



unesco

Lest We Forget

Youth Lenses

on Coping

in a Post-COVID World

**Insights from the
Youth as Researchers
Initiative on COVID-19**

Published in 2024 by the United Nations Educational, Scientific and Cultural Organization,
7, place de Fontenoy, 75352 Paris 07 SP, France

© UNESCO 2024

ISBN 978-92-3-100696-8



This publication is available in Open Access under the Attribution-ShareAlike 3.0 IGO (CC-BY-SA 3.0 IGO) license (<http://creativecommons.org/licenses/by-sa/3.0/igo/>). By using the content of this publication, the users accept to be bound by the terms of use of the UNESCO Open Access Repository (<https://www.unesco.org/en/open-access/cc-sa>).

Images marked with an asterisk (*) do not fall under the [CC-BY-SA](#) license and may not be used or reproduced without the prior permission of the copyright holders.

The designations employed and the presentation of material throughout this publication do not imply the expression of any opinion whatsoever on the part of UNESCO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The ideas and opinions expressed in this publication are those of the authors; they are not necessarily those of UNESCO and do not commit the Organization.

Graphic design, cover design and typeset: Zulfikar Zulfikar (@puangfikar)

Photo credits:

- © HerolImagesonOffset/Shutterstock*: (p. xviii)
- © Rawpixel.com/Shutterstock*: (p. 18)
- © stokkete/Depositphotos*: (p. 40)
- © Prostock-studio/Shutterstock*: (p. 58)
- © Gatot Adriansyah/Vecteezy*: (p.78)
- © Tirachard Kumtanom/Shutterstock*: (p. 96)
- © Egoitz Bengoetxea/Shutterstock*: (p. 120)
- © Goodboy Picture Company/IStockPhoto*: (p. 142)
- © fizkes/Shutterstock*: (p. 166)
- © junpinzon/Shutterstock*: (p. 182)

Printed by UNESCO

Printed in France

SHORT SUMMARY

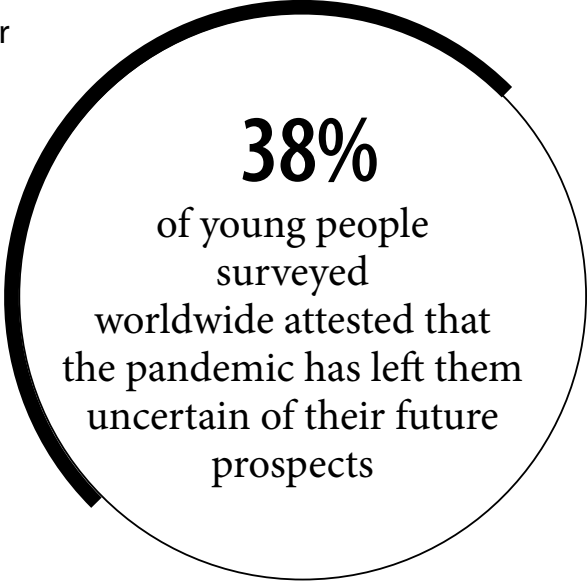
Youth voices on the impact and lessons from the pandemic

The COVID-19 pandemic drastically impacted the lives of young people, leaving them uncertain of their prospects. This uncertainty lingers on, accentuated by ongoing crises. In parallel, the pandemic also revealed examples of resilience and solidarity by youth mobilising to support their communities. Understanding the lessons of the pandemic is fundamental to address youth concerns and to develop lasting solutions with them.

This publication intends to inform responses to youth challenges aggravated since the pandemic and through subsequent crises. It uses youth-led research to unveil evidence of the pandemic's impact on youth, and their actions, in response.

The ten featured studies were developed under UNESCO's Youth As Researchers initiative on 'Exploring the impact of COVID-19 on youth' (2020-2022) which engaged over 10,000 young people across all regions.

UNESCO is committed to bringing the ideas of youth to policy-makers and practitioners to generate lasting solutions.



38%
of young people
surveyed
worldwide attested that
the pandemic has left them
uncertain of their future
prospects



unesco

'Since wars begin in the minds of men and women it is in the minds of men and women that the defences of peace must be constructed'



unesco

Lest We Forget Youth Lenses on Coping in a Post-COVID World

**Insights from the
Youth as Researchers
Initiative on COVID-19**

FOREWORD

By Gabriela Ramos, Assistant Director-General for Social and Human Sciences, UNESCO

The COVID-19 pandemic marked a turning point for the current generation of youth, leaving them uncertain of their prospects, as attested by 38% of young people surveyed globally¹. The challenges generated by the pandemic linger on beyond the emergency phase and are compounded by overlapping crises, conflicts, and polarization. Indeed, those who were 15 years old when the pandemic broke are coming of age in a continuously challenging environment. In parallel, the pandemic allowed many young people around the world to show resilience and solidarity in the face of adversity, as showcased by the levels of civic activity during COVID-19 (74% of young respondents in South Asia and 65% of respondents in Brazil engaged in relief projects)².

Grasping the impact and lessons of the pandemic is a necessary foundation to understand the younger generation's needs, post-COVID-19. This publication presents evidence of the pandemic's impact on youth, as well as of impactful actions by young people, in response. It recognizes and honours ten studies designed and authored by youth throughout the pandemic. These were developed under UNESCO's Youth as Researchers (YAR) initiative on

'Exploring the impact of COVID-19 on youth' (2020-2022). The initiative was co-led with the UNESCO Chairs at the University of Galway (Ireland) and the Pennsylvania State University (United States of America) and engaging over 10,000 young people across all regions.

The ten studies – three global, four regional and three national – showcase shared and context-specific youth experiences around the globe. They also present examples of youth-led adaptation on challenges that remain relevant today. For example, on youth mental health the global study (pp.37-57) reports an alarming increase in youth loneliness. It also reveals a lack of access to information about mental health policies and services at country level (60% of respondents). These findings are enriched through the studies in Asia - Pacific (pp.75-93) and in Europe and North America (pp.115-137). These identify context-specific barriers to accessing such services while also discussing the role of stigma and traditional belief systems in dealing with youth mental health. Finally, the national study in Haiti (pp.161-174) showcases youth using social media to endure the pandemic, through learning, recreational and social activities beneficial to their mental health.

This publication ultimately aims to provide youth-led research the visibility it deserves. Youth-led research is undoubtedly a stepping stone to understanding youth realities and advancing concrete solutions. After all, who can better understand and express the realities of young people than youth themselves? As one young author stated: *‘The Youth as Researchers has the potential to illuminate inspirational stories and narratives about young people’s struggles and triumphs’*.

We are grateful to all the young authors for their laborious work and for sharing with UNESCO the views of the young respondents who engaged in their research. We are equally grateful to the YAR Editorial Board and peer reviewers for their important contributions. UNESCO is committed to bringing the ideas of youth to decision-makers, to make them count and to generate policy solutions. UNESCO will also continue supporting decision-makers in integrating this knowledge into tangible policy reform and action.

¹ ILO. 2020. Youth & COVID-19: Impacts on jobs, education, rights and mental well-being. https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_753026.pdf

² UNESCO. 2022. Global Policy Brief, Youth as Researchers Exploring the Impact of COVID-19 on Youth, <https://unesdoc.unesco.org/ark:/48223/pf0000381506>

ACKNOWLEDGEMENTS

This publication would not have been possible without the unwavering commitment, resilience, creative spirit and invaluable contributions of the 58 young authors:

- | | | |
|----------------------------------|----------------------------------|-----------------------------|
| 1. Max Amanu | 21. Grace Gong | 41. Nishina Prévilon |
| 2. Afifa Anjum | 22. Marline Bilgaï Grand Jean | 42. Islam Qadous |
| 3. Peterson Antenor | 23. Chunyuan Hu | 43. Ivan Ramírez |
| 4. Ruth Ayoola | 24. Robin Huang | 44. Rehab A. Rayan |
| 5. Rashed Bajaj | 25. Nem Jean-Baptiste | 45. Abdul Rehman |
| 6. Michael Beshay | 26. Holly Kandel | 46. Fouzia Reza |
| 7. Aliya Beyhum | 27. Sondos Khattab | 47. Danilo V. Rogayan Jr |
| 8. Sana Bukhari | 28. Smriti Khemka | 48. Gillian Mary B. Sagadal |
| 9. Ernst Dimitry Cadet | 29. Yuria Kubo | 49. Nagui Salama |
| 10. Susan Cheong | 30. Astuti Kusumaningrum | 50. David Sánchez |
| 11. Portia Ozioma Chigbu | 31. Pauline Jane G. Mandrilla | 51. Faye Simanjuntak |
| 12. Lilian Chiu | 32. Munkhzul Mikhaabaatar | 52. Yujin Song |
| 13. Wynona Eurj M. Curaming | 33. Apabrita Mitra Sarkar | 53. Ludwika Telusmon |
| 14. Sara Ebenezer | 34. Shivangshi Mitra | 54. Kristle Teng |
| 15. Efetobor Stephanie Effevottu | 35. Ayesha Priyadarshini Mohanty | 55. Olanike Timipa-Uge |
| 16. Charles Falajiki | 36. Mustakim Moyeed | 56. Udeerna Tippabhatla |
| 17. Babajide Charles Falemara | 37. Muhammad Suleiman Murkthar | 57. Saad Uakkas |
| 18. Donna Fry | 38. Iyanuoluwa Emmanuel Olalowo | 58. Yanjin Zhu |
| 19. Miguel Fuentes | 39. David Otujor Okpatuma | |
| 20. Nicanor D. Germono Jr | 40. Nephtalie Pierre | |

Peer-reviewers of individual papers:

Alice Amegah, Nephtaly Andoney Pierre-Louis, Tee Wee Ang, Janelle Babb, Mark Brennan, William Businge, Leonard Catubay, Pirun Chan, Phinith Chanthalangsy, Alexandra David, Nhial Deng, Pat Dolan, Jack Gaffey, Laura Guay, Mohsen Gul, Eleanor Horrocks, Danielle Kennan, Maria Kyriotou, Mamadou Lamine Sow, Huong Le Thu, Brian Oanga Moogi, Jeba Paula, Salim Shehadeh, Yingying Shi, Seiko Sugita, Clarissa Tanurahardja, Kaila Thorn, Nissa Yaing Torres Soto, Nelson Ukor, Carlos Vargas-Tamez, Sue Vize, Satoko Yano, Moneera Yassien, David Young, Judy Zhu.

YAR Editorial Board:

Danielle Kennan, Raphaela Rezende Nogueira Rodrigues, Sue Vize.

Co-editors of the publication:

Kristina Balalovska, Syreen Forest, Laura Guay, Maria Kyriotou, Sue Vize.

Youth-led research teams' coordinators:

Nephtaly Andoney Pierre-Louis, Kristina Balalovska, George Charonis, Jana El Baba, Johanna Ella May Erroba, Undral Ganbaatar, Shifti Kamal, Maria Kyriotou, Jeffrey Clark Lochard, Arina Myassoyed, Heba Shama, Kaila Thorn, Mahika Vajpeyi, Sue Vize.

Special thanks:

Special thanks to Ângela Melo, former Chief a.i. of the Youth Programme, former Director of Programmes and Policies, Director of the Research, Ethics and Inclusion Division, and Souria Saad-Zoi, Chief of UNESCO's Youth Programme. Their effort, support, commitment and guidance throughout this process have been invaluable.

TABLE OF CONTENTS

| | |
|--|------------|
| 01. Foreword | |
| by Gabriela Ramos, Assistant Director-General for Social and Human Sciences, UNESCO | ..vi |
| 02. Acknowledgements | viii |
| 03. Executive Summary | xii |
| 04. Introduction | |
| by Professor Pat Dolan, UNESCO Chair in Children, Youth and Civic Engagement, University of Galway, Ireland and | |
| by Dr Mark Brennan, UNESCO Chair on Global Citizenship Education for Sustainable Peace through Youth and Community Engagement, Pennsylvania State University, United States of America | ..xvi |
| 05. Youth as Researchers papers | 1 |
| Changes of COVID-19 on How Young People Exercise their Sexual and Reproductive Health and Rights (Global Study) | 1 |
| The COVID-19 Pandemic and Youth Well-being: a (Global Study) | 19 |
| ‘Worried about my Future’: Access and Quality of Higher Education during the COVID-19 Pandemic around the World (Global Study) | 41 |
| University Students in the Era of COVID-19: Using Technology to Overcome Challenges in Higher Education in the Arab Region | 59 |
| Perceived Barriers in Accessing Professional Mental Health Services among Youth in Asia-Pacific during the COVID-19 Pandemic | 79 |
| Transitioning to Online Platforms: How COVID-19 Restrictions Affect Higher Education Students’ Learning in East Asia and Australia | 97 |
| Youth Access to Information about COVID-19 and its Potential Influences on Behaviour and Well-being (Europe and North America) | 121 |
| Assessment of Learning Opportunities among Youth in Nigeria during the COVID-19 Pandemic | 143 |
| Social Media Use and Psychosocial Well-being of Young Haitians in the Era of COVID-19 (Haiti) | 167 |
| Youth Leaders’ Response to COVID-19 – The Case of the Sangguniang Kabataan in the Philippines | 183 |
| 06. Key Policy Messages | 213 |
| 07. Closing message | |
| by the Youth Steering Committee of the Youth As Researchers (YAR) on COVID-19 initiative | 217 |

ABBREVIATIONS AND ACRONYMS

| | | | |
|-------------|---|----------------|--|
| CDC | Centers for Disease Control and Prevention | LYDC | Local Youth Development Council |
| COA | Commission on Audit | NGO | Non-Governmental Organization |
| CSV | Comma-separated values | NYC | National Youth Commission (The Philippines) |
| DAP | Development Academy of the Philippines | OECD | Organisation for Economic Co-operation and Development |
| DILG | Department of Interior and Local Government | PPA | Programmes, projects, and activities |
| DRR | Disaster Risk Reduction | PYPD | Philippine Youth Development Plan |
| ECQ | Enhanced Community Quarantine | SARS | Severe acute respiratory syndrome |
| EIC | Education and Information Campaign | SRH | Sexual and reproductive health |
| ER | Emergency remote | SHRH | Sexual and reproductive health and rights |
| ERT | Emergency remote teaching | SK | Sangguniang Kabataan |
| FCT | Federal Capital Territory (Nigeria) | STI | Sexually transmitted infection |
| GCQ | General Community Quarantine | UN | United Nations |
| H1N1 | Type of influenza A virus | UNDP | United Nations Development Programme |
| HEI | Higher education institution | UNESCO | United Nations Educational, Scientific and Cultural Organization |
| HIV | Human immunodeficiency virus | UNESCAP | United Nations Economic and Social Commission for Asia and the Pacific |
| ILO | International Labour Organization | UNFPA | United Nations Population Fund |
| IPPF | International Planned Parenthood Federation | UNICEF | United Nations Children's Fund |
| LGU | Local Government Unit | VDH | Volunteerism for the Development of Haiti |
| YAR | Youth as Researchers | WHO | World Health Organization |

EXECUTIVE SUMMARY

Between 2020 and 2023, the COVID-19 pandemic drastically impacted the lives of young people. Anxiety and depression increased by 200% among youth,¹ and young women experienced a ‘shadow pandemic’ of domestic violence, increased caregiving work, and risk of early marriage². The concept of a ‘COVID-19’ or ‘lockdown’ generation has emerged in the media to describe how youth may be scarred for decades to come³. Yet, youth have also been proving their resilience in the face of adversity, through social activism (global 31% volunteering for pandemic response)⁴ and supporting relief projects (e.g. 74% South Asia, 65% in Brazil)⁵.

While May 2023 marked the end of COVID-19 as a public health emergency, the pandemic’s imprint on societies remains. Social scientists will spend decades unravelling its consequences⁶ that are further compounded by subsequent crises, conflicts, disasters and polarization. Current literature is already reporting radical shifts in health, social vulnerability, education, social capital, social relationships, social mobility, and social welfare. Such shifts involve dramatic psychological and emotional effects, exacerbation of segregation and poverty, disruption in educational systems and an information divide⁷. These consequences frame the heavy toll on the lives and prospects of youth today which can no longer remain unattended. At the same time, the pandemic also offered stories of youth resilience that need to serve as lessons to enhance social resilience and inspire future policy and action.

This publication is intended to inform responses to contemporary challenges that have been generated through the pandemic and further aggravated as a result of crises, conflict and disasters. It uses youth-led research to unveil what the COVID-19 pandemic signified for young people and what lessons can be drawn on the capacity of youth to rise above crises, adapt, and devise solutions. The ten featured studies⁸ (three global, four regional, three national) were developed under UNESCO’s Youth as Researchers (YAR) on ‘Exploring the impact of COVID-19 on youth’ (2020-2022), designed and implemented with youth, by the UNESCO Social and Human Sciences Sector and the UNESCO Chairs at the University of Galway (Ireland) and the Pennsylvania State University (United States of America).

The **global studies’ section** (pp.1-57) provides insights around the universally reported challenges on access and quality of higher education (pp.1-19), and on youth mental health (pp.37-57). A third study in this section (pp.19-37) sheds light on the pandemic’s toll on youth sexual and reproductive health and rights (SRHR) – an issue that had not been significantly reported during the pandemic.

All three studies point to systemic factors that currently affect, and unless properly addressed will continue to affect, the experience of being young. Chief among those are the gender disparity - with young women facing greater disruptions in accessing remote learning or quality sexual and

reproductive health services (SRH) - and the digital divide, with most students reporting having an unstable internet connection. The deterioration of social relations emerges as another important factor, with an alarming number of young respondents becoming lonelier since the onset of COVID-19 (44.3%) or seeing their relationships worsen with teachers (43.6%) and fellow students (44%) during remote learning. In addition, the absence, defunding, or lack of information about national policies on mental health and on SRHR further aggravated the pandemic's impact on youth.

