# Guest editorial

# Guest editorial: COVID-19 Pandemic and Health Informatics Part 2

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With an overwhelming interest in high-quality submission (Huang *et al.*, 2021), we continue with Part II of our special issue on COVID-19 Pandemic and Health Informatics. The selection of papers for Part II of this special issue coincided with the global spread of the Omicron variant. While this variant seems less lethal, it spreads more quickly and generates more breakthrough cases than its predecessors. We anticipate more continuing and breakthrough research in informatics related to COVID-19 as the pandemic evolves. Up to December 2021, we accepted the following 15 papers for the second series of the special issue.

# 1. Re-engineering in learning and library services during the pandemic

Many countries and cities were locked down during the pandemic to avoid spreading the COVID-19. Most schools were closed, and students continued their studies through online training. The trend of reading habits moving from print to electronic (Wang et al., 2016; Yu et al., 2021) has accelerated (Sung and Chiu, 2021). While online learning is not new, it was not the major learning pathway until the pandemic. Feng et al. (2022) collected data from Zhihu, a Chinese website similar to Quora of the US, and conducted an emotional analysis and topic mining on "online training courses (OTC)". They noted that the Chinese public was gradually accepting OTC. In addition, due to the lockdown, most academic libraries were either closed or provided limited services. In this connection, Leung et al. (2022) explored the correlations of user perceptions, academic library usage and social capital during this period. They noted that library users adjusted themselves to use these facilities with social distancing in their minds. Concerning this, readers may compare the results of their findings with those done before COVID-19 under the same context (Zhou et al., 2021; Chan et al., 2020), as well as the study on cultural library spaces by Noh (2021). Yu et al. (2022) also summarized some pragmatic operation management measures of libraries in Hong Kong under COVID-19.

Readers may also be interested in some related articles in Part I of our special issue (Huang et al., 2021). Fasae et al. (2021) reported that academic libraries in Nigeria responded to COVID-19 at the beginning of the pandemic by adjusting how they provided their services to meet user needs. Meng et al. (2021) used the Kano model to study the university students' health information service needs from the academic libraries in China, providing some suggestions for health information, especially in the post-COVID-19 age.

#### 2. Public perception of COVID-19 vaccination and social distancing

In the past two years, we have seen a lot of health misinformation spread on the Internet, which makes many people feel puzzled and panic and, in some cases, directs people to make wrong health decisions (Ho *et al.*, 2022). Much misinformation is about the COVID-19 vaccination information, and we have two papers discussing this issue. Li *et al.* (2022) experimented with 36 students to examine the influence of prior attitude, perceived health threat level, and information limit on their selective exposure to and recall of COVID-19



Library Hi Tech Vol. 40 No. 2, 2022 pp. 281-285 © Emerald Publishing Limited 0737-8831 DOI 10.1108/LHT-04-2022-447 vaccination information. They found that the prior attitude towards the COVID-19 vaccination would affect a person's attitude toward viewing information. In addition, their perceived health threat level would also affect a person to recall of the information viewed. Therefore, they suggested vaccination campaigns should focus on reaching people with a negative attitude. In addition, Mir *et al.* (2022) studied public sentiments related to COVID-19 vaccines through Twitter. They noted that most tweets expressed positive sentiments, and these positive tweets had the highest impacts in terms of likes and retweets. They suggested public health policymakers could see public reaction via Twitter messages. The last paper on this topic, written by Thanh *et al.* (2022), focused on risk communication in enhancing COVID-19 risk perceptions and adopting related preventive behaviour taken by street vendors in Vietnam. They showed that street vendors in Vietnam perceived high risks associated with COVID-19 and adopted preventive behaviour.

Readers may also be interested in some articles on related information behaviour in Part I of our special issue (Huang *et al.*, 2021). A cross-sectional survey (Naveed *et al.*, 2021) showed the prevalence of conspiracy beliefs and fear of COVID-19 among Pakistan university students and how their conspiracy beliefs could predict their fear of COVID-19. Nguyen and Le (2021) investigated how to strengthen the uptake of older people's COVID-19 behavioural outcomes due to information value and perceived threat through social media, which presented plausible reasons for behavioural disclosure, including facemask wearing, handwashing and social distancing. Li *et al.* (2021) selected the enumeration data of the early COVID-19 theme papers spread on social media networks as the research object and explored the law and characteristics of the spread of scientific papers on social media platforms. Readers may also be interested in Hasan *et al.* (2021), who examined the pros and cons of applying blockchain technology from the perspective of epidemic prevention and control using data collected from China through case studies.

