

CHAPTER 5

CONCLUSIONS AND SUGGESTIONS

5.1 Conclusions

Some conclusions can be made from this study after completing the analyses, as follows:

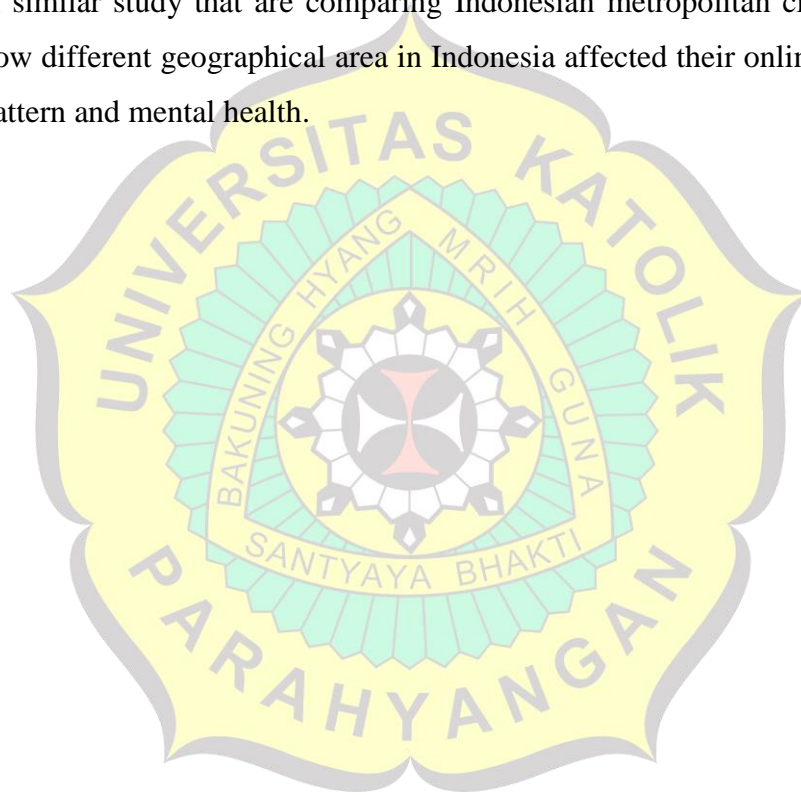
1. The trend of online activity-pattern is mostly increased and people's mental health conditions are changing since the pandemic strike but there are no notable difference. COVID-19 has triggered a massive behavioural change and this affected online activities trends. The highest change of behaviour occurred in the early stage of pandemic as well as people's online activity pattern. Whereas near to the current trend, people's behaviour and their online-activity pattern are getting back to the pre-pandemic condition. Higher use of ICTs also leans to a lower mental health condition if looking at the trends. The trends of changes in online activities and changes in mental health conditions in Thailand and Indonesian model shows a similar characteristic but also have differences. Also that people who have higher activities in online working/studying tend to have lower mental health conditions. This happened in both Indonesian and Thailand model. Whereas the difference happened in the effects of social media activity on mental health. In Thailand they tend to have a higher mental health, while in Indonesia they tend to have a lower mental health.
2. Online activity-pattern found to be significantly impacted by individuals and households' characteristics as well as behavioural change. Also mental health is significantly correlated with sociodemographic characteristics, behavioural change, and different online activity-pattern. Only social media, e-shopping, online gaming, and online food delivery related activities that are significantly correlated with mental health. Moreover, the findings from the multivariate analysis are in line with the previous statement. Higher use of social media and online shopping related activities are correlated with a lower mental health condition in the Indonesian model. Whereas higher use of online gaming and online food delivery related

activities are correlated with a positive mental health condition in the Thailand model.

5.2 Suggestions

Here are a few recommendations for potential future studies:

1. Future study can analyse the correlation of more detailed individuals and households' characteristics on mental health to see if there are any correlation between mental health and sociodemographic that are not covered by the analysis of this research.
2. A similar study that are comparing Indonesian metropolitan cities to see how different geographical area in Indonesia affected their online activity-pattern and mental health.



REFERENCES

- Allardt, E. (1993). Having, loving, being: An alternative to the Swedish model of Welfare Research. *The Quality of Life*, 88–94. <https://doi.org/10.1093/0198287976.003.0008>
- An, L., Tsou, M.-H., Crook, S. E., Chun, Y., Spitzberg, B., Gawron, J. M., & Gupta, D. K. (2015). Space–time analysis: Concepts, quantitative methods, and Future Directions. *Annals of the Association of American Geographers*, 105(5), 891–914. <https://doi.org/10.1080/00045608.2015.1064510>
- Arentze, T. A., & Timmermans, H. J. P. (2005). Information gain, novelty seeking and travel: A model of dynamic activity-travel behavior under conditions of uncertainty. *Transportation Research Part A: Policy and Practice*, 39(2-3), 125–145. <https://doi.org/10.1016/j.tra.2004.08.002>
- Arentze, T., & Timmermans, H. (2008). Social networks, social interactions, and activity-travel behavior: A framework for microsimulation. *Environment and Planning B: Planning and Design*, 35(6), 1012–1027. <https://doi.org/10.1068/b3319t>
- Austin, P. C., Goel, V., & van Walraven, C. (2001). An introduction to multilevel regression models. *Canadian Journal of Public Health*, 92(2), 150–154. <https://doi.org/10.1007/bf03404950>
- Badan Pusat Statistik Kabupaten Bogor. (2022). Retrieved May 19, 2022, from <https://bogorkab.bps.go.id/indicator/12/29/1/jumlah-penduduk.html>
- Badan Pusat Statistik Kabupaten Sumedang. (2022). Retrieved May 19, 2022, from <https://sumedangkab.bps.go.id/publication/download.html?nrbfefe=NmYwOGIzNDliZTFiODc4ZGNIOWE2ZGY0&xzmn=aHR0cHM6Ly9zdW1lZGFuZ2thYi5icHMuZ28uaWQvcHVibGljYXRpb24vMjAyMi8wMi8yNS82ZjA4YjM0OWJlMWI4NzhkY2U5YTZkZjQva2FidXBhdGVuLXN1bWVkaW5nLWRhbGFtLWFuZ2thLTIwMjIuaHRtbA%3D%3D&twoadfnorfeafuf=MjAyMi0wNi0wNiAxMzo1MT01MQ%3D%3D>
- Badan Pusat Statistik Kota Bandung. (2022). Retrieved May 19, 2022, from <https://bandungkota.bps.go.id/publication/download.html?nrbfefe=NjAzM>