The **regional studies' section** (pp.57-137) offers a more contextualized exploration of the pandemic's lessons. The studies on Higher Education in the Arab-States (pp.57-75) and in East Asia and Australia (pp.93-115) reconfirm the globally reported digital divide and challenges in the quality of education and in interactions with professors and peers. They also showcase specific experiences of youth in the respective regions. For example, while youth in the Arab-States felt that online learning increased their procrastination level (69%) and worsened their sleep patterns (47%), they also recognized that online learning (52%) and exams (47%) were less stressful than in-person ones and acknowledged that they were quickly able to adapt their lifestyle to the online learning system (62%). On their end, youth in East Asia and Australia asserted that the student's surrounding circumstances⁹ were important components to their learning and that reduction in tuition fees (71%), access to free internet (62%) and library (51%), and flexibility to do assignments individually or in groups (43%) were the most demanded support needed by students overall.

¹ Organisation for Economic Co-operation and Development (OECD). (2020). Youth and COVID-19: Response, recovery and resilience. Retrieved from <https://www.oecd.org/coronavirus/policy-responses/youth-and-covid-19-response-recovery-and-resilience-c40e61c6/>

² United Nations Educational, Scientific and Cultural Organization (UNESCO). (2022). Global Policy Brief, Youth as Researchers. Exploring the Impact of COVID-19 on Youth. Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000381506> and International Labour Organization (ILO). (2021). Youth Employment in Times of COVID. A global review of COVID-19 policy responses to tackle (un)employment and disadvantage among young people. Retrieved from https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_823751.pdf

³ International Labour Organization (ILO). (2021). Youth Employment in Times of COVID. A global review of COVID-19 policy responses to tackle (un)employment and disadvantage among young people. Retrieved from https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_823751.pdf

⁴ International Labour Organization (ILO). (2020). Youth & COVID-19: Impacts on jobs, education, rights and mental well-being. Retrieved from https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_753026.pdf

⁵ United Nations Educational, Scientific and Cultural Organization (UNESCO). (2022). Global Policy Brief, Youth as Researchers Exploring the Impact of COVID-19 on Youth. Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000381506>

⁶ Redbird, B., Harbridge-Yong, L. and Mersey, R.D. (2022). The Social and Political Impact of the COVID-19 Pandemic: An Introduction. *RSF: The Russell Sage Foundation Journal of the Social Sciences* 8(8), 1-29. Retrieved from <https://www.muse.jhu.edu/article/875585>.

⁷ Alizadeh, H., Sharifi, A., Damanbagh, S., Nazarnia, H. and Nazarnia, M. (2023). Impacts of the COVID-19 pandemic on the social sphere and lessons for crisis management: a literature review. *Nat Hazards* 117, 2139–2164 (2023). Retrieved from <https://doi.org/10.1007/s11069-023-05959-2>

⁸ Three global studies, four regional and three country studies.

⁹ For example, their financial situation, study environment, internet access, and disconnection from learning communities.

Similarly, the regional studies on well-being and mental health in Asia-Pacific (pp.75-93) and Europe and North America (pp.115-137) deepen the understanding of the experiences of youth. While reconfirming the globally perceived lack of access to mental health policies and services, the study in Asia-Pacific identifies the top three barriers to accessing such services¹⁰ while also suggesting that ‘traditional belief systems’, stigmas and insufficient mental health services exacerbate those barriers. Adding one more piece to the puzzle, the study on youth mental health in Europe and North America explores both the stress sources for youth in that region and the factors that youth perceive as beneficial for their mental health. The study also reveals the most trustworthy information mediums for young people during the pandemic, with online news sources (83%) and verified social media accounts (82%) at the top of the list.

The **national studies’ section** (pp.137-205) provides three country-specific examples (Nigeria, Haiti, The Philippines) of the pandemic’s impact on learning, mental health, and civic action, respectively. These studies reveal commonalities with the experiences reported globally and regionally, while also adding country-relevant data categories. For example, the study on Higher Education in Nigeria (pp.137-161) reveals that young Nigerians had similar experiences to those of the young respondents of the global and regional studies (Arab States; East Asia and Australia) on the same subject. It also expands the exploration of the subject by looking at the percentage of urban (57%) and rural (45%) youth engaging in online learning, and the sources of funding to access online learning platforms (47% personal funding, 4% government-funded).

The national studies in Haiti (pp.161-174) and The Philippines (pp.175-204) introduce new angles to the exploration of youth experiences and showcase how youth responded creatively to the restrictions imposed. The study in Haiti reveals an increased use of social media by youth to better endure the pandemic, whether through learning or recreational and social activities¹¹. The study in The Philippines explores youth-led action, highlighting how young leaders mobilized to design and implement pandemic responses in spite the limited mobility and the lack of financial resources and support.

Overall, this publication exemplifies the engagement of youth in trying to understand the issues they face while inviting practitioners and policymakers to implement the **policy messages** that they put forward (pp.209-212).

Though academically supervised, the studies have notable limitations, induced by the evolution of the pandemic and its constantly changing protocols. Most of the studies used a mixed methods approach. Data collection was conducted remotely, thereby excluding communities who are at the lower end of the global connectivity scale. Young researchers often faced unforeseen circumstances that shifted initial plans. Finally, these studies also need to be read with the understanding of the YAR approach, underpinning the initiative. YAR is a youth development programme, building capacities of youth to design and lead research that captures grassroots perspectives. It is not a scientific scholar research programme, nor does it intend to replace one. Rather, it seeks to contribute with grassroots insights to inspiring further scholar research.

Moving forward, UNESCO commits to using the insights, lessons and policy messages from these studies to inform its own work through taking action to:

- Channel the content of the studies into policy reform and action, particularly in the context of technical support programmes using [UNESCO's Toolbox for Youth Policy and Programming](#).
- Mobilise public and private investment in supporting and upscaling youth-led research and youth-led innovation, particularly through the dedicated UNESCO Youth Grant Scheme.
- Mobilise multi-stakeholder, intergenerational and inclusive partnerships to address the impact of the pandemic, notably on youth mental health, learning, livelihoods, and access to technology.
- Expand the knowledge base on youth mental health and on comprehensive sexuality education post-pandemic to inform related policy.
- Build capacities of youth and youth organizations on media and information literacy and digital solutions to address misinformation and disinformation.
- Collaborate with media organizations and youth to combat disinformation and fake news.
- Promote the creation of gender-sensitive, inclusive, and safe spaces to allow youth to engage and influence decision-making, legislation, and public policies and programmes.
- Support the development of inclusive institutional frameworks to build capacities, support, upscale and ensure the policy uptake of youth-led research.

¹⁰ Fear of confidentiality and trust; lack of social support systems; and embarrassment to seek treatment.

¹¹ 32.95% of respondents said that social media had helped them a great deal, while 23.29% of them considered that their contribution to enduring the constraints imposed during the pandemic was enormous.

INTRODUCTION

Amplifying and Valuing Youth Voices: an International Imperative

By

Professor Pat Dolan, UNESCO Chair in Children, Youth and Civic Engagement, University of Galway, Ireland

And

Dr Mark Brennan, UNESCO Chair for Community, Leadership, and Youth Development, Pennsylvania State University, United States of America.

Established in 2010, the Youth as Researchers (YAR) programme provides a platform for youth development and ensures that youth have a voice in programme and policy development, through the medium of their participation in social research. It was first conceived as a model to engage youth in redesigning their own futures. It is premised on the belief that no one knows better than young people themselves about their problems, and the solutions that will work for them. It gained traction as UNESCO Member States are looking for innovative ways to address the challenges youth are facing. In engaging with the Social and Human Sciences Sector and UNESCO field offices, the youth-led research agenda delivers a strong message on the need to underpin policy decisions with scientific facts, and to ensure civil society is consulted on the issues at hand.

From its early beginnings, the YAR programme was not about youth, but for youth. Currently over half of the planet is under age 25. This is the audience to engage and enable to lead. Youth have historically been agents of change and their voice is critical to advancing the human condition. YAR amplified the voice of youth by enabling them to bring data and knowledge to the table that are valuable to all.

YAR also provides a practical contribution to address the need to engage youth – a social group that is often at risk of being excluded from community development, policy, and power. Youth are valuable members of our societies with important contributions to make to the well-being of their peers and society. They are on the ground in their communities and provide better insights and information that could not otherwise be obtained.

In short, young people are far more in touch with the realities of the world and the conditions they encounter than are ‘experts’ from afar. To better understand youth issues, we need to engage youth as research practitioners (e.g. youth consulting, initiating, and facilitating research and programming) and active communicators of research and awareness-raising activities (through social media and digital media).

Finally, supporting youth to lead on research projects contributes to their development, enhancing their skill sets and enabling them to investigate issues that can be used as a launching pad to drive change. It makes them active citizens now, not adult citizens in waiting. Youth-led research is important because it encourages and allows young people to find out about the issues that interest and influence them so that policymakers can make positive changes in those areas.

The effectiveness of Youth as Researchers

The YAR Programme has been applied in a variety of settings. It is supported by a range of research and theoretical perspectives that provide a rigorous structure, assessments of the reliability/validity of core concepts, and justification for the utility of the programme. Similarly, the YAR programme has been evaluated several times utilizing internal and external researchers. All showed YAR's effectiveness on youth development and youth voice which was further asserted through the publication of the results of individual YAR cohorts and of the overall programme, in peer-reviewed academic journals and book chapters.

How it has worked

While YAR has worked in many ways with different applications, one example highlights the importance of youth voice and the place of young people in decision-making that impacts them. In early 2020, the UNESCO Chairs and the UNESCO Social and Human Sciences' Sector came together to help address the disruptions to youth resulting from the COVID-19 pandemic.

In times of crisis, youth are often forgotten, not recognized as individuals with agency who can contribute to crisis response. We saw YAR as a mechanism to ensure that youth voice was included in programmes and policies responding to the pandemic. We were not disappointed, as youth were eager to contribute and become engaged. We like to note that at the height of the pandemic, when the world was paralysed with fear and uncertainty, it was youth that stepped up. We issued a general call on a Thursday hoping for a few dozen youth to volunteer. By the following Sunday evening, we had over 6,000 applicants. The message was clear. Youth were already engaged and ready to lead a path out of the uncertainty we were facing.

The utility of YAR was proven in this work. During the pandemic most policymakers saw structural challenges (lack of access to schooling, disruptions for service delivery) as major concerns. Emerging from the pandemic, these structural challenges could be quickly resolved. However, youth told a very different story of personal, social, and psychological challenges that would take far longer to rectify than structural conditions.

Youth made our blind spots clear. They pointed out to us that life for them would not be simply turned back on, with the end of the pandemic. For them, fundamental educational, social, psychological, and personal development were stunted. Globally, youth had waited for this critical developmental period in their lives. Whether in academic or employment settings, they had been planning for their entry into the world as their own individual person. They had plans about how this would happen and knew very well what the development outcomes would be (personal, social, psychological, professional). For adults, time was halted. For youth, critical years of life and human experience were denied.

Youth voices were critical during the pandemic and remain so as we continue to feel its repercussions which will unfold over the coming decade. Nonetheless, the pandemic showed us again that youth are still doing what they have always done. They are looking after families, continuing their schooling, being adaptive, and remaining aware of the issues impacting them and their communities.

We hope that the YAR programme will continue supporting youth in having a voice in programme and policy development. We also hope that it serves as a basis for informed action and engagement among youth themselves.



CHANGES OF COVID-19 ON HOW YOUNG PEOPLE EXERCISE THEIR SEXUAL AND REPRODUCTIVE HEALTH AND RIGHTS (GLOBAL STUDY)

————— Authored by —————

**Aliya Beyhum, Donna Fry, Miguel Fuentes,
Holly Kandel, and Ivan Ramírez**

Members of the global youth-led research team exploring the impact of COVID-19 on youth rights, in the context of the UNESCO Youth as Researchers (YAR) on COVID-19 initiative (2020–2022)

Acknowledgements

The researchers would like to express their sincere gratitude to the individuals and organizations that have contributed to this paper by sharing their experiences with us. Specifically, we would like to thank the Youth as Researchers (YAR) programme (United Nations Educational, Scientific and Cultural Organisation - UNESCO, University of Galway, and the Pennsylvania State University) without which this paper would not be possible.

We would like to thank members of the research team who greatly contributed to the research design, proposal development and data collection: Ali Keyeyune, Uganda; Trang Hong Vu, Viet Nam; and Younus Arfat, Bangladesh. Special thanks also go to George Charonis, who coordinated, facilitated and guided our team meetings throughout the early stages of the research process. George has provided immeasurable research mentorship and support throughout the entire project, and we are very grateful for his involvement.

Special thanks also go to the whole YAR community, including our peers and mentors who provided capacity-building opportunities to strengthen our research skills, a solid network to partake in knowledge sharing and overall support throughout the research process. We are grateful for the opportunity to participate in this programme and the research relationships it has fostered.

We would also like to thank all the people who participated in the study, particularly the key informants with whom the team interacted, for their time and sharing of information.

We acknowledge the significant support that we received from the YAR team, which contributed to the review/validation of completed tools, our research methodological design as well as the final version of this report.

Abstract

This research aimed to assess the impact of COVID-19 on how young people exercise their sexual and reproductive health and rights (SRHR). The study focused on individuals aged 18–34 years and took a global perspective, spanning 27 countries across five continents (Africa, Asia, Europe, North America and South America).

The study employed a mixed-methods approach, utilizing both qualitative and quantitative measures to conduct an online survey as well as online interviews. The survey questions were based on the essential SRHR package proposed by the Guttmacher–Lancet Commission during the United Nations Population Fund’s (UNFPA) Nairobi Summit of 2019. The interviews were conducted with key informants (aged 18–34 years) working in the domain of SRHR advocacy, communications or youth programmes in order to gain deeper insights on the changes revealed by the survey.

The findings from this research revealed that 36.16% of young respondents in the sample did not receive any information regarding SRHR services during the pandemic. Moreover, the services causing the most significant delays for participants to access (greater than 75% of the cases) were related to abortion care, antenatal, childbirth and postnatal care and contraception. In addition, more than 50% of the respondents also experienced delays in accessing Human immunodeficiency virus (HIV) and sexually transmitted infection (STI) treatment and antiretroviral medication during the pandemic, as well as prevention and management of reproductive cancers. The findings from the key informant interviews shed light on the rise in unplanned pregnancies, obstetric emergencies and obstetric violence stemming from negative changes in safe access to abortion care. Informants in seven countries explained that clinics and centres offering sexual health services shut down or were

unavailable due to travel restrictions, exacerbating the lack of access to services. In Lebanon, Mexico and Peru, there was defunding due to economic crises reducing budgets assigned to sexual and reproductive health (SRH). For all informants, sexuality education for youth was the working area they had to adapt the most to and where they faced the greatest number of challenges and obstacles.

Overall, it is concluded that the pandemic caused serious disruptions and delays among young participants across the globe in accessing quality SRH information and services, notably for women. Despite this, the pandemic also created the need to adapt to the new digital reality, leading to additional innovations in the health sector, such as telemedicine. Furthermore, there is a need to address the stigma associated with youth accessing SRH services in Africa, Asia and Latin America, and increasing access to SRH education would be an effective way to combat this stigma.

Keywords: COVID-19, sexual and reproductive health and rights (SRHR), youth

List of figures*:

Figure 1. SRH services in which youth faced delays more than 50% of the time

Figure 2. SRH services that youth felt safe accessing more than 50% of the time

Figure 3. Youth-led interventions to advance access and care of SRH for youth during the COVID-19 pandemic

*Source of all figures: UNESCO Youth As Researchers on COVID-19 initiative (2020-2022)

Introduction

The extensive impacts of COVID-19 continue around the globe, including the impacts on physical and mental health, hospitalizations and death (ECDC, 2021). As governments and international organizations focused on their COVID-19 crisis decision-making within dramatically changing global and national health governance contexts, it is important to note that the social and political determinants of sexual and reproductive health and rights (SRHR) were also changing (Schaaf et al., 2020). SRHR are among the most complex, sensitive, controversial but important issues in human rights law, and the obstacles preventing individuals from achieving sexual and reproductive health are often interrelated and entrenched (Hunt and Bueno de Mesquita, 2007).

Previous large-scale disruptions, such as the Ebola outbreak, natural disasters and global economic crises, have shown to affect SRHR, such as women's reproductive lives. COVID-19 has already altered the landscape and realities of social and intimate lives (Lindberg et al., 2020), because outbreaks like COVID-19 can impact SRHR at the individual, system and societal levels (Hussein, 2020). Decreased access to and increased violations of SRHR during the COVID-19 pandemic have been seen in many countries (Endler et al., 2021). However, it is important to recognize that the pandemic affected SRHR in both positive and negative ways. For example, there was a decreased uptake in sexual and reproductive health (SRH) services due to isolation and fears of contracting the virus. Despite this, in some countries, new policies, practices and laws have removed barriers which could otherwise take years to overturn (Bateson et al., 2020).

SRH is a vital part of the health and development of adolescents, and before the pandemic, the provision of SRH services to adolescents varied in many countries (Michaud et al., 2020). Thomson-Glover et al. (2020) emphasized the importance of prioritizing accessibility to youth by providing sexual health care services as part of the response to COVID-19. However, it has been difficult to assess amid the pandemic. This research aims to provide quantitative and qualitative data on the impact of the pandemic on SRH services during 2020 through the voices of the youth accessing these services, as well as from organizations on the ground providing SRH services and support for youth. The aim was to provide a global overview of changes in access to SRH services during the COVID-19 pandemic, how this impacted youth in different contexts around the world, as well as to understand what was done and experienced in relation to the access and utilization of SRH services.