### 3. Use of contact tracing apps and telemedicine during the pandemic

The pandemic provides opportunities for advancing contact tracing and telemedicine technology. Nguyen *et al.* (2022) explored the adoption of contact tracing apps in the US through partial least squares structural equation modelling (PLS-SEM) and fuzzy set/qualitative comparative analysis (fsQCA). They showed that health risk perception, health information orientation and perceived usefulness of the contact tracing apps positively affected users' adoption and actual use of these apps. On the other hand, Rahi (2022) investigated the adoption behaviour of telemedicine during the pandemic using data collected from Pakistani citizens. The result suggested that the adoption of telemedicine could be enhanced by improving user performance expectancy and effort expectancy. Readers may also be interested in Rocha *et al.* (2021), who proposed an original information system for epidemic control based on contact tracing in Part I of our special issue.

## 4. Research funding and bibliometric research

As we expect, many research fundings are invested, and research opportunities have been created due to the COVID-19 pandemic. Shueb *et al.* (2022) mapped the funding status of COVID-19 research using data retrieved from the Web of Science (WoS) and presented their finding. On the other hand, Loan and Shah (2022) used quantitative and visualization approaches to map coronavirus research from 1989 to 2020. Further, Riahinia *et al.* (2022) used social network analysis to study the synergistic networks for COVID-19 research. Last but not least, Zhu and Lei (2022) used a dependency-based machine learning approach to demonstrate that information retrieval methods can help researchers find the latest trends of COVID-19 research. In addition, Wu *et al.* (2022) also reviewed the existing evaluation

methods of open government health data. They proposed a tool for accurate assessment of Guest editorial public health data for decision-making during the pandemic.

Readers may also be interested in some related articles in Part I of our special issue. Danesh et al. (2021) reported the topic modelling of the global coronavirus publications in the last 50 years with applied text mining and Latent Dirichlet allocation, Saab et al. (2021) developed a deterministic model that quantifies previously adopted preventive measures driven by the reported number of deaths in Italy and India and used it to derive the optimal exiting policy using the inverse dynamics of the model. Feng et al. (2021b) found that the growth sequence of the number of new confirmed COVID-19 cases per day had a significant cluster of fluctuations. They noted that there are four inflection points in the global time series of new confirmed cases and the number of deaths per day. In addition, Feng et al. (2021a) also showed that open-access articles related to COVID-19 have significantly higher citation frequency and use frequency than non-open-access articles. However, Allen (2021) also pointed out that predatory journals might attempt to leverage the confusion caused by COVID-19 to publish low-quality academic work. As for other recent bibliometric and literature reviews, we have recently arranged a special selection in our recent issue (Chiu and Ho, 2021).

### 5. The aftermath of COVID-19 pandemic

As we move into the second year of the pandemic, some researchers focus on aftermath topics such as reopening readiness, people's cyberchondria and barriers to implementing social distancing in the workplace. First, Suh and Alhaery (2022) measured the reopening readiness in the US states and developed two indexes, i.e. COVID-19 reopening readiness and severity. They noted the states' response to COVID-19 would affect their readiness to reopen. Also, the pandemic affected our psychological well-being (Ye and Ho, 2022) and made us worried about our daily life. More importantly, parents also need to worry about their family and their kids' education. In this connection, Aycin and Can (2022) studied the relationship between stress experienced by parents and their cyberchondria. They showed a positive correlation between the two. Lastly, Abbass et al. (2022) found ten barriers to implementing social distancing at the workplace. Readers may also be interested in Kumar et al. (2021), who attempted to simulate people's interaction due to economic reopening, concerning confirmed cases at various places as per changing situation has been made using data obtained from India at the early stage of COVID-19. Their results suggested the preparedness and mitigation strategy for a threefold lockdown management scheme in allinclusive.

We hope you will enjoy our selection for this special issue. Readers may also be interested in our recent special issue on "Data for better health" (Wu and Yu, 2020). We wish our readers and our community at large good health and safety.

