). Family assessment measure (FAM) and process model of family functioning. *Journal of Family Therapy*, *22*(2), 190–210. <https://doi.org/10.1111/1467-6427.00146>
- Stevenson, C., Costa, S., Wakefield, J. R. H., Kellezi, B., & Stack, R. J. (2020). Family identification facilitates coping with financial stress: A social identity approach to family financial resilience. *Journal of Economic Psychology*, *78*, 102271. <https://doi.org/10.1016/j.joep.2020.102271>
- Tancred, E. M., & Greeff, A. P. (2011). *Gesinsaanpassing, ouerskapstyle en hanteringstrategieë in gesinne met kinders met 'n Aandagtekort/Hiperaktiwiteitsversteuring (AT/HV)*.
- Tanoue, Y., Nomura, S., Yoneoka, D., Kawashima, T., Eguchi, A., Shi, S., Harada, N., & Miyata, H. (2020). Mental health of family, friends, and co-workers of COVID-19 patients in Japan. *Psychiatry Research*, *291*, 113067. <https://doi.org/10.1016/j.psychres.2020.113067>
- Tosepu, R., Gunawan, J., Effendy, D. S., Ahmad, L. O. A. I., Lestari, H., Bahar, H., & Asfian, P. (2020). Correlation between weather and COVID-19 pandemic in Jakarta, Indonesia. *Science of the Total Environment*, *725*, 138436. <https://doi.org/10.1016/j.scitotenv.2020.138436>
- Walsh, F. (1996). The concept of family resilience: Crisis and challenge. *Family Process*, *35*(3), 261–281. <https://doi.org/10.1111/j.1545-5300.1996.00261.x>
- Walsh, F. (1998). *Strengthening family resilience*. Guilford.
- Walsh, F. (2016). *Strengthening family resilience*. The Guilford Press.
- Ward, J. H. (1963). Hierarchical grouping to optimize an objective function. *Journal of the American Statistical Association*, *58*(301), 236–244. <https://doi.org/10.1080/01621459.1963.10500845>
- Yang, J., Zheng, Y., Gou, X., Pu, K., Chen, Z., Guo, Q., Ji, R., Wang, H., Wang, Y., & Zhou, Y. (2020). Prevalence of comorbidities and its effects in patients infected with SARS-CoV-2: A systematic review and meta-analysis. *International Journal of Infectious Diseases*, *94*, 91–95. <https://doi.org/10.1016/j.ijid.2020.03.017>
- Yezli, S., & Khan, A. (2020). COVID-19 social distancing in the Kingdom of Saudi Arabia: Bold measures in the face of political, economic, social and religious challenges. *Travel Medicine and Infectious Disease*, 101692. <https://doi.org/10.1016/j.tmaid.2020.101692>