In this report, the key literature unpinning the issue of youth access to SRH services is examined. The methods and sources of data collection and analysis are then exemplified. The following sections, present the findings and the critical analysis. Finally, there is a conclusion, and recommendations for youth access to SRH services are offered.

Literature Review

This section explores existing literature on ‘SRH as a human right’, ‘Youth access to SRH’, and the process of eliciting ‘Youth perspectives in research’.

SRH as a human right

Everyone is entitled to human rights without discrimination. They are fundamental, affirm the dignity and worth of all human beings and must be universally protected (Ott et al.,2020). Health is part of human rights and is a prerequisite for the ability to exercise other human rights, including the rights to life, bodily integrity, autonomy, legal capacity, information and privacy (Khosla and Say, 2015). Sexual health and reproductive health are an indisputable key element of health and vital for individuals, couples and families and for the development of community and nations both socially and economically (Temmerman et al.,2014). SRH as a human right involves people of all ages having safe and satisfying sexual relationships by addressing barriers such as gender discrimination, inequalities in access to services, restrictive laws, sexual coercion, exploitation and gender-based violence (UNFPA, 2014).

Youth and SRH services

SRH is a core part of the health and development of young people, and sexual behaviour during adolescence can have major health consequences (Michaud et al.,2019). Additionally, it is further important to note that young adults have worse clinical outcomes than adolescents on a variety of health issues, including SRH (Barney et al., 2020). COVID-19 has highlighted the vulnerability of SRH services, which have often been the most difficult to establish and institutionalize, and in times of crisis, they seem to be the first to be cut or are insufficiently protected; the results of this disproportionately affect women and youth (Clark and Gruending, 2020).

There are often barriers young people face in accessing SRH services. The lack of availability of services is most commonly noted, but additionally, the lack of access to reproductive health knowledge is a clear barrier (Shaw, 2009). More recently, research has focused on improving the delivery of SRH services for young people through the development, implementation and assessment of youth-friendly health services, although often without a clear consensus on how best to measure, track and evaluate these (Mazur et al.,2018). Research demonstrates that it is vital to attend to the perceptions and needs of young people, not only for the development and delivery of services, but also for related policies and programmes (Braeken and Rondinelli, 2018).

Moreover, in times of crisis, including the COVID-19 pandemic, disproportionate SRH inequities are often exacerbated for vulnerable populations, including women, girls and youth (Goulds, 2020).

In a similar vein, young people's SRH is often viewed as non-essential during pandemics, thereby decreasing their already limited access. Indeed, it has been noted that SRH clinical providers were urged to contribute to the pandemic response and COVID-19 relief efforts, and therefore could not allocate significant time to their usual SRH service provision (Hall et al., 2020).

During the pandemic, it was clear that youth access to SRHR did not figure among top global priorities, leading to exacerbated inequities and devastating outcomes for young people.

Youth perspectives in research

Feilding (2003), in Bahou (2012), cautions researchers speaking on behalf of others, and warns that by default or by design, it is easy to mistake the realities they share. Accordingly, the International Planned Parenthood Federation (IPPF) (2008) highlights that young people are best positioned to speak to their lived experiences, and therefore, should share their insights to provide a more valuable perspective as it relates to youth issues. In addition, young people should be perceived as principal stakeholders in the development of SRH programmes within their communities to ensure that the implementation of activities, services and sharing of information are useful, relevant and youth-friendly (IPPF, 2008). Therefore, involving youth at the centre of the research process is not only good practice, but also quintessential to driving greater and more sustainable impact in the issues that affect them most.

Methodology

In order to answer the research question 'How is COVID-19 changing the way young people exercise their SRHR?', the Global YAR Human Rights team used a mixed method approach, utilizing both qualitative and quantitative measures to perform an online survey and conduct online interviews.

The questionnaire of the online survey was open for three weeks for young respondents aged between 18 and 34 years worldwide. Data were gathered through a non-probabilistic randomized method, and the survey was shared through the team members' and the United Nations Educational, Scientific and the Cultural Organization's (UNESCO) social media. The survey requested participants to read and agree to the participant information sheet before answering it, and it filtered out those who were outside the age range. The survey included 73 questions, it was available in six languages and promotional material was produced in English, Spanish and French to share on social media. Questions were based on the essential SRHR package proposed by the Guttmacher–Lancet Commission during the UNFPA Nairobi Summit of 2019: sexuality education; counselling and services for sexual health and well-being; antenatal; childbirth and postnatal care; counselling and services for infertility; detecting; preventing and managing reproductive cancers; prevention and treatment of HIV and other sexually transmitted infections (STIs); comprehensive abortion care, detecting and preventing sexual and gender-based violence (SGBV) as well as counselling and services for modern contraceptives.

Besides the sociodemographic profile, the survey asked five large questions around these SRH packages: illegal or negatively impacted

use of any of these SRH services; information on SRH provided during the pandemic; delay or obstruction in accessing any of these services; safety in accessing any of these services and ways the youth organized to stay resilient and exercise their SRHR.

The online interviews were based on a semi-structured questionnaire with 10 questions, which lasted around 30 minutes. Besides getting a general profile of the organizations, they focused on the present and future work of the organizations: general changes in SRH services provision; their adaptation to provide youth-friendly services through COVID-19; challenges and obstacles they faced providing services; improvement programmes they deemed necessary for global youth to access SRH services and policy requests to achieve access. Interviewees were members of civil society organizations who worked on SRH and who had a particular focus on youth.

All interviews were transcribed and translated to English. Each member of the research team conducted at least two interviews, and all of the participants were informed about the purpose of the research, as well as the protection of their data. Participants who wanted to be kept anonymous from the beginning were not registered under their legal name, and the final analysis included quotes only by those who consented to it.

By using exclusively online data collection methods, it was possible to appeal to a global audience. At a time where in-person work can be unsafe, and online work is a new reality, adapting the research methods to solely online collection allowed us to interact and reach a greater and more geographically diverse number of participants.

Method of analysis

The survey data were shared with the research team through Qualtrics. The software does not gather personal information that could individually track any participant. Results were collated and analysed with Stata 12.0. Due to the heterogeneous composition of the sample and the non-probabilistic method to collect data, the results should be seen as a sample, for which the conclusions can only be focused on the participants and not be generalized to the larger population without further research. The interviews were coded and systematized using NVivo. Cases were labelled according to the country and the number of participants as a way to keep them anonymous, to the extent possible. The coding was twofold: the SRH service listed above and the topic from the questionnaire (adaptations, changes, challenges, improvements needed, programmes suggested and policy recommendations). A crosstab matrix allowed us to compare the coding frequency for each SRH service and each topic of interest.

Ethical safeguarding

To ensure the ethical safeguarding of the research and all research participants, the principles of the YAR Distressed Person Protocol were applied, which emphasizes the concept of ‘Do No Harm’ while completing any research involving human participants. Potential risks were identified and anticipated prior to conducting the interviews and the surveys, and a plan to mitigate this risk was implemented. To mitigate risk during the interviews, only stakeholders who were already involved in the SRH space were spoken to, rather than individuals coming from the general population. Thus, it was found to be unlikely that professionals whose agenda is centred in these services will require or request from us any further help to access these services in their respective geographies. Regardless, consent was secured prior to conducting all interviews, anonymity remained guaranteed and all interviewees had the option to opt out from the interview at any time.

To mitigate all risk for those who filled out the survey, logic flows were produced that opened or closed certain options for further questions in terms of what was inquired about SRH services which may be illegal in certain country contexts (i.e. abortion, contraception). If any of these services were illegal in their respective contexts, no further questions related to these services showed up throughout the remainder of the survey. In addition to this logic flow, all respondents’ data were kept anonymous and confidential and were stored within the UNESCO YAR programme’s database until the completion of the project.

Limitations

Due to the composition of the sample, an in-depth analysis was not possible. Digital divides worldwide and the network outreach of UNESCO and the research team’s social media made it hard to reach certain geographic areas. With these limitations, the sample was mainly centred on the countries of the research participants (in order of participation): Mexico, Peru, Bangladesh, Viet Nam, Senegal and the United Kingdom of Great Britain and Northern Ireland.

Since qualitative research measures and online surveys can have limitations, the team decided to conduct interviews as a way to balance those limitations. While the interviews served as an important base for analysis, their limitations include: not being representative to a population, as only two participants per country from the research team were interviewed, and verifying the information said in the interview can sometimes be difficult and time-consuming.

For future research, a look at diversifying the participants should be considered. This includes ensuring that the survey is spread widely and equally among regions, targeting different geographical locations, gender and age groups; including more interviewees with different backgrounds and professional knowledge.

Findings

Two non-probabilistic samples were collected: from the survey, 361 responses from 27 countries were gathered; from the interviews, responses from 13 key informants in seven countries were collected. People answering the survey ranged from 18 to 34 years old and were mostly concentrated in the age bracket of 22–26 (40% of respondents). Most of them were women, living in urban settings, without any form of disability, and enrolled in higher education. Most of the responses stemmed from Latin America – 43% between Mexico and Peru –, followed by Asia – Bangladesh and Viet Nam added up to 30% of the sample. To answer how access to SRH services changed for young participants since the beginning of the COVID-19 pandemic, five main questions were asked.

First, participants were asked which services were illegal or had negative consequences to distinguish barriers existing prior to the pandemic. Despite a third of the young respondents in the sample reporting having faced no negative legal consequences when accessing any SRH service, counselling and services for abortion care were most frequently illegal or had negative legal consequences out of all of them. It is not possible to report major differences between regions or countries, as in most cases, participants reported both positive and negative consequences for abortion care. This may be due to the reasoning behind requesting the service or counselling, which may vary within countries.

Second, participants were asked which SRH care and services they received information about during the pandemic. Out of 495 responses (due to possible combinations), 36.16% of young participants in the sample did not receive any information during the pandemic. Data in the

study showed people within the same country had different answers about information access. After looking at individual countries, it was concluded that this was a global phenomenon rather than specific to a region or country. From the small percentages of participants who did receive information on SRH, they were mostly focused on treatment of HIV and other STIs and some form of sexuality education. The care and services they received the least information about were infertility and abortion.

Third, participants were asked which SRH counselling and services were delayed.

The services that were delayed, in more than 75% of the cases, were related to abortion care, antenatal, childbirth and postnatal care and contraception. In more than 50% of the cases, respondents also included HIV and STIs treatment and antiretroviral medication, as well as prevention and management of reproductive cancers.

Fourth, participants were asked which SRH counselling and services they felt safe accessing during the pandemic, and when looking at the only ones they felt safe accessing, more than 75% of the cases were external condoms. In 50% of the cases, respondents reported feeling safe accessing some abortion care services and some other modern contraceptive services.

While our study has found that more than three-quarters (75%) of the respondents felt safe accessing external condoms, the vast majority of SRH services were delayed and thereby difficult to access during the COVID-19 pandemic. This is in line with the key findings outlined by Clark and Gruending (2020), who cite that SRH services tend to be neglected during times of hardship or crisis,

often due to a lack of prioritization at the institutional level. Moreover, these authors highlight that women and youth generally bear the brunt of this burden. This claim is supported by our research, which not only depicts the bulk of SRH services being delayed for youth, but also those which primarily affect women. Indeed, these services include

access to abortion care, and antenatal, childbirth and postnatal care. Our findings also align with Hall et al. (2020), who stressed that SRH clinical providers were encouraged to reallocate their time, energy and efforts towards COVID-19, thus decreasing availability to SRH services.

Figure 1. SRH services in which youth faced delays more than 50% of the time

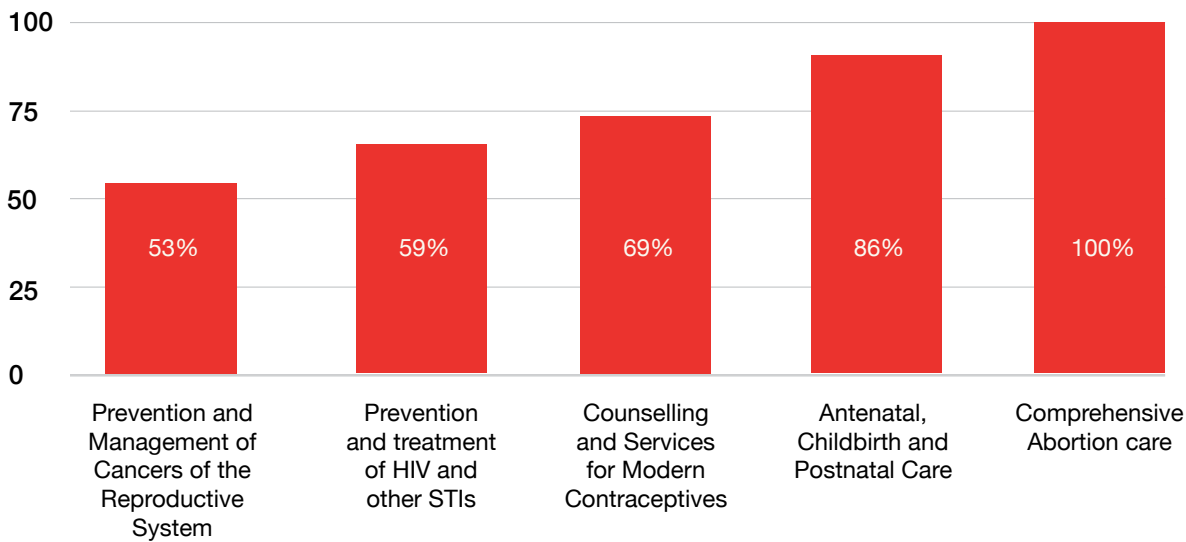
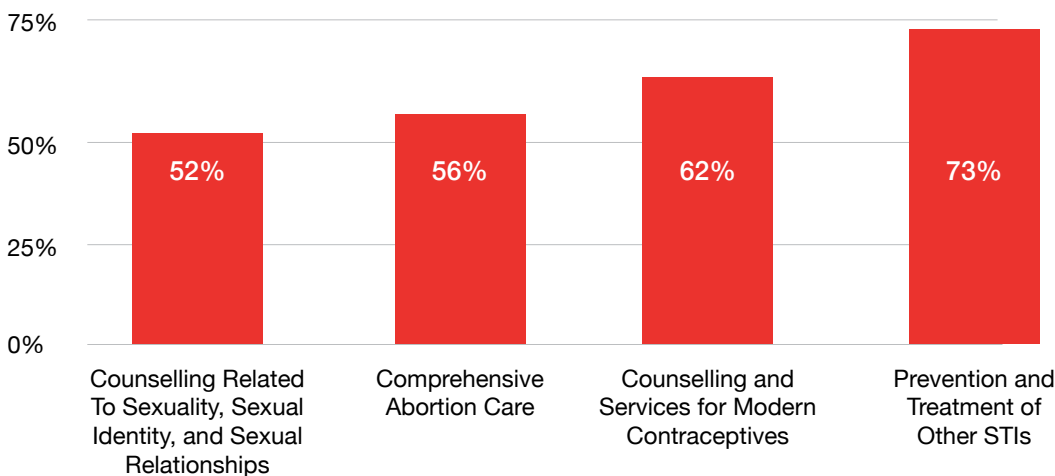


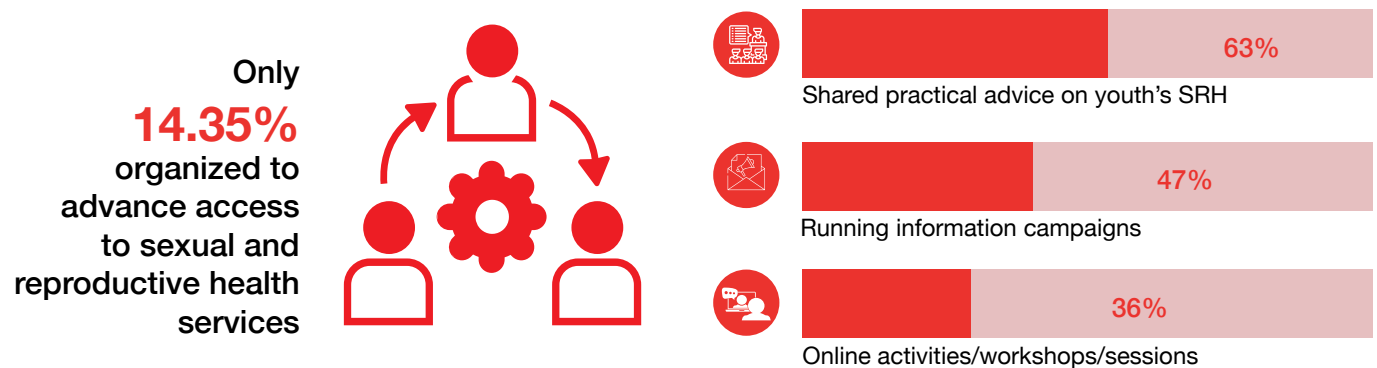
Figure 2. SRH services that youth felt safe accessing more than 50% of the time



Finally, participants were asked about ways in which young people organized during the pandemic to advance access and care of SRH for youth. Only 14% answered they had organized, centred around three main interventions. Mainly, they shared practical advice on how to deal with

different aspects of youth’s SRH; secondly, they ran information campaigns to keep youth informed on ways to exercise their SRH rights, and third, they provided online activities, workshops, and/or dialogue sessions to bring forth access to SRH information for youth.

Figure 3. Youth-led interventions to advance access and care of SRH for youth during the COVID-19 pandemic



The key informant interviews were structured in three parts to answer the same overarching question. However, the target was not SRH services’ users, but rather, providers from civil society organizations.