TBmYjEyODYyYjQwZDY4OGEzNTc4&xzmn=aHR0cHM6Ly9iYW5kdW5na290YS5icHMuZ28uaWQvcHVibGljYXRpb24vMjAyMi8wMi8yNS82MDMxMGZiMTI4NjJiNDBkNjg4YTM1Nzgva290YS1iYW5kdW5nLWRhbGFtLWFuZ2thLTIwMjIuaHRtbA%3D%3D&tweakfnoarfeauf=MjAyMi0wNi0wNiAxMzo1NzozNQ%3D%3D

Badan Pusat Statistik Kota Bekasi. (2021). Retrieved May 19, 2022, from <https://bekasikota.bps.go.id/publication/download.html?nrbfvefe=ZDkzZTc5MmFjOTJmOGIwMGI1MTNIYTJi&xzmn=aHR0cHM6Ly9iZWthc2lrb3RhLmJwcy5nby5pZC9wdWJsaWNhdGlvi8yMDIxLzAyLzI2L2Q5M2U3OTJhYzkyZjhiMDBiNTEzZWEyYi9rb3RhLWJla2FzaS1kYWxhbS1hbmdrYS0yMDIxLmh0bWw%3D&tweakfnoarfeauf=MjAyMi0wNi0wNiAxMzozMDo0MA%3D%3D>

Badan Pusat Statistik Kota Bogor. (2022). Retrieved May 19, 2022, from <https://bogorkota.bps.go.id/publication/download.html?nrbfvefe=MTljZTY4MGY3M2YyZTYyYjE0ZWZkOTQ5&xzmn=aHR0cHM6Ly9ib2dvcmtvdGEuYnBzLmdvLmlkL3B1YmxpY2F0aW9uLzIwMjIvMDIvMjUvMTljZTY4MGY3M2YyZTYyYjE0ZWZkOTQ5L2tvdGEtYm9nb3ItZGFsYW0tYW5na2EtMjAyMi5odG1s&tweakfnoarfeauf=MjAyMi0wNi0wNiAxNDoyMzozOA%3D%3D>

Badan Pusat Statistik Kota Depok. (2021). Retrieved May 19, 2022, from <https://depokkota.bps.go.id/indicator/12/30/1/jumlah-penduduk-menurut-kecamatan-dan-jenis-kelamin-.html>

Badan Pusat Statistik Provinsi Jawa Barat. (2021). Retrieved May 19, 2022, from <https://jabar.bps.go.id/indicator/12/133/1/jumlah-penduduk-menurut-kabupaten-kota.html>

Badan Pusat Statistik Tangerang. (2021). Retrieved May 19, 2022, from <https://tangerangkota.bps.go.id/publication/download.html?nrbfvefe=ZDU2M2QyM2Q1NGQ3YzU5NzUzNjdlMWE1&xzmn=aHR0cHM6Ly90YW5nZXJhbmdrb3RhLmJwcy5nby5pZC9wdWJsaWNhdGlvi8yMDIxLzAyLzI2L2Q1NjNkMjNkNTRkN2M1OTc1MzY3ZTFhNS9rb3RhLXRhbmdlcmlFuZy1kYWxhbS1hbmdrYS0yMDIxLmh0bWw%3D&tweakfnoarfeauf=MjAyMi0wNi0wNiAxMzoyNzoxMg%3D%3D>

- Barbieri, D. M., Lou, B., Passavanti, M., Hui, C., Hoff, I., Lessa, D. A., Sikka, G., Chang, K., Gupta, A., Fang, K., Banerjee, A., Maharaj, B., Lam, L., Ghasemi, N., Naik, B., Wang, F., Foroutan Mirhosseini, A., Naseri, S., Liu, Z., ... Rashidi, T. H. (2021). Impact of covid-19 pandemic on mobility in ten countries and associated perceived risk for all transport modes. *PLOS ONE*, 16(2). <https://doi.org/10.1371/journal.pone.0245886>
- Benisek, A. (2021). *Touch starvation: What to know*. WebMD. Retrieved June 29, 2022, from <https://www.webmd.com/balance/touch-starvation#:~:text=It%27s%20also%20known%20as%20touch,t%20get%20enough%20positive%20contact>.
- Bergan, A., & McConatha, J. T. (2001). Religiosity and life satisfaction. *Activities, Adaptation & Aging*, 24(3), 23–34. https://doi.org/10.1300/j016v24n03_02
- Biswas, R. (2021, September 16). *Thailand: Covid-19 Delta Wave disrupts economic recovery*. IHS Markit. Retrieved June 18, 2022, from <https://ihsmarkit.com/research-analysis/thailand-covid19-delta-wave-disrupts-economic-recovery-Sep21.html>
- Boorse, C. (1976). What a theory of mental health should be. *Journal for the Theory of Social Behaviour*, 6(1), 61–84. <https://doi.org/10.1111/j.1468-5914.1976.tb00359.x>
- BPS Provinsi DKI Jakarta. (2022). Retrieved May 19, 2022, from <https://jakarta.bps.go.id/indicator/12/111/1/jumlah-penduduk-provinsi-dki-jakarta-menurut-kelompok-umur-dan-jenis-kelamin.html>
- Cattell, R. B. (1966). The scree test for the number of factors. *Multivariate Behavioral Research*, 1(2), 245–276. https://doi.org/10.1207/s15327906mbr0102_10
- Cattell, R. B. (1978). The scientific use of factor analysis in Behavioral and Life Sciences. <https://doi.org/10.1007/978-1-4684-2262-7>
- Ceci, L. (2022, May 13). *TikTok users by country 2022*. Statista. Retrieved June 15, 2022, from <https://www.statista.com/statistics/1299807/number-of-monthly-unique-tiktok-users/>
- Central Statistic Office Ireland. (2020, November 26). *Type of internet activities - CSO - central statistics office*. CSO. Retrieved June 19, 2022, from