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#### References

- Abbass, K., Niazi, A.A.K., Qazi, T.F., Basit, A. and Song, H. (2022), "The aftermath of COVID-19 pandemic period: barriers in implementation of social distancing at workplace", *Library Hi Tech*, Vol. 40 No. 2, pp. 569-585.
- Allen, R.M. (2021), "When peril responds to plague: predatory journal engagement with COVID-19", Library Hi Tech, Vol. 39 No. 3, pp. 746-760.
- Avçin, E. and Can, Ş. (2022), "The relationship between the stress experienced by parents and cyberchondria during the pandemic process", Library Hi Tech, Vol. 40 No. 2, pp. 548-568.
- Chan, M.K.Y., Chiu, D.K.W. and Lam, E.T.H. (2020), "Effectiveness of overnight learning commons: a comparative study", The Journal of Academic Librarianship, Vol. 46 No. 7, 102253.
- Chiu, D.K.W. and Ho, K.K.W. (2021), "Editorial", Library Hi Tech, Vol. 39 No. 4, pp. 913-914.
- Danesh, F., Dastani, M. and Ghorbani, M. (2021), "Retrospective and prospective approaches of coronavirus publications in the last half-century: a Latent Dirichlet allocation analysis", *Library Hi Tech*, Vol. 39 No. 3, pp. 855-872.
- Fasae, J.K., Adekoya, C.O. and Adegbilero-Iwari, I. (2021), "Academic libraries' response to the COVID-19 pandemic in Nigeria", Library Hi Tech, Vol. 39 No. 3, pp. 696-710.
- Feng, X., Sun, L., Liu, Y., Li, J. and Wu, Y. (2021a), "Bibliometric analysis on OA articles of public health emergencies from multidimensional perspective", *Library Hi Tech*, Vol. 39 No. 3, pp. 722-745.
- Feng, X., Zhang, H., Zhang, Y., Sun, L., Li, J. and Wu, Y. (2021b), "On fluctuating characteristics of global COVID-19 cases and identification of inflection points", *Library Hi Tech*, Vol. 39 No. 3, pp. 888-902.
- Feng, X., Wang, X. and Zhang, Y. (2022), "Research on public emotional polarization and public opinion evolution of OTC and learning during the COVID-19 epidemic: taking the topic of OTC on Zhihu as an example", *Library Hi Tech*, Vol. 40 No. 2, pp. 286-303.
- Hasan, M.R., Deng, S., Sultana, N. and Hossain, M.Z. (2021), "The applicability of blockchain technology in healthcare contexts to contain COVID-19 challenges", *Library Hi Tech*, Vol. 39 No. 3, pp. 814-833.
- Ho, K.K.W., Chan, J.Y. and Chiu, D.K.W. (2022), "Fake news and misinformation during the Pandemic: what we know, and what we don't know", IEEE IT Professional, Vol. 24 No. 2.
- Huang, P.S., Paulino, Y., So, S., Chiu, D.K.W. and Ho, K.K.W. (2021), "Special issue editorial COVID-19 pandemic and health informatics (part 1)", Library Hi-Tech, Vol. 39 No. 3, pp. 693-695.
- Kumar, G., Kumar, A., Khan, F.M. and Gupta, R. (2021), "Sprawl of the COVID-19 in changing scenario: a methodology based on social interaction", *Library Hi Tech*, Vol. 39 No. 3, pp. 903-911.
- Leung, T.N., Chiu, D.K.W., Ho, K.K.W. and Luk, C.K.L. (2022), "User perceptions, academic library usage and social capital: a correlation analysis under COVID-19 after library renovation", Library Hi Tech, Vol. 40 No. 2, pp. 304-322.
- Li, J., Sun, L., Feng, X., He, P. and Zhang, Y. (2021), "Social media communication of the scientific and technological literature in emergency under COVID-19", *Library Hi Tech*, Vol. 39 No. 3, pp. 796-813.
- Li, K., Li, Y. and Zhang, P. (2022), "Selective exposure to COVID-19 vaccination information: the influence of prior attitude, perceived threat level and information limit", *Library Hi Tech*, Vol. 40 No. 2, pp. 323-339.
- Loan, F.A. and Shah, U.Y. (2022), "Mapping coronavirus research: quantitative and visualization approaches", Library Hi Tech, Vol. 40 No. 2, pp. 437-453.
- Meng, Y., Dong, L., Guan, R. and Zhang, Y. (2021), "An analysis of university students' health information service needs from academic library in the post-COVID-19 age through Kano model", *Library Hi Tech*, Vol. 39 No. 3, pp. 711-721.
- Mir, A.A., Rathinam, S. and Gul, S. (2022), "Public perception of COVID-19 vaccines from the digital footprints left on Twitter: analyzing positive, neutral and negative sentiments of Twitterati", Library Hi Tech, Vol. 40 No. 2, pp. 340-356.