First, participants were asked about the organization’s experience with SRH services and the populations they serve. All 13 of them worked with youth as their main audience or a key group within their activities. Some of them worked with refugees and forcibly displaced people. The 13 organizations offered some form of sexuality education, and none of them offered services on prevention and management of reproductive cancers or counselling and services for infertility.

The second group of questions focused on the changes in SRH services for youth that the different organizations observed during the pandemic. The SRH service activists found most changes in access was observed with abortion care. Five informants

in Mexico, Peru and the United Kingdom of Great Britain and Northern Ireland argued that the pandemic complicated access to safe abortion care, even of cases that fall within the permissible according to local legislation. They identified a rise in unplanned pregnancies, obstetric emergencies and obstetric violence stemming from negative changes in safe access to abortion care.

Also, the pandemic changed access to information, counselling and services for sexual health and well-being. Informants in seven countries explained clinics and centres offering sexual health services shut down or were unavailable due to travel restrictions. In Lebanon, Mexico and Peru, they also referred to reducing assigned budgets to SRH due to economic crises.

For all informants, sexuality education for youth was the working area to which they had to adapt the most and where they faced most of the challenges and obstacles. Four informants explained the main adaptation they implemented was transferring

information on SRH to digital platforms, creating e-campaigns, or offering instructions for young people to access de-stigmatized SRH services. In Mexico and Peru, they created new infographics and brochures that are easy to read and distributed them online on different topics like comprehensive sexuality education, sexual health, contraception and abortion care. In most cases, young people told activists that challenges included information not being fact-based, that it became difficult to access it for those without the internet, and that outreach services faced more difficulties due to prevailing stigma and taboos. For example, in Senegal, the Syrian Arab Republic and the United Kingdom of Great Britain and Northern Ireland, lockdown restrictions made it harder for activities of sensitization to reach people.

The third group of questions centred on the future of access to SRH services for young people that informants envisioned. Activists from most of the countries agreed that sexuality education needed improvements, better public policies, and new programmes. Informants suggested governments improve sexuality education programmes, both inside and outside school. Informants from Latin America, Asia and Africa emphasized the need to

better train health care providers against taboos and stigma, as well as towards updated and fact-based information that is youth-friendly. All suggestions on public policy and sexuality education focused on enforcing syllabi on the topic in elementary school, and new programmes focused on two dimensions: the first was telemedicine and telecommunication as a new method to inform and provide SRH services to youth; the second was new educational programmes that are truly comprehensive on sexuality, including SGBV; HIV new prevention therapies and treatments and a youth-friendly perspective.

Additional barriers to accessing SRH information or services during the pandemic, identified through the KIs, included fear of contracting the novel coronavirus, internet restrictions limiting the flow of information, prevailing stigma and taboo surrounding SRHR, and limited economic flexibility among youth. The perspectives of these young key informants echo previous findings published by PLAN International (2021), which underscored through its report that SRH inequities are often exacerbated in times of crisis for vulnerable populations, including women, girls and youth.

Analysis and discussion

This study has obvious limitations due to the sample size inhibiting the ability to make global generalizations; however, some clear conclusions about access to SRH services during the COVID-19 pandemic for young participants can be drawn. This study concluded that, although many young respondents across the globe felt safe to access SRH services during the pandemic, they often faced delays in doing so, and many had no access to these essential services.

Additionally, this study recorded that abortion care seemed to be a significantly affected service which has impacted young women in particular. The findings have shown that digital services

became more frequent to enable youth to access SRH information and services. Furthermore, numerous participants highlighted that the stigma of accessing SRH services was prevalent across several contexts, and improved access to SRH education was frequently cited as a way of addressing this stigma.

Recommendations

Based on the data collected and the surrounding literature, the researchers agree that the following recommendations for research, policy and practice may benefit youth access to SRH services:

Policy

- Governments should mandate the inclusion of ‘gender-sensitive and rights-based’ SRH education in school curricula.
- Governments should adapt their contingency plans for health emergencies to ensure that they do not significantly impact the essential services of SRH by allocating budgetary resources to SRH clinical service delivery.
- Governments in Latin America, Asia and Africa should invest in training health care providers on youth/adolescent SRHR to combat related taboos and stigma.

Research

- Further research into women’s experience of abortion care during the pandemic should be conducted to better understand the barriers for women during this period.
- Studies should be carried out to ascertain how youth would prefer to access SRH services in the future since experiencing digital options during the pandemic.
- Reviewing existing SRH education curricula and the teaching of SRH in school contexts could help ascertain if/how stigma is addressed and identify gaps in educational provision of SRH.

- Facilitate partnerships between education facilities and civil society to provide comprehensive sexuality education in schools and expand youth access to SRHR information.
- Invest in digital infrastructure and training for youth programmes to facilitate peer-to-peer knowledge sharing and SRHR information campaigns.
- Diversify outreach mechanisms to ensure youth can access SRH services by proactively bringing information and services to them.

Finally, this report aims to emphasize that youth’s experiences and voices should consistently be included in the research, policies and practices which serve them with respect to their access to SRH services. Although youth are not a global homogeneous group and have considerable diversity in their needs and perspectives, SRH has a significant impact on their health and well-being, and their access to services should be ensured and developed to support their diverse needs and voices.

This research aimed to provide quantitative and qualitative data to understand the impact of the COVID-19 pandemic on SRH services through the voices of the youth accessing these services, as well as from organizations on the ground providing SRH services and support for youth. The study enabled us to provide a global overview of changes in access to SRH services during the COVID-19 pandemic, how this impacted youth in different contexts around the world, as well as generating an understanding of what has been done and experienced in relation to the access to SRH services.

References

- Bahou, L. (2012) Cultivating student agency and teachers as learners in one Lebanese school. *Educational Action Research*, 20, (2) pp.233–250. Retrieved from <https://doi.org/10.1080/09650792.2012.676288>
- Barney, A., Buckelew, S., Mesheriakova, V., and Raymond-Flesch, M. (2020). The COVID-19 Pandemic and Rapid Implementation of Adolescent and Young Adult Telemedicine: Challenges and Opportunities for Innovation. *The Journal of adolescent health : official publication of the Society for Adolescent Medicine*, 67(2), pp.164–171. Retrieved from <https://doi.org/10.1016/j.jadohealth.2020.05.006>
- Bateson, D. J., Lohr, P. A., Norman, W. V., Moreau, C., Gemzell-Danielsson, K., Blumenthal, P. D., Hoggart, L., Li, H. R., Aiken, A. R. A., and Black, K. I. (2020). The impact of COVID-19 on contraception and abortion care policy and practice: experiences from selected countries. *BMJ Sexual and Reproductive Health*, 46(4), pp.241–243. Retrieved from <https://doi.org/10.1136/bmjshr-2020-200709>
- Braeken, D. and Rondinelli, I. (2012) Sexual and reproductive health needs of young people: Matching needs with systems. *International Journal of Gynecology and Obstetrics*, 119(SUPPL.1), pp.60–63. Retrieved from <https://doi.org/10.1016/j.ijgo.2012.03.019>
- Clark, H. and Gruending, A. (2020). Invest in health and uphold rights to ‘build back better’ after COVID-19. *Sexual and Reproductive Health Matters*, 28(2), pp.3–8. Retrieved from <https://www.tandfonline.com/doi/full/10.1080/26410397.2020.1781583>
- Endler, M., Al-Haidari, T., Benedetto, C., Chowdhury, S., Christilaw, J., El Kak, F., Galimberti, D., Garcia-Moreno, C., Gutierrez, M., Ibrahim, S., Kumari, S., McNicholas, C., Mostajo Flores, D., Muganda, J., Ramirez-Negrin, A., Senanayake, H., Sohail, R., Temmerman, M., and Gemzell-Danielsson, K. (2021). How the coronavirus disease 2019 pandemic is impacting sexual and reproductive health and rights and response: Results from a global survey of providers, researchers, and policy-makers. *Acta obstetrica et gynecologica Scandinavica*, 100(4), pp.571–578. Retrieved from <https://doi.org/10.1111/aogs.14043>
- Goulds, S. (2020). Living Under Lockdown: Girls and COVID-19. PLAN International. Retrieved from https://plan-international.org/uploads/2021/12/living_under_lockdown-final-2.pdf
- Hall, K. S., Samari, G., Garbers, S., Casey, S. E., Diallo, D. D., Orcutt, M., Moresky, R. T., Martinez, M. E., and McGovern, T. (2020). Centring sexual and reproductive health and justice in the global COVID-19 response. *Lancet (London)*, 395(10231), pp.1175–1177. Retrieved from <https://www.sciencedirect.com/science/article/pii/S0140673620308011?via%3Dihub>

Hunt, P. and de Mesquita, J. B. (2007). The Rights to Sexual and Reproductive Health. Human Rights Centre, University of Essex, 13(2), pp.1224–1230. Retrieved from <https://core.ac.uk/download/pdf/20607636.pdf>

Hussein, J. (2020). COVID-19: What implications for sexual and reproductive health and rights globally? Sexual and Reproductive Health Matters, 28(1). Retrieved from <https://doi.org/doi:10.1080/26410397.2020.1746065>

International Planned Parenthood Federation (IPPF). (2008) Explore: Ideas for youth involvement in research. IPPF. Retrieved from https://www.ippf.org/sites/default/files/inspire_explore.pdf

Khosla, R. and Say, L. (2015). Linking Sexual and Reproductive Health and Human Rights. World Health Organization Regional Office for Europe. Retrieved from https://apps.who.int/iris/bitstream/handle/10665/175556/9789241564984_eng.pdf

Lindberg, L., VandeVusse, A., Mueller, J., and Kirstein, M. (2020). Early Impacts of the COVID-19 Pandemic: Findings from the 2020 Guttmacher Survey of Reproductive Health Experiences. New York: Guttmacher Institute. Retrieved from <https://www.guttmacher.org/report/early-impacts-COVID-19-pandemic-findings-2020-guttmacher-survey-reproductive-health>

Mazur, A., Brindis, C. D., and Decker, M. J. (2018). Assessing youth-friendly sexual and reproductive health services: A systematic review. BMC Health Services Research, 18(1), pp.1–12. Retrieved from <https://doi.org/10.1186/s12913-018-2982-4>

Michaud, P. A., Visser, A., Vervoort, J., Kocken, P., Reijneveld, S., Blair, M., Alexander, D., Rigby, M., Weber, M., and Jansen, D. (2020). Do European Union countries adequately address the health care needs of adolescents in the area of sexual reproductive health and rights? Archives of disease in childhood, 105(1), pp.40–46. Retrieved from <https://doi.org/10.1136/archdischild-2019-317073>

Ott, M. A., Bernard, C., Wilkinson, T. A., and Edmonds, B. T. (2020). Clinician Perspectives on Ethics and COVID-19: Minding the Gap in Sexual and Reproductive Health. Perspectives on sexual and reproductive health, 52(3), pp.145–149. Retrieved from <https://doi.org/10.1363/psrh.12156>

Schaaf, M., Boydell, V., Van Belle, V., Derick W. B., and George, A. (2020). Accountability for SRHR in the context of the COVID-19 pandemic. Sexual and Reproductive Health Matters, 28(1). Retrieved from <https://www.tandfonline.com/doi/full/10.1080/26410397.2020.1779634>

Shaw, D. (2009). Access to sexual and reproductive health for young people: Bridging the disconnect between rights and reality. International Journal of Gynecology and Obstetrics, 106(2), pp.132–136. Retrieved from <https://doi.org/10.1016/j.ijgo.2009.03.025>

Temmerman, M., Khosla, R. and Say, L. (2014). Sexual and reproductive health and rights: A global development, health, and human rights priority, The Lancet, 384(9941), e30–e31. Retrieved from [https://doi.org/10.1016/S0140-6736\(14\)61190-9](https://doi.org/10.1016/S0140-6736(14)61190-9)

Thomson-Glover, R., Hamlett, H., Weston, D., and Ashby, J. (2020). Coronavirus (COVID-19) and young people's sexual health. *Sexually transmitted infections*, 96(7), pp.473–474. Retrieved from <https://www.sciencedirect.com/science/article/abs/pii/S0140673614611909?via%3Dihub>

United Nations Population Fund (UNFPA). (2014). *Reproductive Rights are Human Rights. A Handbook for National Human Rights Institutions*. United Nations. Retrieved from <https://www.ohchr.org/sites/default/files/Documents/Publications/NHRIHandbook.pdf>



THE COVID-19 PANDEMIC AND YOUTH WELL-BEING: A GLOBAL STUDY

————— Authored by —————

**Max Amanu, Afifa Anjum, Ruth Ayoola,
Chunyuan Hu, Rehab A. Rayan, Abdul Rehman,
Nagui Salama and David Sánchez**

Members of the global youth-led research team
exploring the impact of COVID-19 on youth well-being, in the context of the
UNESCO Youth as Researchers (YAR) on COVID-19 initiative (2020–2022)

Acknowledgements

This paper is the result of the collaborative work of eight young people from Uganda, Pakistan, Peru, Nigeria, Egypt and Bangladesh, as part of the Youth as Researchers (YAR) on COVID-19 initiative. We acknowledge the many people who contributed their ideas, time and perspectives to this effort.

Our special thanks to the United Nations Educational, Cultural and Scientific Organization's (UNESCO) YAR Coordination Team, including the Make A Difference Leadership Foundation, and UNESCO Chairs at the University of Galway and the Pennsylvania State University, for their support, with particular recognition to Sue Vize, Regional Adviser for Social and Human Sciences in Asia-Pacific, UNESCO Office in Bangkok (now Head of the UNESCO Office in Dhaka) for her outstanding guidance and mentorship.

Abstract

The COVID-19 pandemic has affected the well-being of people all over the world in several ways, including education, health and financial condition. In public health emergencies, young people are a population of interest for study, being faced with multifaceted risks relating to these areas. To address this, comprehensive and inclusive policies are needed to ensure youth in the post-COVID-19 world can resume their education, find employment and live healthy, balanced and fulfilling lives.

This paper investigates how young respondents' was impacted during the COVID-19 pandemic and identifies recommendations for timely interventions to address the adverse effects and enhance preparedness for possible future pandemics, epidemics and other crises.

A cross-sectional questionnaire-based survey was designed to understand (1) the extent to which the COVID-19 pandemic influenced the education and livelihoods of youth, and (2) the changes in terms of mental health and behaviour before and during the pandemic. The study focused on current tertiary students and recent graduates (within 5 years of graduation) aged 18–35 years and was open to people in different regions of the world.

The findings shed light on the extent to which the pandemic affected young participants' well-being, especially in relation to education, health and livelihoods. It was found that some of the changes were consistent with existing studies while others filled the information gap identified in a review of the literature.

The top three areas for which respondents were most worried about, should the pandemic continue, were education (65.4%), mental health (64.4%) and social life (61.4%). These were followed by income and employment (nearly 50%).

The recommendations propose ideas to support youth in facing the adverse effects of the pandemic on their mental health and social life, as well as dealing with financial difficulties and challenges surrounding online education.

Keywords: COVID-19, youth, well-being

List of figures*:

Figure 1. Issues respondents worry about in the next few months, should the pandemic continue

Figure 2. A lack of access to internet and devices for e-learning across regions and areas when educational buildings were closed

Figure 3. Impact of virtual learning on respondents' mental health and educational outcomes

Figure 4. 'How stressful have the precautions of leaving home been for you? (wearing masks, using alcohol and sanitizers)'

Figure 5. Changes in respondent media use during the pandemic (including social media, the news, and entertainment – movies/series or video games)

Figure 6. 'How often do you read, listen, watch, or talk about COVID-19?'

Figure 7. The extent to which respondents agreed with the statement 'I am lonely' before and since the pandemic

Figure 8. Changes in contact with people outside home/accommodation since the start of the pandemic

Figure 9. Changes in the quality of relationships with friends and family

*Source of all figures: UNESCO Youth As Researchers on COVID-19 initiative (2020-2022)

Introduction and literature review

On 30 January 2020, the World Health Organization (WHO) announced that an unprecedented new coronavirus disease 2019 (COVID-19) was a public health emergency of international concern. As of 3 November 2021, around 250 million people had been infected with COVID-19, causing 5,012,337 deaths globally (WHO, 2021). The outbreak of COVID-19 not only posed a global health risk, but also created public anxiety around the world (Bao et al., 2020).

Well-being is a positive outcome which combines both physical and mental health (Centers for Disease Control and Prevention [CDC], 2018) and is measured by how people perceive their lives from their own point of view. It can be considered an indicator that can measure beyond morbidity and mortality (Diener et al., 2009). Communicable illnesses are among the major dangers to global well-being (Mak et al., 2010), affecting both physiological and mental health (Xiang et al., 2014). The COVID-19 pandemic has affected the well-being of people all over the world in several ways, including education, health and financial condition.

Young people may be at risk due to their insecure developmental phase, fear of infection, confinement/distance requirements, interruptions to schooling and extracurricular activities and the impacts of fiscal recessions and related consequences (Aknin et al., 2022). During the pandemic, WHO identified youth as a priority 'target audience with specific concerns, experiences and behaviours'.

Their assessment concluded that, although by the mid-teen years, youth's cognitive decision-making operations are like those of adults, behavioural elements that are associated with dangerous or insecure behaviours are especially applicable to youth (WHO, 2021).