- <https://www.cso.ie/en/releasesandpublications/ep/p-isssh/informationstistics-households2020/typeofinternetactivities/>
- Cerami, C., Santi, G. C., Galandra, C., Dodich, A., Cappa, S. F., Vecchi, T., & Crespi, C. (2020). Covid-19 outbreak in Italy: Are we ready for the psychosocial and the economic crisis? baseline findings from the PSYCOVID study. *Frontiers in Psychiatry*, 11. <https://doi.org/10.3389/fpsy.2020.00556>
- Chaivichayachat, S. (2020, April 4). *Covid-19 impact on the Thai economy and vulnerability*. Krungsri Research. Retrieved May 5, 2022, from <https://www.krungsri.com/en/research/research-intelligence/ri-covid19-impact-en>
- Chao, C.-nan, Hegarty, N., & Fray, I. (2016). Impact of movie streaming over traditional DVD movie rental—an empirical study. *Journal of Industrial and Intelligent Information*. <https://doi.org/10.18178/jiii.4.2.104-109>
- Chatzoudes, Dimitrios. (2017). Re: Exploratory Factor Analysis versus Confirmatory Factor Analysis. Retrieved from: https://www.researchgate.net/post/Exploratory_Factor_Analysis_versus_Confirmatory_Factor_Analysis/5953afabcbd5c20f37529e27/citation/download
- Chen, H., Guo, J., Wang, C., Luo, F., Yu, X., Zhang, W., Li, J., Zhao, D., Xu, D., Gong, Q., Liao, J., Yang, H., Hou, W., & Zhang, Y. (2020). Clinical characteristics and intrauterine vertical transmission potential of covid-19 infection in nine pregnant women: A retrospective review of medical records. *The Lancet*, 395(10226), 809–815. [https://doi.org/10.1016/s0140-6736\(20\)30360-3](https://doi.org/10.1016/s0140-6736(20)30360-3)
- Chesley, N. (2005). Blurring Boundaries? Linking Technology Use, Spillover, Individual Distress, And Family Satisfaction. *Journal of Marriage and Family*, 67(5), 1237–1248. <https://doi.org/10.1111/j.1741-3737.2005.00213.x>
- Cho, S. M., Park, C.-ung, & Song, M. (2020). The evolution of Social Health Research Topics: A data-driven analysis. *Social Science & Medicine*, 265, 113299. <https://doi.org/10.1016/j.socscimed.2020.113299>

- Christidis, P., Christodoulou, A., Navajas-Cawood, E., & Ciuffo, B. (2021). The post-pandemic recovery of transport activity: Emerging mobility patterns and repercussions on future evolution. *Sustainability*, 13(11), 6359. <https://doi.org/10.3390/su13116359>
- Coronavirus disease 2019 (covid-19)*. WHO. (2020, April). Retrieved July 5, 2022, from https://www.who.int/docs/default-source/searo/thailand/2020-04-3-tha-sitrep-41-covid19-final.pdf?sfvrsn=9e14aebc_0.pdf
- Couclelis, H. (2009). Rethinking time geography in the information age. *Environment and Planning A: Economy and Space*, 41(7), 1556–1575. <https://doi.org/10.1068/a4151>
- Covid-19 developments in Indonesia. AHK Indonesien. (2020). Retrieved March 15, 2022, from <https://indonesien.ahk.de/en/infocenter/news/news-details/covid-19-developments-in-indonesia>
- Cresswell, T. (2013). *Geographic thought: A critical introduction*. West Sussex, UK: Wiley-Blackwell
- Cudeck, R. (2000). Exploratory factor analysis. *Handbook of Applied Multivariate Statistics and Mathematical Modeling*, 265–296. <https://doi.org/10.1016/b978-012691360-6/50011-2>
- Data Jumlah Pulau di Indonesia*. Ministry of Marine Affairs and Fishery of Indonesia. (2020). Retrieved June 21, 2022, from <https://kkp.go.id/djprl/p4k/page/4270-jumlah-pulau>
- Dcode Economic & Financial Consulting. (2020). Decoding the Economics of COVID-19. Dcode Economic & Financial Consulting. Retrieved March 2022, from <https://dcodeefc.com/infographics>
- de Haas, M., Faber, R., & Hamersma, M. (2020). How covid-19 and the Dutch ‘Intelligent Lockdown’ change activities, work and travel behaviour: Evidence from longitudinal data in the Netherlands. *Transportation Research Interdisciplinary Perspectives*, 6, 100150. <https://doi.org/10.1016/j.trip.2020.100150>
- Dechsupa, S., Assawakosri, S., Phakham, S., & Honsawek, S. (2020). Positive impact of lockdown on covid-19 outbreak in Thailand. *Travel Medicine and Infectious Disease*, 36, 101802. <https://doi.org/10.1016/j.tmaid.2020.101802>