- Naveed, M.A., Malik, A. and Mahmood, K. (2021), "Impact of conspiracy beliefs on Covid-19 fear and health protective behavior: a case of university students", *Library Hi Tech*, Vol. 39 No. 3, pp. 761-775.
- Nguyen, T.H. and Le, X.C. (2021), "How social media fosters the elders' COVID-19 preventive behaviors: perspectives of information value and perceived threat", *Library Hi Tech*, Vol. 39 No. 3, pp. 776-795.
- Nguyen, T.T., Nguyen, T.C.A.H. and Tran, C.D. (2022), "Exploring individuals' adoption of COVID-19 contact-tracing apps: a mixed-methods approach", *Library Hi Tech*, Vol. 40 No. 2, pp. 376-393.
- Noh, Y. (2021), "The analytic study of librarian-user and importance-satisfaction on the use factor of complex cultural space in library", *Library Hi Tech*. doi: 10.1108/LHT-06-2020-0135.
- Rahi, S. (2022), "Assessing individual behavior towards adoption of telemedicine application during COVID-19 Pandemic: evidence from emerging market", *Library Hi Tech*, Vol. 40 No. 2, pp. 394-420.
- Riahinia, N., Danesh, F. and GhaviDel, S. (2022), "Synergistic networks of COVID-19's top papers", Library Hi Tech, Vol. 40 No. 2, pp. 454-494.
- Rocha, G.C., Paiva, H.M., Sanches, D.G., Fiks, D., Castro, R.M. and Silva, LFAE (2021), "Information system for epidemic control: a computational solution addressing successful experiences and main challenges", *Library Hi Tech*, Vol. 39 No. 3, pp. 834-854.
- Saab, S., Al Abbas, M., Samaha, R.N., Jaafar, R., Saab, K.K. and Saab, S.S. Jr (2021), "Setting the boundaries of COVID-19 lockdown relaxation measures", *Library Hi Tech*, Vol. 39 No. 3, pp. 873-887.
- Shueb, S., Gul, S., Nisa, N.T., Shabir, T., Ur Rehman, S. and Hussain, A. (2022), "Measuring the funding landscape of COVID-19 research", *Library Hi Tech*, Vol. 40 No. 2, pp. 421-436.
- Suh, E. and Alhaery, M. (2022), "Measuring reopening readiness: a universal COVID-19 index for US states", Library Hi Tech, Vol. 40 No. 2, pp. 535-547.
- Sung, Y.Y.C. and Chiu, D.K.W. (2021), "E-book or print book: parents' current view in Hong Kong", Library Hi Tech. doi: 10.1108/LHT-09-2020-0230.
- Thanh, P.T., Nguyen, H.T.H., Ngan, L.T.B., Nguyen, D.M.D., Phan, G.H. and Nguyen, T.M.N. (2022), "No one left behind: risk communication to the street vendors during COVID-19 social distancing", *Library Hi Tech*, Vol. 40 No. 2, pp. 357-375.
- Wang, P., Chiu, D.K.W., Ho, K.K.W. and Lo, P. (2016), "Why read it on your mobile device? Change in reading habit of electronic magazines for university students", *The Journal of Academic Librarianship*, Vol. 42 No. 6, pp. 664-669.
- Wu, D. and Yu, F. (2020), "Guest editorial", Library Hi Tech, Vol. 38 No. 4, pp. 701-703.
- Wu, D., Xu, H., Yongyi, W. and Zhu, H. (2022), "Quality of government health data in COVID-19: definition and testing of an open government health data quality evaluation framework", *Library Hi Tech*, Vol. 40 No. 2, pp. 516-534.
- Ye, S. and Ho, K.K.W. (2022), "College students' Twitter usage and psychological well-being from the perspective of generalised trust: comparing changes before and during the COVID-19 pandemic", *Library Hi Tech*. doi: 10.1108/LHT-06-2021-0178.
- Yu, H.Y., Tsoi, Y.Y., Rhim, A.H.R., Chiu, D.K.W. and Lung, M.M.-W. (2021), "Changes in habits of electronic news usage on mobile devices in university students: a comparative survey", *Library Hi Tech*. doi: 10.1108/LHT-03-2021-0085.
- Yu, P.Y., Lam, E.T.H. and Chiu, D.K.W. (2022), "Operation management of academic libraries in Hong Kong under COVID-19", Library Hi Tech. doi: 10.1108/LHT-10-2021-0342.
- Zhou, J., Lam, E., Au, C.H., Lo, P. and Chiu, D.K.W. (2021), "Library café or elsewhere: usage of study space by different majors under contemporary technological environment", *Library Hi Tech*. doi: 10.1108/LHT-03-2021-0103.
- Zhu, H. and Lei, L. (2022), "A dependency-based machine learning approach to the identification of researchtopics: a case in COVID-19 studies", Library Hi Tech, Vol. 40 No. 2, pp. 495-515.