Numerous studies have argued the effect of infectious disease outbreaks on mental well-being, including those of the severe acute respiratory syndrome (SARS) in 2003 (Peng et al., 2010), and the 2009 novel influenza A (H1N1) epidemic (Yeung et al., 2017). Studies prior to the onset of the COVID-19 pandemic indicated that youth mental health was already a critical concern. For example, mental health conditions impacted one in five young persons in Canada (Zahn-Waxler et al., 2008). More recently, a study in China revealed that youth aged less than 35 years go through more intense mental health effects and experience a higher level of anxiety and depression symptoms compared to adults (Huang and Zhao, 2020). More and more investigations on the mental well-being of young people during the COVID-19 pandemic have shown increasing issues/concerns in many parts of the world.

In public health emergencies, young people are a population of interest for study, (Holmes et al., 2020) as key life progressive milestones may be negatively affected, such as education and employment (Arnett, 2014). COVID-19 lockdowns significantly disrupted the daily lives of children and

adolescents. With increased time at home, online learning and limited physical social interaction, young people have experienced increased stress, anxiety and depressive symptoms, and in some cases, increased alcohol and substance use and externalizing behavioural problems (UNICEF, 2021). Though some studies discovered that the COVID-19 pandemic stay-at-home regulations offered protective effects for youth mental health (Biel and Hamrah, 2021), evidence is now emerging from a number of studies, which consistently point to increased levels of stress and anxiety among young people. The COVID-19 health crisis has turned into a mental health crisis for young people with reported mental health significantly worsening from 2020 to 2021 (OECD, 2021). Economic stressors, physical illness and changes in daily life were found to be positive predictors of mental health problems (Nathiya et al., 2020).

It has also been observed that young people developed more negative feelings during the pandemic, as they generally had little control over their situation (EU, 2022). According to a University of Calgary study published in the medical journal *JAMA Pediatrics* in 2021, there is an alarming percentage of young people world-wide experiencing mental health issues, with depression and anxiety symptoms doubling compared to pre-pandemic.

There was remarkable evidence that infectious diseases, such as COVID-19, may have an immense influence on youth mental health (Liang et al., 2020). A recent review found that COVID-19-related anxiety observed in young people particularly affects older youth, girls and those who suffered neuro diversities and/or chronic physical illnesses. Additionally, the review denoted that COVID-19 control measures have the potential to impact young people's well-being. Physical activity, access to recreation, positive family relations and societal assistance were linked to better mental health results (Samji et al., 2022).

Research has indicated that good coping mechanisms could protect persons from mental health difficulties during crises (Xu and He, 2012); however, these coping mechanisms can lead to positive and negative consequences (Chesney et al., 2006). Research has also pointed out that negative coping mechanisms, like abstaining, are linked to mental issues like depression (Liang et al., 2020).

Over the first year of the COVID-19 pandemic, over 55 million learners were affected by the closure of educational institutions (UNESCO, 2021). The education system, ranging from preschool to university, of both developed and developing countries, has been going through a deep crisis, generating unique challenges along with increased inequalities (Abdulkareem and Eidan, 2020). All countries of the world have tried their best to prevent the disruption of learning by introducing distance learning, using different mixes of technologies. The internet is by far the most used platform for distance learning (Chang and Yano, 2020). Education systems have been rapidly adapting to the online realm to enable continuity during the pandemic. This creates additional challenges relating to finance and infrastructure (Abdulkareem and Eidan, 2020; Crawford et al., 2020). Both teachers and students face problems related to the internet, software or other difficulties. (Dhawan S., 2020), such as low-quality audio and video that impacts lesson quality. Furthermore, mediocre course content and lack of understanding of instructional goals are some challenges faced by youth while learning online (Dhawan S., 2020; Song et al., 2004).

According to the International Labour Organization (ILO), the impact of the pandemic on young people is systematic, deep and disproportionate. It has been particularly hard on young women, younger youth and youth in lower-income countries. Among workers worldwide, about 93% experienced some form of workplace closure up until January 2021

(ILO, 2021). About 114 million people have lost their jobs (ILO, 2021) and youth were more affected by such job losses, with youth employment falling by 8.7% whilst the decrease for adults was only 3.7% (Fleming, 2021).

Evidence showed that youth were vulnerable in the labour market prior to the pandemic, and that the massive job loss induced by the pandemic, along with ongoing insecurity, is projected to affect youth employment for a long time (Blustein et al., 2020; ILO, 2020). The current unemployment condition among youth may have an impact on their psychological health, and this may be long-term. Studies show that unemployed people exhibit more distress compared to employed people (Jefferis et al., 2011). In addition, unemployment has a psychological cost that can include loss of meaning in life, suffering from identity crisis as well as loss of self-esteem (Helliwell et al., 2012).

For youth, social support acts as a buffer against stress and any other types of behavioural and emotional problems (Pössel et al., 2017). Due to the closure of educational institutions, confinement and unemployment, many youth lost social touch with peers, and family members became their

principal company (Campione-Barr et al., 2021). Many also faced cancellation of significant life events. This may trigger anxiety, isolation and disappointment (UNICEF, 2021). Family members can play a significant role in this regard through providing positive relationships to combat stress and other behavioural and emotional concerns (Campione-Barr et al., 2021), but, when and where this is lacking, there could be a detrimental effect on family relationships and well-being.

Anxiety and health concerns, school closures, loss of livelihoods and reduced social outlets have put youth in a very vulnerable situation (United Nations, 2020). To address this, comprehensive and inclusive policies are needed to ensure that youth in the post COVID-19 world can resume their education, find employment and lead healthy, balanced and fulfilling lives.

This paper investigates how young respondents' well-being has been impacted during the COVID-19 pandemic and identifies recommendations for timely interventions to decrease the negative effects and enhance the preparedness for upcoming crises.

Methodology

Survey design

A cross-sectional questionnaire-based survey was designed to understand (1) the extent to which the COVID-19 pandemic influenced the education and livelihoods of youth, and (2) the changes in terms of mental health and behaviour before and during the pandemic. The study focused on current tertiary students and recent graduates (within 5 years of graduation) aged 18–35 years from different regions of the world. The survey instrument was developed based on the information gathered from a detailed review of literature and discussions with relevant experts. The final questionnaire was divided into 11 sections that had 65 questions in total, including 12 ranking questions, two open-ended questions and 51 closed-ended questions. Topics covered by the questions included COVID-19-related health status, mobility, relationships, financial status, physical activity and sleep, media use, education, employment, emotions and substance use. No personal information was obtained to maintain anonymity.

Outreach strategy

This study was conducted during the COVID-19 pandemic and lockdown periods in most of the countries; therefore, face-to-face interviews were not possible. An online version of the questionnaire was created using the Google forms platforms at Google.com. The data were collected between April and July 2021, with the survey being disseminated through social media platforms; mailing lists of universities; youth organizations and networks; the United Nations Educational, Scientific and Cultural Organization (UNESCO) offices at regional and country levels as well as through the YAR website. To obtain a higher response rate, in addition to English, the survey was translated into Urdu, Chinese and Arabic. A total of 397 respondents (male 36.5%, female 62.7%, preferred-not-to-say 0.8%) participated in the study. The majority of the respondents were from the Asia-Pacific region (54.9%), while others were spread across other regions of the world: 17.9% were from Africa, 6.3% were from the Arab States, 16.1% were from Europe and 4.8% were from Latin America and the Caribbean (Figure 1).

Ethics

Before the data collection, an informed consent that included a brief introduction to the youth-led research team, the purpose and scope of the study and the data confidentiality statement was obtained from each participant. The participants had the option to leave the study at any stage during the survey. To mitigate risks for distress of respondents (that could lead to a crisis), the YAR Distress Person Protocol sheet was included in the survey, informing respondents of options available to them.

Data processing and analysis

Descriptive statistics were used to capture the potential effect of the COVID-19 pandemic on the respondents with respect to different variables related to well-being. Demographic and spatial distribution of the study respondents was presented in frequency tables and bar charts along with simple percentages. Cross-tabulation was performed with multiple variables and Cramér's V and Pearson's χ^2 tests were used to assess the association between various qualitative variables. The data were cleaned using Pandas (Python library) and analysed using Stata (version 17.0).

Assumptions/limitations

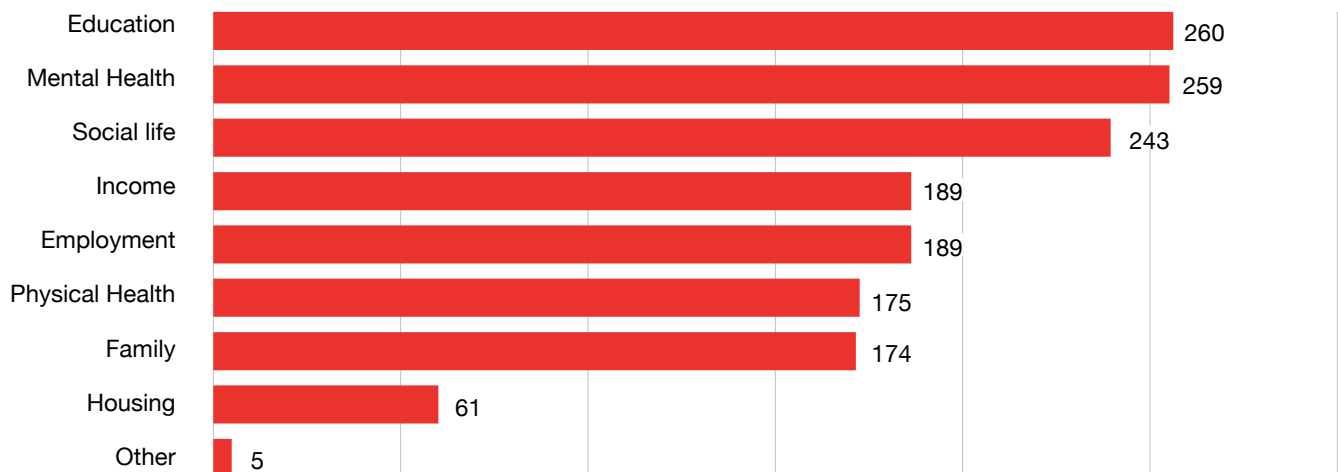
The time and resource constraint in data collection might have introduced a potential bias in the study, as only those respondents who have access to the internet and frequently use social networking service (SNS) platforms were able to answer, which might have potentially excluded a number of relevant respondents, including those most marginalized. Also, not including the French version of the survey might have left significant populations in Africa out of the picture. Although the sample size and data collection (sampling) strategy of the study does not allow the findings to be generalized to other youth populations, this still provides a picture (albeit blurred) of how the COVID-19 pandemic affected youth well-being, particularly in terms of education, livelihoods and mental health of youth globally.

Findings, analysis and discussion

The findings shed light on the extent to which the pandemic affected the well-being of young participants, especially with regard to education, mental health and livelihoods. It was found that some of the changes were consistent with existing studies while others filled the information gap identified through the literature review.

The top three areas for which respondents were most worried about, should the pandemic continue, were education (65.4%), mental health (64.4%) and social life (61.4%). These were followed by income and employment (nearly 50%) (see Figure 2).

Figure 1. Issues respondents worry about in the next few months, should the pandemic continue



Education

327 out of the total 397 respondents experienced school closures. Despite the fact that many schools closed during the pandemic, over 40% of the respondents said they still needed to physically attend university or take exams on-site, which not only increased the risk of contracting the virus, but also resulted in increased anxiety among respondents. 39% of those who had to attend

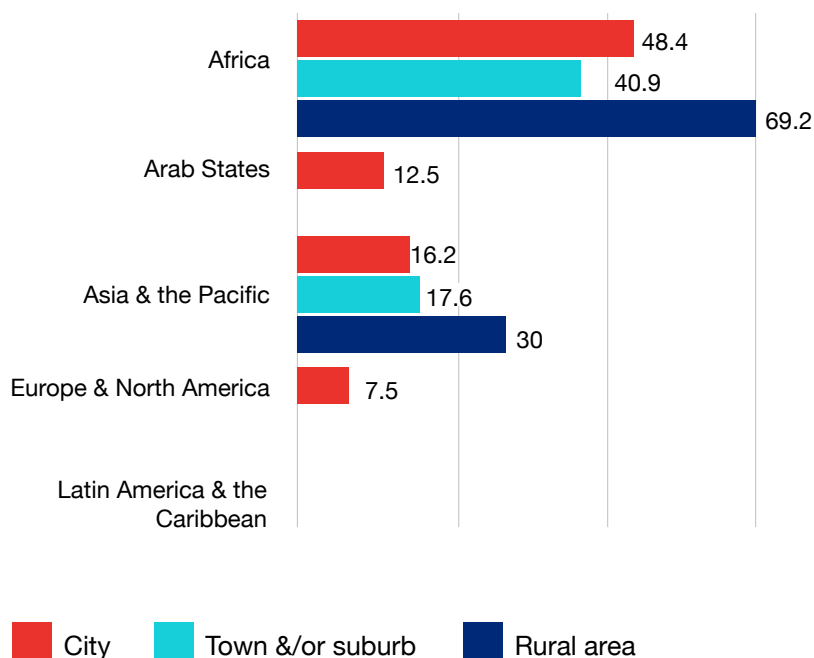
university and take exams in-person stated that they were very worried about getting infected at the university or on the way.

To avoid education disruptions and minimize physical interactions, educational institutions had to adapt to online learning within a short amount of time. However, as Abdulkareem and Eidan (2020)

noted, the transition to online learning had become a hurdle for faculties with limited information technology resources and learners living in regions with unstable internet connections or even electricity. In the study, a lack of accessibility to the internet and devices for online learning was widespread. Overall, 21% of the students

said they could not access stable internet and/or devices for e-learning. The lack of accessibility to the internet or devices was particularly noticeable in Africa, where more respondents answered negatively, whereas, in the other four regions, fewer respondents reported such problems.

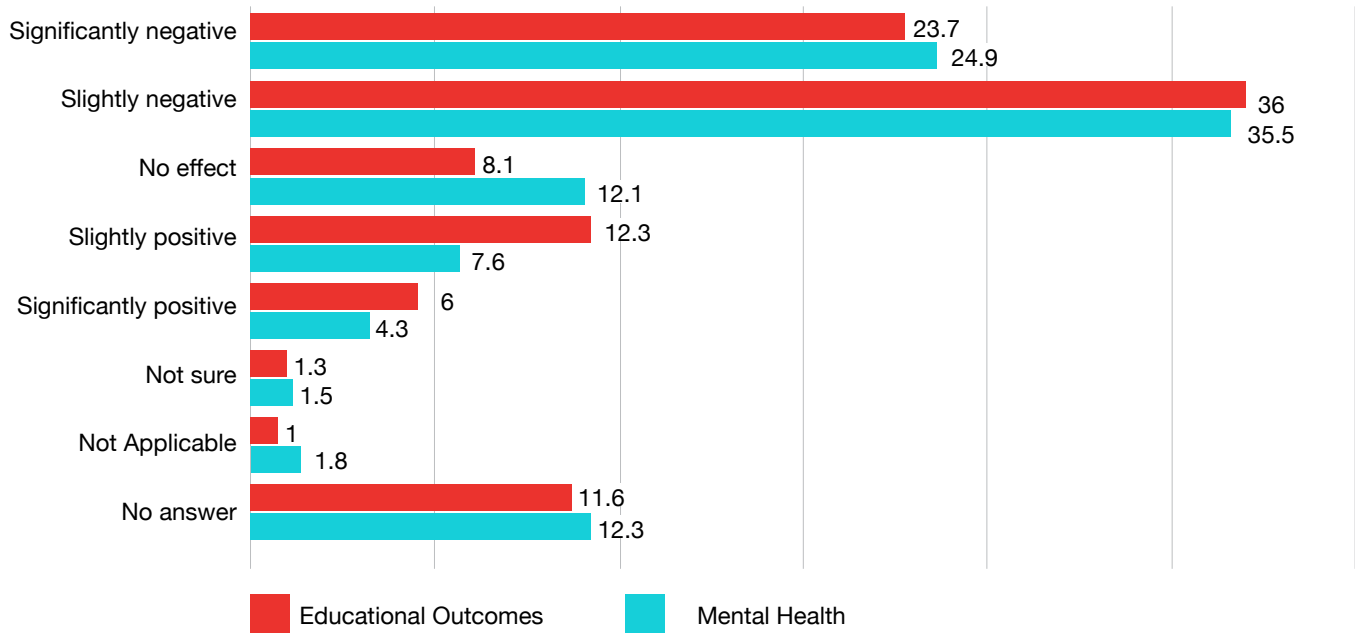
Figure 2. A lack of access to internet and devices for e-learning across regions and areas when educational buildings were closed



N.B: It was not possible to acquire data from respondents in Latin America and the Caribbean as well as those living in towns/suburbs or rural areas in the Arab states and Europe and North America.

Close to 60% of the respondents said their educational outcomes were adversely impacted by virtual learning. The finding is different from findings of a study carried out in the Republic of Korea and India by Baber (2020) on the impact of online learning on students’ perceived learning outcomes and satisfaction, in which the author discovered no significant differences.

In addition, online learning took a toll on the respondents’ health, as 60% stated their mental health was affected by online learning in a slightly or significantly negative way (see Figure 3). Some respondents reported extra assignments and assessments due to the switch to online learning; some reported also health concerns associated with a sedentary lifestyle and staring at a computer for a long time.

Figure 3. Impact of virtual learning on respondents' mental health and educational outcomes

That said, there were also positive changes. One respondent said:

COVID-19 brought out the best in me. During the lockdown in my country Ghana, schools were closed so I was at home. I started learning about graphic design, digital and social media marketing. I used these skills to help my friends who could have access to mobile phones and network connectivity. I formed an online platform where

we discussed issues affecting young people, and how to address them. I started advocating for people's rights using some of the skills I learned during the lockdown on social media.