- DeWalt, D. A., Thissen, D., Stucky, B. D., Langer, M. M., Morgan DeWitt, E., Irwin, D. E., Lai, J.-S., Yeatts, K. B., Gross, H. E., Taylor, O., & Varni, J. W. (2013). Promis Pediatric Peer Relationships Scale: Development of a peer relationships item bank as part of Social Health Measurement. *Health Psychology, 32*(10), 1093–1103. <https://doi.org/10.1037/a0032670>
- Dharmowijoyo, D. B. E. (2016). *The complexity and variability of individuals' activity-travel patterns in Indonesia* (dissertation). KTH Royal Institute of Technology, Stockholm.
- Dharmowijoyo, D. B. E., Susilo, Y. O., & Karlström, A. (2014). Day-to-day interpersonal and intrapersonal variability of individuals' activity spaces in a developing country. *Environment and Planning B: Planning and Design, 41*(6), 1063–1076. <https://doi.org/10.1068/b130067p>
- Dharmowijoyo, D. B. E., Susilo, Y. O., & Syabri, I. (2020). Time use and spatial influence on transport-related social exclusion, and mental and Social Health. *Travel Behaviour and Society, 21*, 24–36. <https://doi.org/10.1016/j.tbs.2020.05.006>
- Dijst, M., Farag, S., & Schwanen, T. (2008). A comparative study of attitude theory and other theoretical models for understanding travel behaviour. *Environment and Planning A: Economy and Space, 40*(4), 831–847. <https://doi.org/10.1068/a39151>
- Edgar, T. W., & Manz, D. O. (2017). Exploratory study. *Research Methods for Cyber Security, 95–130*. <https://doi.org/10.1016/b978-0-12-805349-2.00004-2>
- Emerson, R. W. (2015). Convenience sampling, random sampling, and Snowball Sampling: How does sampling affect the validity of research? *Journal of Visual Impairment & Blindness, 109*(2), 164–168. <https://doi.org/10.1177/0145482x1510900215>
- Esping-Andersen, G., & Przeworski, A. (2001). Quantitative cross-national research methods. *International Encyclopedia of the Social & Behavioral Sciences, 12649–12655*. <https://doi.org/10.1016/b0-08-043076-7/00754-3>
- Fabrigar, L. R., & Wegener, D. T. (2012). *Factor analysis*. NY: Oxford University Press.

- Farag, S., Schwanen, T., Dijst, M., & Faber, J. (2007). Shopping online and/or in-store? A structural equation model of the relationships between e-shopping and in-store shopping. *Transportation Research Part A: Policy and Practice*, 41(2), 125–141. <https://doi.org/10.1016/j.tra.2006.02.003>
- Farag, S., Schwanen, T., Dijst, M., & Faber, J. (2007). Shopping online and/or in-store? A structural equation model of the relationships between e-shopping and in-store shopping. *Transportation Research Part A: Policy and Practice*, 41(2), 125–141. <https://doi.org/10.1016/j.tra.2006.02.003>
- Farisa, F. C. (2021, October 18). *PPKM level 1-4 diperpanjang 14 Hari hingga 1 November*. KOMPAS.com. Retrieved June 24, 2022, from <https://nasional.kompas.com/read/2021/10/18/16314671/ppkm-level-1-4-diperpanjang-14-hari-hingga-1-november#:~:text=Adapun%20PPKM%20Level%201-4,menekan%20laju%20penyebaran%20virus%20corona>
- Farrell, A., & Geist-Martin, P. (2005). Communicating Social Health. *Management Communication Quarterly*, 18(4), 543–592. <https://doi.org/10.1177/0893318904273691>
- Finaka, A. W. (2020). *Kenali 33 Titik Pemeriksaan Saat psbb Jakarta: Indonesia Baik*. indonesiabaik. Retrieved June 24, 2022, from <https://indonesiabaik.id/infografis/kenali-33-titik-pemeriksaan-saat-psbb-jakarta>
- Fontaine, J. R. J. (2005). Equivalence. *Encyclopedia of Social Measurement*, 1, 803–813. <https://doi.org/10.1016/b0-12-369398-5/00116-x>
- Gamm, L., Stone, S., & Pittman, S. (2010). Mental health and mental disorders—a rural challenge: A literature review. *Rural Healthy People*.
- Glahan, S. (2019, January 16). *Why Thailand will stay in third world*. <https://www.bangkokpost.com>. Retrieved June 23, 2022, from <https://www.bangkokpost.com/opinion/opinion/1611714/why-thailand-will-stay-in-third-world>
- Glen, S. (2016, May 11). *Kaiser-Meyer-Olkin (KMO) test for sampling adequacy*. Statistics How To. Retrieved June 25, 2022, from <https://www.statisticshowto.com/kaiser-meyer-olkin/>