Others also mentioned that the pandemic presented an opportunity for them to improve their digital skills through online courses, spend more time with friends and family due to a decrease in commute or travel, and learn more about their surroundings, the environment and themselves.

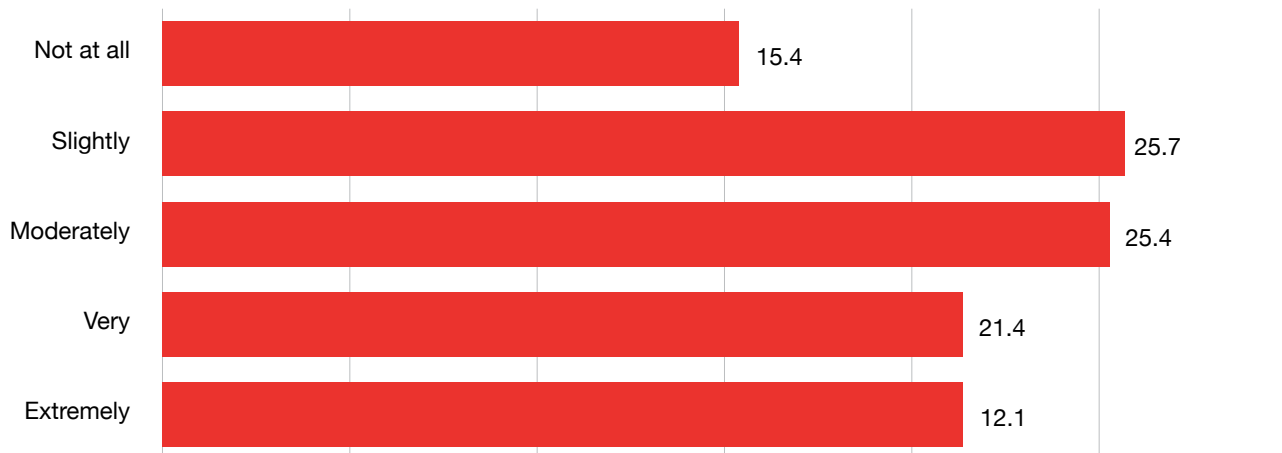
Mental health

The survey results showed a decline in self-reported mental health by youth from all regions. This trend is in line with other literature showing a high prevalence of COVID-19-related fear noted among younger age groups, as well as more depressive and anxious symptoms, compared with pre-pandemic estimates (Samji et al., 2021).

The mental health of participants was impacted negatively during the pandemic in many ways. As briefly mentioned in the previous section, changes,

such as in pedagogy and learning, can influence students' mental health. But there are also other factors that are directly linked to rising anxiety and stress. For example, Figure 4 shows how stressed respondents felt about precautions needed or required to leave their household. One third of participants were extremely or very stressed due to the precautions needed when leaving home (like wearing masks and using sanitizers and alcohol), while 1 in 4 respondents found such precautions moderately stressful.

Figure 4. ‘How stressful have the precautions of leaving home been for you? (wearing masks, using alcohol and sanitizers)’

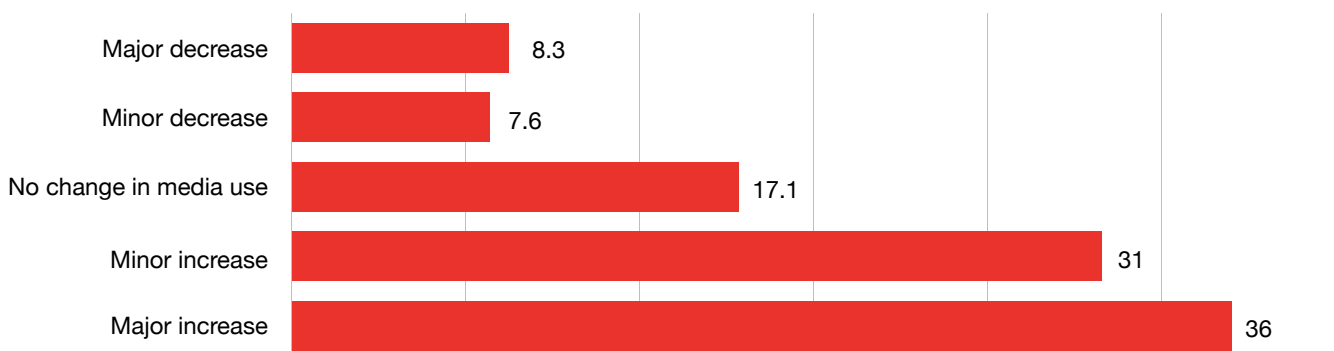


A main issue was youth’s concern about the effect of COVID-19 on family members. Having a family member being put in self-quarantine with COVID-19 symptoms was associated with a decline in mental health. This concern is followed by concerns stemming from the loss of the job of a family member or their death. The latter’s effect on mental health, as per the survey, can be

interpreted by the fact that family death was less common among participants.

The difference in media consumption among young participants during the pandemic was also noted. Two in three respondents reported an increase in using media, including social media, the news and entertainment, as shown in Figure 5.

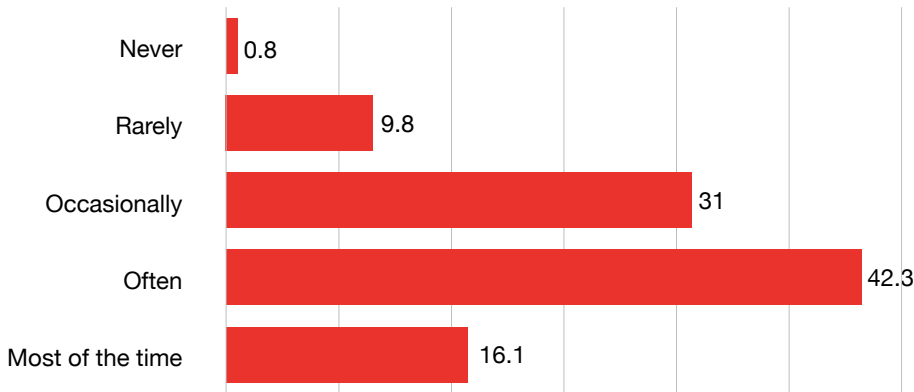
Figure 5. Changes in respondent media use during the pandemic (including social media, the news, and entertainment – movies/series or video games)



Not only did people spend more time using media, but they also invested more time reading, listening and talking about COVID-19, as nearly 60% of

them said they did so often or most of the time (Figure 6).

Figure 6. ‘How often do you read, listen, watch, or talk about COVID-19?’



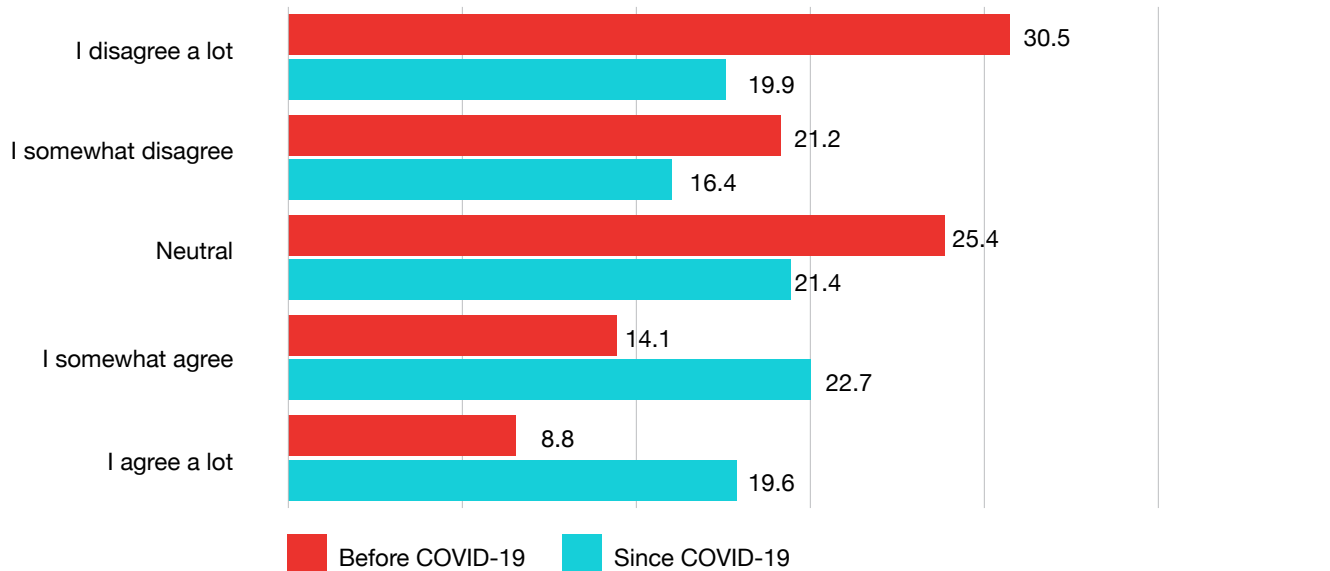
While using media more frequently made respondents feel more informed (almost 70%), most respondents reported that it also resulted in them becoming more worried (around 60%). The changes in media consumption did not help to address anxiety, with more than half reporting it did not help to reduce stress.

Social life

Social life was reported to be the third issue of concern for youth participants, should the pandemic continue for a few months. An alarming

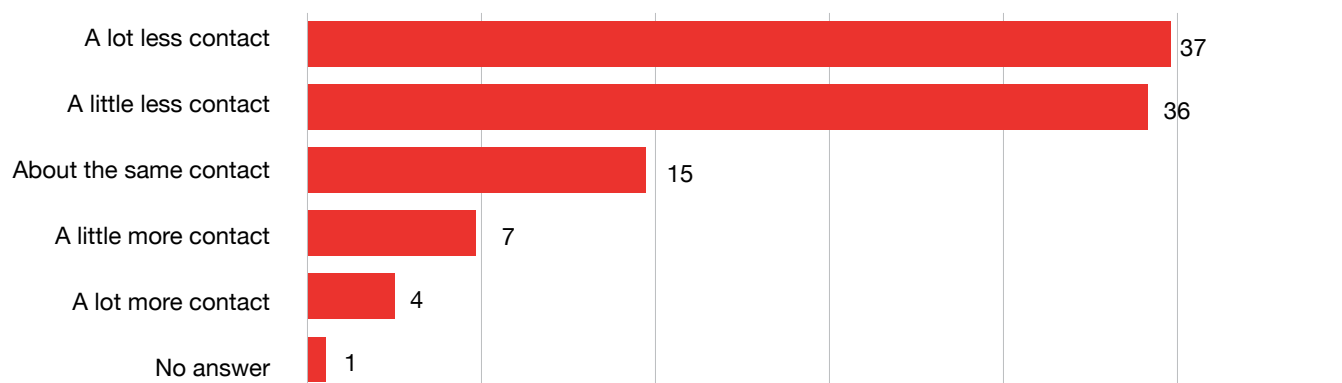
rate of youth reported becoming lonelier since the onset of COVID-19 (from 22.9% before COVID-19 to 44.3% since COVID-19 as shown in Figure 7).

Figure 7. The extent to which respondents agreed with the statement ‘I am lonely’ before and since the pandemic



The cancellation of important events in life (such as graduation, prom, vacation, gatherings, etc.) was said to be very and extremely difficult by more than half of participants (50.3%). A decrease in gatherings could mean fewer opportunities to

socialize in public. 73% of respondents had less contact with people outside their household since the start of the pandemic, which brought about preventive measures like school closures and lockdowns (see Figure 8).

Figure 8. Changes in contact with people outside home/accommodation since the start of the pandemic

As for the more intimate relationships, such as friends and family, while nearly half of the respondents said the quality of the relationship remained the same, it was interesting to see the difference in answers with friends and family. For 40% of the respondents, the relationship with friends had worsened, whereas only 14% said it had improved. In contrast, 28% of the respondents had had a better relationship with their family, and 22% said otherwise (see Figure 9).

The findings on the changing relationship with family members is in line with studies such as the one carried out by Hermanto et al. (2021) on students in Indonesia. They stated that studying at home had a positive influence on the relationship between students and their families because they had more time interacting with each other.

Towner et al. (2022) pointed out a significant effect of household size on respondents' sense of loneliness, whereby participants with a higher number of household members reported a lower level of loneliness. However, in the cohort, a strong correlation between household size and loneliness was not identified.

Financial difficulties

In terms of COVID-19's impact on livelihood, many respondents reported significant changes in their income. 27.7% of the respondents noted that the pandemic had created significant financial hardships for them and their families. One third (32.9%) were concerned about the stability of their living situation.

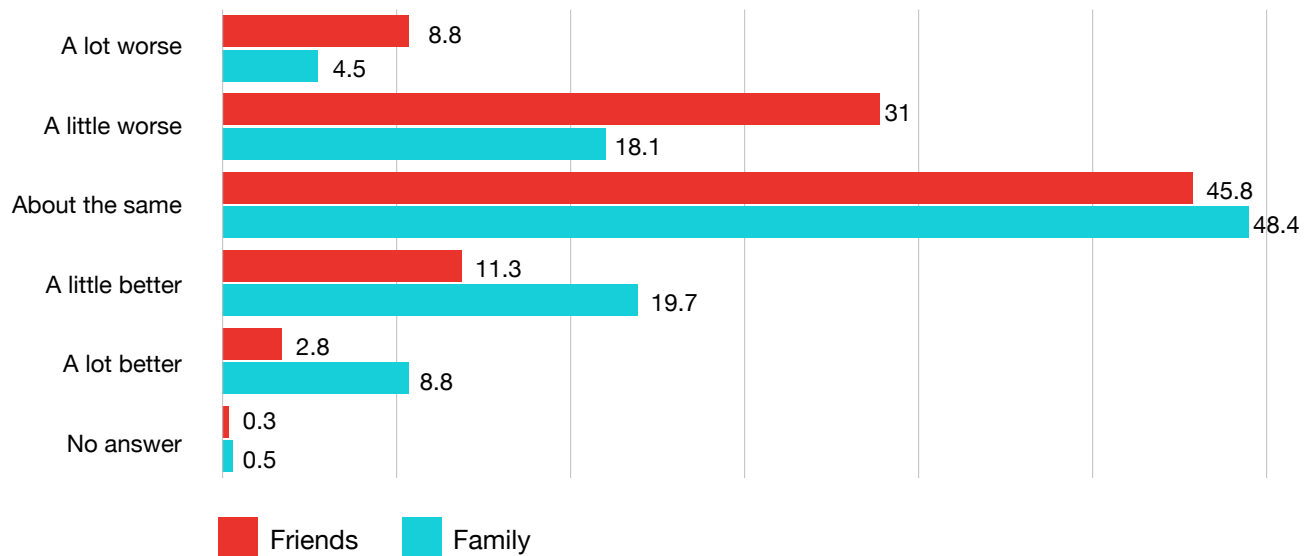
Should the pandemic continue, close to one third of the respondents (31.2%) explicitly said they were very and extremely worried about covering the costs of their basic needs, and a quarter (25.9%) mentioned that they had to borrow money as a result of increasing financial pressure.

Fifty-three respondents had lost their jobs since the start of the pandemic. Among them, a change in them resonating with statements such as, 'I am anxious about things in my life' and 'I am depressed about my life', before and after the start of the pandemic was noted. 17 people were anxious before, and the number increased to 38 since the onset of the pandemic. Similarly, before the pandemic, only seven people said they felt depressed, and then the number jumped to 23 after

the pandemic broke out. Furthermore, 22 out of 34 participants who did not agree with the statement, 'I am depressed about my life', before the pandemic later changed this view when asked about the same statement since the pandemic.

It is believed that these findings and analyses warrant more attention from both educational institutions and researchers who can potentially work together and further investigate the areas presented above.

Figure 9. Changes in the quality of relationships with friends and family



Conclusion and recommendations

Based on the data collected and analysed in this paper, the authors propose three recommendations for decision-makers. It is understood that these recommendations must be contextualized to reach optimum impact. But in these findings, a number of common issues faced by youth, beyond borders, have been identified, and it is believed that this paper and these data-driven recommendations can not only serve as a reference, but also become an incentive for action.

1. During the COVID-19 crisis, many respondents indicated their mental health was adversely affected, and the majority were not aware of any national mental health policy in their country. As a result, it is recommended that Ministries of Health and Education should collaborate with youth to develop mental health policies for youth and students that would not only tackle mental health issues, but also restore faith in youth about government intervention, given that many respondents said 'no' to the need for governments to provide mental health support.
2. Respondents' mental health was also affected by the inflexibility of some educational establishments in terms of physical attendance and subsequent exposure to COVID-19 when attending classes in-person. Therefore, it is recommended that educational institutions acknowledge young people's mental health struggles and create motivation and counselling sessions accessible face-to-face or online to help students cope with mental health-related issues.
3. Finally, globally, student learning has been most affected due to school closures during the pandemic. From the survey, over 21% of respondents, especially those from African countries, reported a lack of access to technological devices and stable internet, as most institutions moved to online learning. It is recommended that governments, international bodies and stakeholders (e.g. school administrators and local community leaders) join hands to ensure adequate educational funding that guarantees equitable access to technology and education in developing and less developed countries.

References

- Abdulkareem, T. A. and Eidan, S. M. (2020). Online Learning for Higher Education Continuity (during COVID-19 Pandemic): The challenges, advantages, disadvantages and how to overcome: A Literature review. *International Journal of Youth Economy*, 6(4), pp.125–131. Retrieved from <https://doi.org/10.18576/ijye/040206>
- Aknin, L. B., De Neve, J.-E., Dunn, E. W., Fancourt, D. E., Goldberg, E., Helliwell, J. F., Jones, S. P., Karam, E., Layard, R., Lyubomirsky, S., Rzepa, A., Saxena, S., Thornton, E. M., VanderWeele, T. J., Whillans, A. V., Zaki, J., Karadag, O., and Ben Amor, Y. (2022). Mental Health During the First Year of the COVID-19 Pandemic: A Review and Recommendations for Moving Forward. *Perspectives on Psychological Science*. Retrieved from <https://doi.org/10.1177/17456916211029964>
- Arnett, J. J. (2014). *Emerging Adulthood: The Winding Road from the Late Teens Through the Twenties*. Oxford, Oxford University Press.
- Baber, H. (2020). Determinants of Students' Perceived Learning Outcome and Satisfaction in Online Learning during the Pandemic of COVID19. *Journal of Education and eLearning Research*, 7(3), pp.285–292. Retrieved from <https://ssrn.com/abstract=3679489>
- Bao, Y., Sun, Y., Meng, S., Shi, J., and Lu, L. (2020). 2019-nCoV epidemic: address mental health care to empower society. *Lancet (London)*. 395(10224):e37–e38. Retrieved from <https://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2820%2930309-3/fulltext>
- Biel, M., Hamrah, O. (2021). Learning From the Pandemic: 'Building Back Better' Through Research on Risk and Resilience With Diverse Populations. *Journal of the American Academy of Child and Adolescent Psychiatry*, 60(4), pp.445–447. Retrieved from <https://doi.org/10.1016/j.jaac.2021.02.001>
- Blustein, D. L., Duffy, R., Ferreira, J. A., Cohen-Scali, V., Cinamon, R. G., and Allan, B. A. (2020). Unemployment in the time of COVID-19: A research agenda. *J Vocat Behav*, 119, 103436. Retrieved from <https://doi.org/10.1016/j.jvb.2020.103436>
- Campione-Barr, N., Rote, W., Killoren, S. E., and Rose, A. J. (2021). Adolescent Adjustment During COVID-19: The Role of Close Relationships and COVID-19-related Stress. *Journal of Research on Adolescence*, 31(3), 608–622. Retrieved from [doi:10.1111/jora.12647](https://doi.org/10.1111/jora.12647)
- Centers for Disease Control and Prevention (CDC). (2018). Well-Being Concepts. Centers for Disease Control and Prevention. Retrieved from <https://www.naspa.org/images/uploads/kcs/>

Chang, G. C., and Yano, S. (2020). How are countries addressing the COVID-19 challenges in education? A snapshot of policy measures. *World Educ. blog*. Retrieved from <https://gecv.ac.in/uploads/ssip/UNESCO%20snap%20shot%20for%20maintaining%20education.pdf>

Chesney, M. A., Neilands, T. B., Chambers, D. B., Taylor, J. M., and Folkman, S. (2006). A validity and reliability study of the coping self-efficacy scale. *British journal of health psychology*. 11(Pt 3), pp.421–437. Retrieved from <https://doi.org/10.1348/135910705X53155>.

Crawford, J., Butler-Henderson, K., Rudolph, J., Malkawi, B., Glowatz, M., Burton, R., Magni, P. A. and Lam, S. (2020). COVID-19: 20 countries' higher education intra-period digital pedagogy responses. *Journal of Applied Learning and Teaching*, 3(1). Retrieved from <https://doi.org/10.37074/jalt.2020.3.1.7>

Diener, E., Scollon, C. N., and Lucas, R. E. (2009). The evolving concept of subjective well-being: The multifaceted nature of happiness. In E. Diener (Ed.), *Assessing well-being: The collected works of Ed Diener*, pp.67–100. Springer Science and Business Media. Retrieved from https://doi.org/10.1007/978-90-481-2354-4_4

Dhawan, S. (2020). Online Learning: A Panacea in the Time of COVID-19 Crisis. *Journal of Educational Technology Systems*, 49(1), pp.5–22. Retrieved from <https://doi.org/10.1177/0047239520934018>

European Commission, European Education and Culture Executive Agency, (2022). The impact of the COVID-19 pandemic on the mental health of young people: policy responses in European countries, Publications Office of the European Union. Retrieved from <https://data.europa.eu/doi/10.2797/299233>

Fleming, S. (2021). The pandemic has damaged youth employment: Here's how we can help. *World Economic Forum*. Retrieved from <https://www.weforum.org/agenda/2021/07/pandemic-damaged-youth-employment/>

Helliwell, J., Layard, R., and Sachs, J. (2012). *World happiness report*. The Earth Institute, Columbia University. Retrieved from <https://doi.org/10.14288/1.0053622>

Hermanto, Y. B., and Srimulyani, V. A. (2021). The Challenges of Online Learning During the COVID-19 Pandemic. *Jurnal Pendidikan Dan Pengajaran*, 54(1), pp.46–57. Retrieved from <https://doi.org/10.23887/jpp.v54i1.29703>

Holmes, E. A., O'Connor, R. C., Perry, V. H., Tracey, I., Wessely, S., Arseneault, L., Ballard, C., Christensen, H., et al. (2020). Multidisciplinary research priorities for the COVID-19 pandemic: a call for action for mental health science. *The Lancet. Psychiatry*. 7(6), pp.547–560. Retrieved from [https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366\(20\)30168-1/fulltext](https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366(20)30168-1/fulltext)

Huang, Y. and Zhao, N. (2020). Generalized anxiety disorder, depressive symptoms and sleep quality during COVID-19 outbreak in China: a web-based cross-sectional survey. *Psychiatry Research*, 288, 112954. Retrieved from <https://doi.org/10.1016/j.psychres.2020.112954>

International Labour Organization (ILO). (2020). International Labour Organization: World Employment and Social Outlook – Trends. International Labour Organization. Retrieved from https://www.ilo.org/global/topics/coronavirus/impacts-and-responses/WCMS_767028/lang--en/index.htm

International Labour Organization (ILO). (2021). ILO Monitor: COVID-19 and the world of work. Seventh edition; Updated estimates and analysis. International Labour Organization. Retrieved from https://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/documents/briefingnote/wcms_767028.pdf

Liang, L., Ren, H., Cao, R., Hu, Y., Qin, Z., Li, C., and Mei, S. (2020). The Effect of COVID-19 on Youth Mental Health. *The Psychiatric Quarterly*. (April, 21):1–12. Retrieved from <https://doi.org/10.1007/s11126-020-09744-3>

Mak, I. W. C., Chu, C. M., Pan, P. C., Yiu, M. G. C., Ho, S. C., and Chan, V. L. (2010). Risk factors for chronic post-traumatic stress disorder (PTSD) in SARS survivors. *General Hospital Psychiatry*. 32(6), pp.590–598. Retrieved from <https://www.sciencedirect.com/science/article/abs/pii/S0163834310001453?via%3Dihub>

Nathiya, D., Singh, P., Suman, S., Raj, P., Tomar, B. S. (2020). Mental health problems and impact on youth minds during the COVID-19 outbreak: Cross-sectional (RED-COVID) survey. *Soc Health Behav*, 3, pp.83–88. Retrieved from <https://www.semanticscholar.org/paper/Mental-health-problems-and-impact-on-youth-minds-Nathiya-Singh/854c4b388ec614b575bc3fcea07456af5a1bdc28>

Organisation for Economic Co-operation and Development (OECD). (2021). Supporting young people’s mental health through the COVID-19 crisis. OECD. Retrieved from <https://www.oecd.org/coronavirus/policy-responses%2%ADes/supporting-young-people-s-mental-health-through-the-COVID-19-crisis-84e143e5/>

Peng, E. Y.-C., Lee, M.-B., Tsai, S.-T., Yang, C.-C., Morisky, D. E., Tsai, L.-T., Weng, Y.-L., and Lyu, S.-Y. (2010). Population-based post-crisis psychological distress: an example from the SARS outbreak in Taiwan. *Journal of the Formosan Medical Association = Taiwan Yi Zhi*, 109(7), pp.524–532. Retrieved from [https://doi.org/10.1016/S0929-6646\(10\)60087-3](https://doi.org/10.1016/S0929-6646(10)60087-3)

Pössel, P., Burton, S. M., Cauley, B., Sawyer, M. G., Spence, S. H., and Sheffield, J. (2017). Associations between Social Support from Family, Friends, and Teachers and depressive Symptoms in Adolescents. *Journal of Youth and Adolescence*, 47(2), pp.398–412. Retrieved from <https://link.springer.com/article/10.1007/s10964-017-0712-6>

Samji, H., Wu, J., Ladak, A., Vossen, C., Stewart, E., Dove, N., Long, D., and Snell, G. (2022). Review: Mental health impacts of the COVID-19 pandemic on children and youth - a systematic review. *Child and adolescent mental health*, 27(2), pp.173–189. Retrieved from <https://doi.org/10.1111/camh.12501>

Song, L., Singleton, E. S., Hill, J. R., and Koh, M. H. (2004). Improving online learning: Student perceptions of useful and challenging characteristics. *The Internet and Higher Education*, 7(1), pp.59–70. Retrieved from <https://www.sciencedirect.com/science/article/abs/pii/S1096751603000885>

Towner, E., Tomova, L., Ladensack, D., Chu, K., and Callaghan, B. (2022). Virtual social interaction and loneliness among emerging adults amid the COVID-19 pandemic. *Current research in ecological and social psychology*, 3, 100058. Retrieved from <https://doi.org/10.1016/j.cresp.2022.100058>

United Nations Educational, Scientific and Cultural Organization (UNESCO). (2021). *Education: From disruption to recovery*. UNESCO. Retrieved from <https://en.unesco.org/COVID19/educationresponse>

United Nations Children's Fund (UNICEF). (2021). *Life in Lockdown - Child and adolescent mental health and well-being in the time of COVID-19*. UNICEF. Retrieved from <https://www.unicef-irc.org/publications/1227-life-in-lockdown.html>

United Nations. (2020a). *Protecting and mobilizing youth in COVID-19 responses*. Department of Economic and Social Affairs Youth, UN. Retrieved from <https://www.un.org/development/desa/youth/news/2020/05/COVID-19/>

United Nations. (2020b). *World Economic Situation Prospects*. Department of Economic and Social Affairs Youth, UN. Retrieved from https://www.un.org/development/desa/dpad/wp-content/uploads/sites/45/WESP2020_FullReport.pdf

University of Calgary. (2021). *Youth, the pandemic and a global mental health crisis: Depression and anxiety symptoms have doubled, help needed, warn clinical psychologists*. ScienceDaily. Retrieved from www.sciencedaily.com/releases/2021/08/210809112840.htm

World Health Organization (WHO). (2021). *WHO Coronavirus (COVID-19) Dashboard*. World Health Organization. Retrieved from <https://COVID19.who.int>

World Health Organization (WHO). (2021). *Young people and COVID-19: behavioural considerations for promoting safe behaviours: policy brief*.

Xiang, Y. T., Yu, X., Ungvari, G. S., Correll, C. U., and Chiu, H. F. (2014). Outcomes of SARS survivors in China: not only physical and psychiatric co-morbidities. *East Asian Archives of Psychiatry: Official Journal of the Hong Kong College of Psychiatrists = Dong Ya Jing Shen Ke Xue Zhi: Xianggang Jing Shen Ke Yi Xue Yuan Qi Kan*, 24(1), pp.37–38.

Xu, J. and He, Y. (2012). Psychological health and coping strategy among survivors in the year following the 2008 Wenchuan earthquake. *Psychiatry and Clinical Neurosciences*, 66(3), pp.210–219. Retrieved from <https://doi.org/10.1111/j.1440-1819.2012.02331.x>

Yeung, N. C. Y., Lau, J. T. F., Choi, K. C., and Griffiths, S. (2017). Population Responses during the Pandemic Phase of the Influenza A(H1N1) pdm09 Epidemic, Hong Kong, China. *Emerging Infectious Diseases*, 23(5), pp.813–815. Retrieved from <https://doi.org/10.3201/eid2305.160768>

Zahn-Waxler, C., Shirtcliff, E. A., and Marceau, K. (2008). Disorders of childhood and adolescence: gender and psychopathology. *Annual Review of Clinical Psychology*, 4, pp.275–303. Retrieved from <https://doi.org/10.1146/annurev.clinpsy.3.022806.091358>



'WORRIED ABOUT MY FUTURE': ACCESS AND QUALITY OF HIGHER EDUCATION DURING THE COVID-19 PANDEMIC AROUND THE WORLD (GLOBAL STUDY)

————— Authored by —————

Smriti Khemka and Fouzia Reza

Members of the global youth-led research team exploring the impact of COVID-19 on youth learning, in the context of the UNESCO Youth as Researchers (YAR) on COVID-19 initiative (2020–2022)

Acknowledgements

We acknowledge the mentoring of Sue Vize and of the United Nations Educational, Scientific and Cultural Organization (UNESCO), and the contribution of the Global Learning Team members (Nem Jean-Baptiste, Haiti; Mohammed Babagana, Nigeria; Reem El Hassan, Egypt; and Vânia de Oliveira Alves, Brazil) for their support in the design of the study. We extend our thanks to the participants trusting us with their experiences. Last, but not least, a big thank you to our pets Hagrid and Moyna for taking care of our mental health needs and reminding us to take breaks.

Keywords: higher education, COVID-19, inequality

List of figures*:

Figure 1. Access and quality

Figure 2. Snapshot of participant representation

Figure 3. Professor respondents

Figure 4. Responses by area

Figure 5. Access to internet devices across genders

Figure 6. Impact of online education on teacher-student relationship

Abstract

The abrupt changes caused by the COVID-19 pandemic to the educational opportunities of youth warrant investigation to establish the global consequences of the pandemic on access to and quality of higher education. Through a survey with open and closed questions, responses were collected from 359 students and teachers from 27 countries across all five of the UNESCO regions. It was found that remote learning experiences varied according to gender. Respondents who shared their internet device within a household were mostly women. Both teachers and students reported a sharp decline in their relationships with each other. Most of the respondents reflected on the impact on mental health. In conclusion, it is recommended to extend financial and psycho-social support, especially to marginalized communities and female students, addressing mental health education in undergraduate curricula, reviewing methods of learning and assessment and strengthening teacher-student relationships through extracurricular sessions online.

*Source of all figures: UNESCO Youth As Researchers on COVID-19 initiative (2020-2022)

Introduction

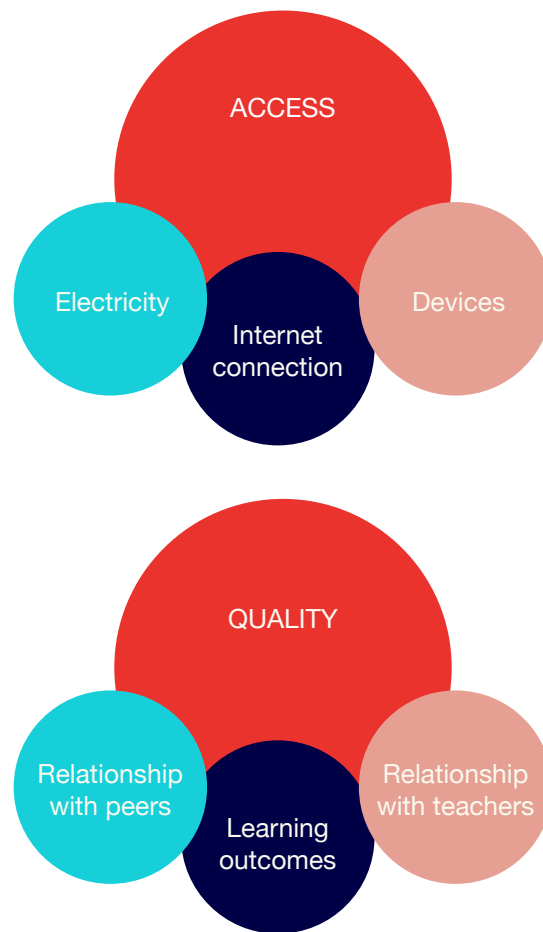
Classified by the World Health Organization (WHO) as a pandemic, the new coronavirus has caused social, political, economic and cultural disruptions all over the world. Education has been one of the most greatly impacted sectors, with school and university closures affecting an estimated 89.4% of enrolled learners in schools and higher education institutions globally (Marinoni et al., 2020).

In any crisis, whether natural or human-made, the impact on the most vulnerable – women, youth and the elderly – is significant in most areas of their lives and will continue to be long after the pandemic is contained. As evidenced by natural crises (e.g. tsunami, floods, earthquakes), human-made crises (e.g. conflicts, wars) or health crises (e.g. Ebola, Zika) it is the most marginalized and disadvantaged groups that suffer the greatest. Whether through exclusion, cramped living conditions or lack of resources, this cohort is at a heightened risk of vulnerability to multiple deprivations, psychological stress and exploitation, both before the pandemic and in its aftermath (Berman et al., 2020). The additional ‘cost’ to the disadvantaged communities, such as severe illness or death, amalgamates the economic insecurity and restricted access to resources like formal education, further compounding social inequalities (Waller et al., 2020). Crises have a long-lasting impact on education.

The COVID-19 pandemic has caused the largest disruption of education in history, having essentially a universal impact on learners and teachers around the world. The crisis further exacerbates pre-existing educational disparity by reducing educational opportunities for the disadvantaged and the marginalized. According to the United Nations (2020) some 23.8 million additional children and youth (from pre-primary to tertiary) may drop out or not have access to school due to the pandemic’s economic impact alone. The transition to virtual learning has exacerbated existing inequalities in access to education, but also affected its quality. For instance, only 29% of higher education institutions in Africa were able to switch to remote learning immediately, compared to 85% in Europe (Koninckx et al., 2021).