- Glen, S. (2021, May 5). *Factor analysis: Easy definition*. Statistics How To. Retrieved June 23, 2022, from <https://www.statisticshowto.com/factor-analysis/>
- Goulias, K. (2000). Traveler Behavior and Values Research for Human-Centered Transportation Systems. *Transportation in the New Millenium*.
- Goulias, K., Davis, A. W., & McBride, E. C. (2020). Introduction and the genome of travel behavior. *Mapping the Travel Behavior Genome*, 1–14. <https://doi.org/10.1016/b978-0-12-817340-4.00001-2>
- Hackney, C. H., & Sanders, G. S. (2003). Religiosity and mental health: A meta-analysis of recent studies. *Journal for the Scientific Study of Religion*, 42(1), 43–55. <https://doi.org/10.1111/1468-5906.t01-1-00160>
- Haddawy, P., Lawpoolsri, S., Sa-ngamuang, C., Su Yin, M., Barkowsky, T., Wiratsudakul, A., Kaewkungwal, J., Khamsiriwatchara, A., Sa-angchai, P., Sattabongkot, J., & Cui, L. (2021). Effects of covid-19 government travel restrictions on mobility in a rural border area of northern Thailand: A Mobile Phone Tracking Study. *PLOS ONE*, 16(2). <https://doi.org/10.1371/journal.pone.0245842>
- Hahn, E. A., DeVellis, R. F., Bode, R. K., Garcia, S. F., Castel, L. D., Eisen, S. V., Bosworth, H. B., Heinemann, A. W., Rothrock, N., & Cella, D. (2010). Measuring Social Health in the patient-reported outcomes Measurement Information System (PROMIS): Item Bank Development and testing. *Quality of Life Research*, 19(7), 1035–1044. <https://doi.org/10.1007/s11136-010-9654-0>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate Data Analysis* (Seventh). Pearson.
- Hallisey, K. (2021, June 2). Take care of your mental health by walking and biking. Transportation. Retrieved July 5, 2022, from <https://transportation.ucla.edu/blog/take-care-your-mental-health-walking-and-biking>
- Handayani, M. (2020, February 27). *Misinterpretation of Indonesia as a developed country*. VOI. Retrieved June 23, 2022, from

<https://voi.id/en/news/3209/misinterpretation-of-indonesia-as-a-developed-country>

Harrell, F. E. (2015). *Regression modeling strategies*. Springer Series in Statistics. <https://doi.org/10.1007/978-3-319-19425-7>

Hotle, S. L., Castillo, M., Garrow, L. A., & Higgins, M. J. (2015). The impact of advance purchase deadlines on airline consumers' search and purchase behaviors. *Transportation Research Part A: Policy and Practice*, 82, 1–16. <https://doi.org/10.1016/j.tra.2015.09.001>

Huber, M., Knottnerus, J. A., Green, L., Horst, H. v., Jadad, A. R., Kromhout, D., Leonard, B., Lorig, K., Loureiro, M. I., Meer, J. W., Schnabel, P., Smith, R., Weel, C. v., & Smid, H. (2011). How should we define health? *BMJ*, 343(jul26 2), d4163–d4163. <https://doi.org/10.1136/bmj.d4163>

Hägerstrand, T. O. R. S. T. E. N. (1970). What about people in regional science? *Transport Sociology*, 143–158. <https://doi.org/10.1016/b978-0-08-023686-5.50017-1>

Imran, N., Zeshan, M., & Pervaiz, Z. (2020). Mental Health Considerations for Children & Adolescents in COVID-19 pandemic. *Pakistan Journal of Medical Sciences*, 36(COVID19). <https://doi.org/10.12669/pjms.36.covid19-s4.2759>

Indonesia 2021 International Religious Freedom Report. United States Department of State • Office of International Religious Freedom. (2021). Retrieved June 21, 2022, from <https://www.state.gov/wp-content/uploads/2022/04/INDONESIA-2021-INTERNATIONAL-RELIGIOUS-FREEDOM-REPORT.pdf>

Indonesia Overview. World Bank. (2022). Retrieved June 21, 2022, from <https://www.worldbank.org/en/country/indonesia/overview>

Indonesia Presidential Secretariat. (2022, May 17). *Pernyataan Pers Presiden RI Terkait Pelonggaran Penggunaan Masker, Istana Bogor, 17 Mei 2022*. Retrieved June 19, 2022, from <https://www.youtube.com/watch?v=xblAVPh32Vs>

Indriartiningtias, R., Hartono, B., & Subagyo. (2019). Pilot Study: Organizational Creativity in Indonesia's Creative Industries. *Proceedings of the*

International Conference on Industrial Engineering and Operations Management, 3080–3087.

Irawan, M. Z., Belgiawan, P. F., Joewono, T. B., Bastariato, F. F., Rizki, M., & Ilahi, A. (2021). Exploring activity-travel behavior changes during the beginning of COVID-19 pandemic in Indonesia. *Transportation*. <https://doi.org/10.1007/s11116-021-10185-5>

Israel, G. D. (1992). Determining sample size.

Javier, N. (2021). *Watching movies has psychological benefits, and here is all we know about it!* The Bridge Chronicle. Retrieved June 23, 2022, from <https://www.thebridgechronicle.com/lifestyle/living/watching-movies-has-psychological-benefits-and-here-is-all-we-know-about-it>

JHU CSSE. (2022). *CSSEGISANDDATA/covid-19: Novel coronavirus (COVID-19) cases, provided by JHU CSSE*. GitHub. Retrieved June 24, 2022, from <https://github.com/CSSEGISandData/COVID-19>

Johnson, J. (2022, May 17). *U.S.: Internet activities*. Statista. Retrieved June 15, 2022, from <https://www.statista.com/statistics/183910/internet-activities-of-us-users/>

Jones, S., & Fox, S. (2009). *Generations Online in 2009*. Pew Research Center Publication.

Kaiser, H. F. (1970). A second generation little jiffy. *Psychometrika*, 35(4), 401–415. <https://doi.org/10.1007/bf02291817>

Kaiser, H. F., & Rice, J. (1974). Little jiffy, Mark IV. *Educational and Psychological Measurement*, 34(1), 111–117. <https://doi.org/10.1177/001316447403400115>

Kang, H., & Scott, D. M. (2010). Exploring day-to-day variability in time use for household members. *Transportation Research Part A: Policy and Practice*, 44(8), 609–619. <https://doi.org/10.1016/j.tra.2010.04.002>

Kitamura, R. (1988). An evaluation of activity-based travel analysis. *Transportation*, 15(1-2). <https://doi.org/10.1007/bf00167973>

Lamkhede, S., & Das, S. (2019). Challenges in search on streaming services. *Proceedings of the 42nd International ACM SIGIR Conference on Research*

and Development in Information Retrieval.
<https://doi.org/10.1145/3331184.3331440>

- Larasati, S., & Purnamasari, D. (2022). Comparative Quality Analysis of Mutual Fund Investment Service on Ajaib and Bibit Application based on User Satisfaction Using PIECES Method. *International Research Journal of Advanced Engineering and Science*, 7(22), 8–13.
- Larson, J. S. (1996). The World Health Organization's definition of Health: Social Versus Spiritual Health. *Social Indicators Research*, 38(2), 181–192.
<https://doi.org/10.1007/bf00300458>
- Leonard Holmes, P. D. (2022, March 4). *What is mental health?* Verywell Mind. Retrieved June 16, 2022, from <https://www.verywellmind.com/what-is-mental-health-2330755>
- Li, M., Zou, M., & Li, H. (2019). Urban Travel Behavior Study based on Data Fusion Model. *Data-Driven Solutions to Transportation Problems*, 111–135.
<https://doi.org/10.1016/b978-0-12-817026-7.00005-9>
- Litman, T. (2016). Evaluating Public Transportation Health Benefits.
- Macpherson, R., Pesola, F., Leamy, M., Bird, V., Le Boutillier, C., Williams, J., & Slade, M. (2015). The relationship between clinical and recovery dimensions of outcome in Mental Health. *Schizophrenia Research*, 175(1-3), 142–147.
<https://doi.org/10.1016/j.schres.2015.10.031>
- Maltby, J., & Day, L. (2000). Depressive symptoms and religious orientation: Examining the relationship between religiosity and depression within the context of other correlates of depression. *Personality and Individual Differences*, 28(2), 383–393. [https://doi.org/10.1016/s0191-8869\(99\)00108-7](https://doi.org/10.1016/s0191-8869(99)00108-7)
- Mangkunegara, C. N., Azzahro, F., & Handayani, P. W. (2018). Analysis of factors affecting user's intention in using Mobile Health Application: A case study of halodoc. *2018 International Conference on Advanced Computer Science and Information Systems (ICACISIS)*.
<https://doi.org/10.1109/icacsis.2018.8618174>

- Mastoni, M., & Rahmawati, R. (2019, March). Desain Pembelajaran Bahasa Inggris Melalui Google Classroom. In Prosiding Seminar Nasional Program Pascasarjana Universitas Pgri Palembang (Vol. 12, No. 01)
- Miller, H. J. (1999). Measuring space-time accessibility benefits within transportation networks: Basic theory and computational procedures. *Geographical Analysis*, 31(2), 187–212. <https://doi.org/10.1111/j.1538-4632.1999.tb00976.x>
- Miller, H. J. (2017). Time Geography and space-time prism. *International Encyclopedia of Geography*, 1–19. <https://doi.org/10.1002/9781118786352.wbieg0431>
- Minihane, J., Buckley, J., & Cripps, K. (2020, December 30). *Traveling to Thailand during COVID-19: What you need to know before you go*. CNN. Retrieved July 5, 2022, from <https://edition.cnn.com/travel/article/thailand-travel-covid-19/index.html>
- Mortimer, G., Fazal e Hasan, S., Andrews, L., & Martin, J. (2016). Online grocery shopping: The impact of shopping frequency on perceived risk. *The International Review of Retail, Distribution and Consumer Research*, 26(2), 202–223. <https://doi.org/10.1080/09593969.2015.1130737>
- Mulyani, Y. (Ed.). (2020). Health Minister Signs Regulation on Guidelines to Propose Large-Scale Social Restrictions amid COVID-19 Pandemic. Cabinet Secretariat of the Republic of Indonesia. Retrieved 2022, from <https://setkab.go.id/en/health-minister-signs-regulation-on-guidelines-to-propose-large-scale-social-restrictions-amid-covid-19-pandemic/>
- Myers, D. G., & Diener, E. (1995). Who is happy? *Psychological Science*, 6(1), 10–19. <https://doi.org/10.1111/j.1467-9280.1995.tb00298.x>
- Naslund, J. A., Bondre, A., Torous, J., & Aschbrenner, K. A. (2020). Social Media and Mental Health: Benefits, risks, and opportunities for research and Practice. *Journal of Technology in Behavioral Science*, 5(3), 245–257. <https://doi.org/10.1007/s41347-020-00134-x>
- Neutens, T., Schwanen, T., & Witlox, F. (2011). The prism of Everyday Life: Towards a new research agenda for Time Geography. *Transport Reviews*, 31(1), 25–47. <https://doi.org/10.1080/01441647.2010.484153>

- Nordbakke, S., & Schwanen, T. (2014). Transport, unmet activity needs and wellbeing in later life: Exploring the links. *Transportation*, 42(6), 1129–1151. <https://doi.org/10.1007/s11116-014-9558-x>
- Ockey, G. J. (2013). Exploratory factor analysis and Structural Equation Modeling. *The Companion to Language Assessment*, 1224–1244. <https://doi.org/10.1002/9781118411360.wbcla114>
- O'Connor, R. C., Wetherall, K., Cleare, S., McClelland, H., Melson, A. J., Niedzwiedz, C. L., O'Carroll, R. E., O'Connor, D. B., Platt, S., Scowcroft, E., Watson, B., Zortea, T., Ferguson, E., & Robb, K. A. (2020). Mental health and well-being during the COVID-19 pandemic: Longitudinal analyses of adults in the UK COVID-19 mental health & wellbeing study. *The British Journal of Psychiatry*, 218(6), 326–333. <https://doi.org/10.1192/bjp.2020.212>
- Pagani, M., Hofacker, C. F., & Goldsmith, R. E. (2011). The influence of personality on active and passive use of social networking sites. *Psychology and Marketing*, 28(5), 441–456. <https://doi.org/10.1002/mar.20395>
- Pembatasan Sosial Berskala Besar*. Coordinating Ministry for Human Development and Cultural Affairs of Indonesia. (2020). Retrieved June 24, 2022, from <https://www.kemenkopmk.go.id/pembatasan-sosial-berskala-besar>
- Penguatan Sistem Kesehatan Dalam pengendalian covid-19*. P2P Kemenkes RI. (2021, December 23). Retrieved June 19, 2022, from <http://p2p.kemkes.go.id/penguatan-sistem-kesehatan-dalam-pengendalian-covid-19/>
- Pinto-Bruno, Á. C., García-Casal, J. A., Csipke, E., Jenaro-Río, C., & Franco-Martín, M. (2016). ICT-based applications to improve social health and social participation in older adults with dementia. A systematic literature review. *Aging & Mental Health*, 21(1), 58–65. <https://doi.org/10.1080/13607863.2016.1262818>
- Pituch, K. A., & Stevens, J. (2016). *Applied multivariate statistics for the Social Sciences* (6th ed.). Routledge.
- Pratama, H., Azman, M. N. A., Kassymova, G. K., & Duisenbayeva, S. S. (2020). The Trend in Using Online Meeting Applications for Learning During the

- Period of Pandemic COVID-19: A Literature Review. *Journal of Innovation in Educational and Cultural Research*, 1(2), 58-68
- Rabe-Hesketh, S., Skrondal, A., & Pickles, A. (2004). Generalized multilevel structural equation modeling. *Psychometrika*, 69(2), 167–190.
- Rabe-Hesketh, S., Skrondal, A., & Zheng, X. (2007). Multilevel structural equation modeling. *Handbook of Latent Variable and Related Models*, 209–227. [https://doi.org/10.1016/s1871-0301\(06\)01010-9](https://doi.org/10.1016/s1871-0301(06)01010-9)
- Rajatanavin, N., Tuangratananon, T., Suphanchaimat, R., & Tangcharoensathien, V. (2021). Responding to the COVID-19 second wave in Thailand by diversifying and adapting lessons from the first wave. *BMJ Global Health*, 6(7). <https://doi.org/10.1136/bmjgh-2021-006178>
- Renne, K. S. (1974). Measurement of Social Health in a general population survey. *Social Science Research*, 3(1), 25–44. [https://doi.org/10.1016/0049-089x\(74\)90017-9](https://doi.org/10.1016/0049-089x(74)90017-9)
- Republic of Indonesia. 2020. Government Regulation No. 21 in 2020 about **PEMBATASAN SOSIAL BERSKALA BESAR DALAM RANGKA PERCEPATAN PENANGANAN CORONA VIRUS DISEASE 2019 (COVID-19)**. Jakarta: President of Indonesian Republic
- Republic of Indonesia. 2020. Presidential Decree No. 7 in 2020 about Task Force for Corona Virus Disease-19 (COVID-19). Jakarta: President of Indonesian Republic
- Republic of Indonesia. 2021. Ministerial Instruction of Internal Affairs No. 23 in 2021 about **PERPANJANGAN PEMBERLAKUAN PEMBATASAN KEGIATAN MASYARAKAT BERBASIS MIKRO DAN MENGOPTIMALKAN POSKO PENANGANAN CORONA VIRUS DISEASE 2019 DI TINGKAT DESA DAN KELURAHAN UNTUK PENGENDALIAN PENYEBARAN CORONA VIRUS DISEASE 2019**. Jakarta: Ministry of Internal Affairs
- Republic of Indonesia. 2021. Ministerial Instruction of Internal Affairs of Indonesia No. 23 in 2021 about **PEMBERLAKUAN PEMBATASAN KEGIATAN MASYARAKAT BERBASIS MIKRO (PPKM)**. Jakarta: Ministry of Internal Affairs.

- Republic of Indonesia. 2022. Joint Letter No. 01/KB/2022, No. 408/2022, No. HK.01.08/MENKES/1140/2022, & No. 420-1026 in 2022. Jakarta: Ministry of Education, Ministry of Religion, Ministry of Health, & Ministry of Internal Affairs
- Ryan, R. M., Rigby, S., & King, K. (1993). Two types of religious internalization and their relations to religious orientations and mental health. *Journal of Personality and Social Psychology*, 65(3), 586–596. <https://doi.org/10.1037/0022-3514.65.3.586>
- Sahni, H., & Sharma, H. (2020). Role of Social Media during the COVID-19 Pandemic: Beneficial, Destructive, or Reconstructive?
- Schwanen, T., Kwan, M.-P., & Ren, F. (2008). How fixed is fixed? gendered rigidity of space–time constraints and geographies of everyday activities. *Geoforum*, 39(6), 2109–2121. <https://doi.org/10.1016/j.geoforum.2008.09.002>
- Signs that Indicate Poor Social Health*. Actimaxx. (2021, December 23). Retrieved June 16, 2022, from <https://actimaxx.com/7-signs-that-indicate-poor-social-health/>
- Smith, D. R. (2021). Review A brief history of Coronaviruses in Thailand. *Journal of Virological Methods*, 289, 114034. <https://doi.org/10.1016/j.jviromet.2020.114034>
- Snook, S. C., & Gorsuch, R. L. (1989). Component analysis versus common factor analysis: A Monte Carlo Study. *Psychological Bulletin*, 106(1), 148–154. <https://doi.org/10.1037/0033-2909.106.1.148>
- Social Health: National Health Portal of India. Social Health | National Health Portal Of India. (2019). Retrieved February 25, 2022, from https://www.nhp.gov.in/social-health_pg
- Social Media Stats Indonesia*. StatCounter Global Stats. (n.d.). Retrieved June 15, 2022, from <https://gs.statcounter.com/social-media-stats/all/indonesia>
- Stankov, L., Kleitman, S., & Jackson, S. A. (2015). Measures of the trait of confidence. *Measures of Personality and Social Psychological Constructs*, 158–189. <https://doi.org/10.1016/b978-0-12-386915-9.00007-3>

- Strangio, S. (2021, January 5). *Thailand orders restrictions as covid-19 cluster spreads*. The Diplomat. Retrieved May 5, 2022, from <https://thediplomat.com/2021/01/thailand-orders-restrictions-as-covid-19-cluster-spreads/>
- Suits, L. F. (2018, August 13). *5 benefits of using social media*. LinkedIn. Retrieved June 15, 2022, from <https://www.linkedin.com/pulse/20140422162738-44670464-5-benefits-of-using-social-media/>
- Susilo, Y. O., & Kitamura, R. (2005). Analysis of day-to-day variability in an individual's action space. *Transportation Research Record: Journal of the Transportation Research Board*, 1902(1), 124–133. <https://doi.org/10.1177/0361198105190200115>
- Thailand 2021 International Religious Freedom Report*. United States Department of State • Office of International Religious Freedom. (2021). Retrieved June 21, 2022, from <https://www.state.gov/wp-content/uploads/2022/04/THAILAND-2021-INTERNATIONAL-RELIGIOUS-FREEDOM-REPORT.pdf>
- Thailand Overview*. World Bank. (2022). Retrieved June 21, 2022, from <https://www.worldbank.org/en/country/thailand/overview>
- Thirunavurakasu, M., Thirunavukarasu, P., & Bhugra, D. (2011). Concepts of Mental Health: Definitions and challenges. *International Journal of Social Psychiatry*, 59(3), 197–198. <https://doi.org/10.1177/0020764011422006>
- Tracking the impact of COVID-19: The next normal beyond coronavirus. McKinsey & Company. (2020). Retrieved March 2022, from <https://www.mckinsey.com/featured-insights/coronavirus-leading-through-the-crisis/interactive>
- UN Office for the Coordination of Humanitarian Affairs. (2022, April 20). *Coronavirus disease 2019 (covid-19) who thailand situation report 232 - 20 April 2022 [en/th] - thailand*. ReliefWeb. Retrieved June 18, 2022, from <https://reliefweb.int/report/thailand/coronavirus-disease-2019-covid-19-who-thailand-situation-report-232-20-april-2022>
- Velarosdela, R. N. (2021, July 15). *Awal Mula Varian delta masuk ke Jakarta Hingga Mendominasi 90 Persen Kasus Covid-19 Halaman all*.

- KOMPAS.com. Retrieved June 24, 2022, from <https://megapolitan.kompas.com/read/2021/07/15/13220151/awal-mula-varian-delta-masuk-ke-jakarta-hingga-mendominasi-90-persen?page=all>
- Vidgen, B., & Yasserli, T. (2016). P-values: Misunderstood and misused. *Frontiers in Physics*, 4. <https://doi.org/10.3389/fphy.2016.00006>
- Vogel, E. A., Rose, J. P., Okdie, B. M., Eckles, K., & Franz, B. (2015). Who compares and despairs? the effect of social comparison orientation on social media use and its outcomes. *Personality and Individual Differences*, 86, 249–256. <https://doi.org/10.1016/j.paid.2015.06.026>
- Weber, M., Harzer, C., Scott Huebner, E., & Hills, K. J. (2015). Measures of life satisfaction across the lifespan. *Measures of Personality and Social Psychological Constructs*, 101–130. <https://doi.org/10.1016/b978-0-12-386915-9.00005-x>
- Wee, B. van, & Witlox, F. (2021). Covid-19 and its long-term effects on activity participation and travel behaviour: A multiperspective view. *Journal of Transport Geography*, 95, 103144. <https://doi.org/10.1016/j.jtrangeo.2021.103144>
- Winter. (2005). *A quick primer on Exploratory Factor Analysis - SUNY Cortland*. Retrieved June 25, 2022, from <https://web.cortland.edu/andersmd/psy341/efa.pdf>
- World Health Organization. (2018). Mental health: Strengthening our response. World Health Organization. Retrieved February 25, 2022, from <https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response>
- World Health Organization. (2020). Archived: Who timeline - covid-19. World Health Organization. Retrieved March 15, 2022, from <https://www.who.int/news/item/27-04-2020-who-timeline---covid-19>
- Zach. (2019, April 22). *A guide to Bartlett's test of sphericity*. Statology. Retrieved June 25, 2022, from <https://www.statology.org/bartletts-test-of-sphericity/#:~:text=Bartlett%27s%20Test%20of%20Sphericity%20compares,are%20orthogonal%2C%20i.e.%20not%20correlated.>

- Zamboni, L., Carli, S., Marika, B., Giordano, R., Saretta, G., & Lugoboni, F. (2021). Covid-19 lockdown: Impact on online gambling, online shopping, web navigation and online pornography. *Journal of Public Health Research*, 10(1). <https://doi.org/10.4081/jphr.2021.1959>
- Zhang, J. (2013, July). Urban forms and health promotion: an evaluation based on health-related QOL indicators. In 13th World Conference on Transport Research (WCTR).