It becomes crucial to understand how those abrupt changes caused by the pandemic have affected the future prospects of youth, which are closely aligned to their educational achievements. The unprecedented threatening situation of the pandemic worldwide also creates an urgent need for critical reflection and new knowledge production. Hence, the study investigated the consequences of COVID-19 on access and quality of higher education. As shown in Figure 1, the aim is to understand not just access in terms of electricity, internet connection and devices, but also about quality in terms of learning outcomes and relationship with teachers and peers.

Figure 1. Access and quality



This paper presents the literature review of the study, where the literature on the status of higher education during the pandemic is discussed. This section also addresses the nuances of access and quality of higher education across the globe. It is followed by the methodology and the data analysis plan for the study. The next section focuses on the

findings and analysis. Here, both the positive and negative impacts of the transition to virtual learning caused by the pandemic is acknowledged. Finally, keeping in mind to not let perfect be the enemy of the good in extraordinarily challenging times, the recommendations for the study are presented.

Literature review

The COVID-19 pandemic forced the educational institutions to re-look at digitalization of learning. The pandemic exacerbated pre-existing vulnerabilities and shortcomings of the higher education systems by questioning quality of education, mode of delivery and accessibility. Since March 2020, significant losses in learning have been observed due to disruptions to the systems of education. Compromised flexibility and mobility, limited access to resources and fewer in-person development opportunities have led to reinforcement of inequalities (Hassan et al., 2021).

Globally, a move to online education has been a prominent response. However, most low- and middle-income countries struggled to ensure digitalization for all. Postponement of classes or rearrangement of the academic calendar became a common trend in these countries. For example, stating problems faced by students in accessing the internet, the Hyderabad Central University in India opted not to implement virtual learning (Salmi, 2020). Similarly, in Bangladesh, public universities waited at least 4–5 months before shifting to virtual learning, citing lack of internet connection and capacity to teach remotely (Wadud, 2020).

In the countries where online education was mandated by the government, student protests erupted. 'Arguing that it was elitist and out of reach for poor students without proper internet

access', Student Unions of Ghana, South Africa and Zimbabwe led such protests (Mukeredzi et al., 2020). The exorbitant costs of internet connection posed a challenge for many in countries like the Syrian Arab Republic where most students and teachers relied on 3G connections rather than Wi-Fi. A study done by Cambridge University identified that online learning costs are one of many financial burdens for students as '(s)ome students are also left wrestling with a responsibility to financially support their families during another wave of crippling price inflation caused by COVID-19' (Hajir and Salem, 2020). In a study conducted by Hayashi et al. (2020) in Sri Lanka, connectivity difficulties are prevalent. In a large-scale survey, it was found that almost half of students said that mobile data plans were not affordable or only somewhat affordable. In Colombia, students complained to the Ministry of Education about internet connections, and some professors supported their agenda (Salmi, 2020). For professors, too, the switch to online led to over-work and stress. They had to rethink the curriculum, create e-content and revise modes of assessment without having sufficient time to plan or adjust (Rashid and Yadav, 2020). Further, a study conducted by El Said (2021) investigating overall learning experiences in universities in Egypt interviewed professors, where one complained, 'Teaching and working from home increased working hours and interfered with family life.'

In order to ensure an equitable student experience, students from less privileged socio-economic backgrounds need special attention. 'Low-income and first-generation students, immigrants, and people of colour will be more likely to delay going to college or to drop out' (Salmi, 2020).

In terms of quality of learning during the pandemic, attainment of learning outcomes has been a major concern among educators. One study mentions the challenges faced by students in a professional degree like medicine or biotechnology. Malcolm Reed, Dean of Brighton and Sussex Medical School, Brighton, United Kingdom of Great Britain and Northern Ireland argued that 'there is no simple answer as to how to deal with students who have missed 6 months of their clinical experience' (Burki, 2020). On the other hand, students struggled with virtual learning because of significant barriers such as isolation, lack of time and routine, and self-organizing capabilities (García-Morales et al., 2021).

One of the key features of face-to-face learning has been student engagement. With a transition to online learning, student-teacher and student-student relationships have been strained. A study conducted in Australia by Smith et al. (2021) found that 57% of the respondents agreed that web-based technologies hindered their interaction with the instructor. From the point of view of the professors, 'it was more difficult for the teachers to see the differences between students and, therefore, they are not able to anticipate the individual needs of students to the appropriate extent'.

In the context of higher education, it is common knowledge that decisions made today will have future consequences. Governments, policy-makers and universities, among others, must make informed decisions, keeping in mind the high stakes for the future generations.

Methodology

Design

The nature of the study is exploratory and aims to investigate the effects of COVID-19 on access to and quality of higher education around the world. The design adopted uses quantitative methods with both open and closed questions. The closed-ended questions generated figures and data analysis and interpretations using statistical measures, and the open-ended questions involved analysis and interpretations in terms of perceptions, values and opinions of respondents of the study. To complement the findings of the study, a literature review was conducted focusing on global studies by the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Children's Fund (UNICEF), the World Bank, as well as country-specific studies, via various academic journals and news reports, among others.

Sample

Undergraduate students and professors/academic staff in all five UNESCO regions (Africa, Arab States, Asia and the Pacific, Europe and North America, and Latin America and the Caribbean) were targeted. The goal was to capture voices from a diverse group across regions and gender, among students aged 18–35 years and professors/academic staff aged over 18 years. Since only undergraduate students were targeted, students who already had completed a degree before March 2020, or who were already in a distance programme, were excluded along with students already enrolled in a postgraduate degree before March 2020.

Of the 359 responses collected, 275 were from undergraduates and 49 were from professors/academic staff members. The remaining 35 were discarded during data cleaning, as they did not fit the targeted categories. While it was intended to reach respondents from both urban and rural areas, the respondents from rural areas were significantly low, at 12%; the universities of rural areas were also under-represented at 8%. More than half of the respondents identified themselves as female. Responses from 27 countries across the five UNESCO regions were collected; however, the Asia-Pacific region was over-represented, and only a few responses from Europe and North America could be collected.

Tools

The study was conducted using an online survey with both open and closed questions via Google Forms. The figures and graphs contained in this study are sourced from the answers to the online survey. The survey had separate sections for undergraduates and professors/academic staff members. Questions addressed access, in terms of electricity, internet connection, devices, and quality of learning outcomes and relationships with teachers and peers.

Methodology and research experience

The dissemination of the survey form lasted for two months (19 March 2021 to 31 May 2021). It was promoted through the personal networks of the researchers of the Global Learning Team,

Youth as Researchers (YAR), various universities and youth organizations across the world, but also through the networks of the YAR community and UNESCO. As the study was global in nature, the survey was circulated in six languages: English, French, Portuguese, Arabic, Chinese and Spanish. The highest number of responses were collected in English (280 responses), and the fewest in Arabic (4 responses); however, many native speakers of the aforementioned languages also chose to respond in English. As the tool of data collection was Google Forms, it was not possible to collect responses from China.³

Data analysis plan

For data analysis, the responses collected in the other five languages (French, Portuguese, Arabic, Chinese and Spanish) were first translated to English. From the combined list of responses, the data were cleaned by discarding the responses that did not fit in the targeted categories of undergraduates and professors/academic staff members. The data for the closed-ended questions were then coded and fed into IBM Statistical Package for Social Sciences (SPSS). Using descriptive frequencies and cross-tabulation, the data were analysed. The qualitative narratives of the open-ended questions were analysed using thematic analysis to find common themes. The final part of the analysis included tabulation, organization and presentation of the data to support the recommendations.

Ethics

The unprecedented threatening situation of the pandemic worldwide created an urgent need for critical reflection and new knowledge production. Further, the ethics of academic writing concerns itself with whether the objectives of the study for which data are collected benefits the larger society. Hence, as part of the introductory section of the Google form, a consent form along with the motivation behind this research were attached requesting the agreement of participants to the study and also mentioning their choice to withdraw their participation at any moment. It was ensured that the survey was anonymous and no sensitive data regarding the participants' identities were collected.

Limitations

While it was possible to collect responses from a diverse population across the world, the pandemic itself and its constantly changing protocols posed limitations to the study. For example, the research was conducted remotely instead of a mixed approach of both in-person and remote, which would have helped to reach out to communities who are at the lower end of the global connectivity scale. Further, an in-depth analysis would have complemented the responses from the survey form, and although it was intended to conduct interviews, due to unforeseen circumstances, it was not possible.

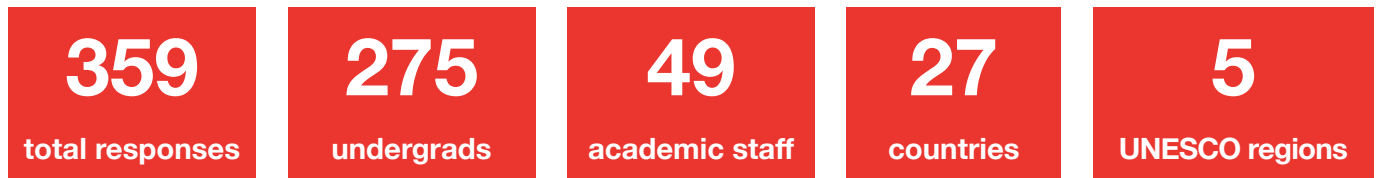
³ Google services are not available in China.

Findings

The survey analysis was based on 359 responses, out of which 275 were undergraduates and 49 were professors/academic staff members. In tandem with the global nature of the study, responses were collected from 27 countries across five UNESCO regions (Figure 2). While most responses were from the Asia-Pacific region, especially from India, Bangladesh and Malaysia, there was an

under-representation of the Europe and North America region with responses as low as one from a few countries. Interestingly, while all the Malaysian respondents responded using the survey form in Chinese, no responses from China could be collected as Google services are not available in China.

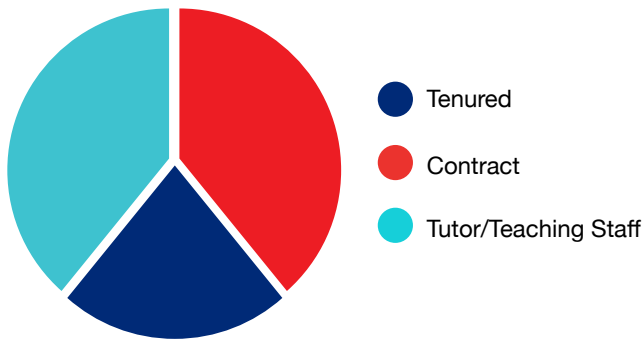
Figure 2. Snapshot of participant representation



In reference to the gender dynamic, while 52% of the respondents used the pronouns ‘she/her/hers’, 1.5% used the pronouns ‘they/them/theirs’. For the age breakdown, 88.4% of undergraduate respondents were aged 18–25 years, 9.5% were aged 26–30 years and 2.1% were aged 31–35 years. For professors/academic staff members, 31.5% were aged 26–30 years, 29.5% were aged 31–35 years, and 39% were aged 36 years. The classification of the professor/academic staff

employment status was 40% contract professors, while 22% and 38% were tenured professors and tutor/teaching staff members, respectively (Figure 3). The objective of the research was to reach out to students and professors in both urban and rural settings. However, as illustrated in Figure 4, only 12% of all respondents lived in rural areas. The universities located in rural areas were also under-represented, at only 8%.

Figure 3. Professor respondents

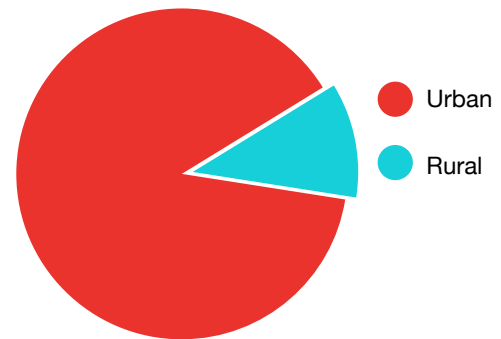


A UNESCO study found that as many as 89.4% of enrolled learners in schools and higher education institutions were affected globally (cited in Marinoni et al., 2020).

Similarly, in this study, it was found that 94% of undergraduate respondents reported that their degree pre-COVID-19 was completely face-to-face, which post-COVID-19 reduced to merely 11%. 63% of students reported a complete transition to online learning, while 23% had part face-to-face and part online education since the onset of COVID-19.

In relation to access to education during the pandemic, the majority of students and about half of the teachers reported having an unstable internet connection, while 18.9% of students and 24.5% of teachers experienced power outages. Likewise, a large-scale survey in Sri Lanka resonated similar findings, where both the students and the faculty agreed that poor internet connection was their topmost challenge during online learning and teaching. More than 70% of students, 68% of faculty in state institutions and 76% of faculty in non-state institutions faced connection issues during online teaching and learning (Salmi, 2020). But not all experiences of online learning were negative. One respondent studying in Germany appreciated the time and energy saved by cutting out his daily commute: 'you don't have to wake

Figure 4. Responses by area



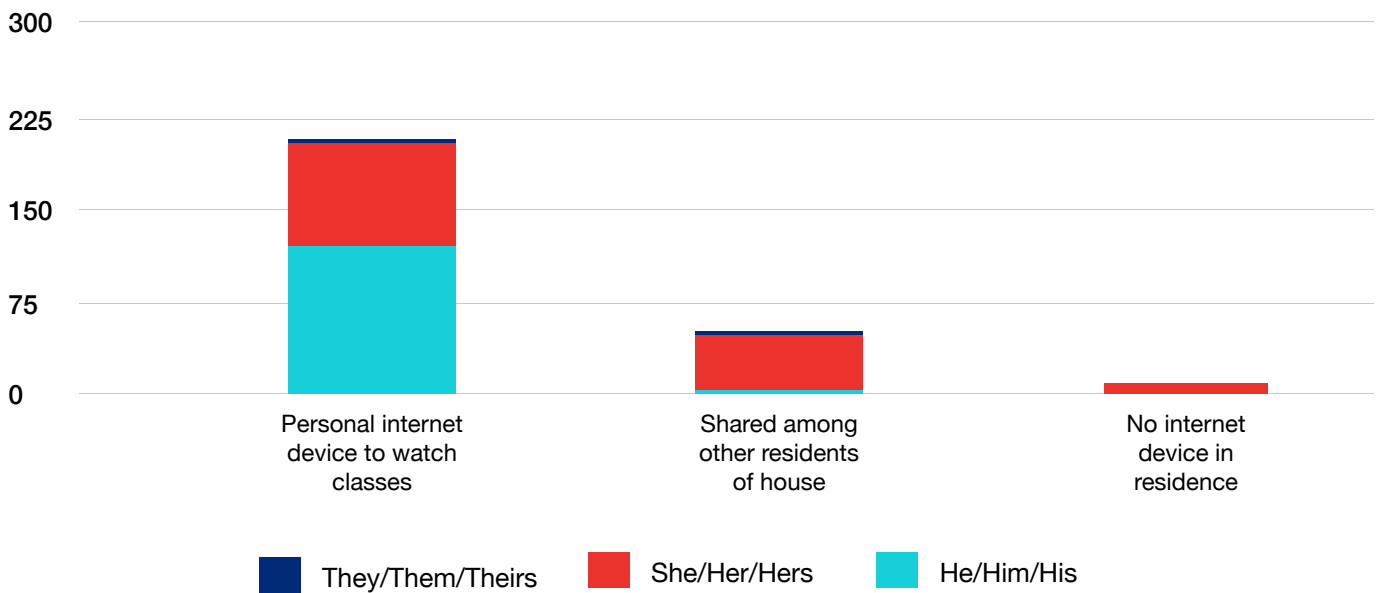
up 1.5 hours prior to the lecture in order to have a breakfast and to take a shower before leaving for a commute of 40 minutes'. El Said (2021) also highlights the positive impact of online learning where all the professors who were interviewed 'agreed that sharing the link of the recorded online lectures provided students with the ability to replay videos, revise materials, and skip unneeded parts of the lecture'.

Women and girls' access to education was more affected by the pandemic. A 'young lives' study, by Moore and Marshall (2020), highlighted the gender dimension of accessing technology and quality learning environments. They found that young men in India were much more likely to regularly use a computer and the internet along with other forms of technology – like smartphones – than their female counterparts. The study also mentioned that 'four in five (80%) girls in our India sample (based in Andhra Pradesh and Telangana) have never accessed the internet, and more than three in five (62%) have never used a computer' (Moore and Marshall, 2020). Further, another study by Attfield et al. (2021) found alarming evidence from South Asia. For example, despite high access rates to mobile phone technology in Pakistan (78%), Bangladesh (86%) and Afghanistan (84%), comparatively few women and girls have access to their own devices. In terms of internet access, girls and women are as high as 70% less likely to access

content online, as compared to boys and men. Similar concerns were echoed in the findings from this study as well, where, as shown in Figure 5, the 19.3% of respondents who shared their internet device within a household were mostly women.

Further, a female respondent from Brazil remarked on not having a conducive learning environment at home: 'I had difficulty concentrating at home, there were more household tasks than before'.

Figure 5. Access to internet devices across genders



Many students reported learning during the pandemic to be stressful and fatiguing. 'I was worried about my future', commented a student from Haiti. A Latvian respondent also observed 'spending lots of time in front of a screen for days in an enclosed studio apartment' affected his mental stability. The UNESCO YAR paper exploring the impact of COVID-19 on youth well-being globally, echoed the same results: the top two areas of concern rated by students were mental health and education, which were far outranking concerns for physical health, income and employment (Amanu et al., 2024). A UNICEF (2021) study conducted in Latin America and the Caribbean to understand the crisis of mental health of adolescents and young people due to COVID-19, found that 43% of women felt pessimistic about their future, compared to 31% of the men participating in the study.

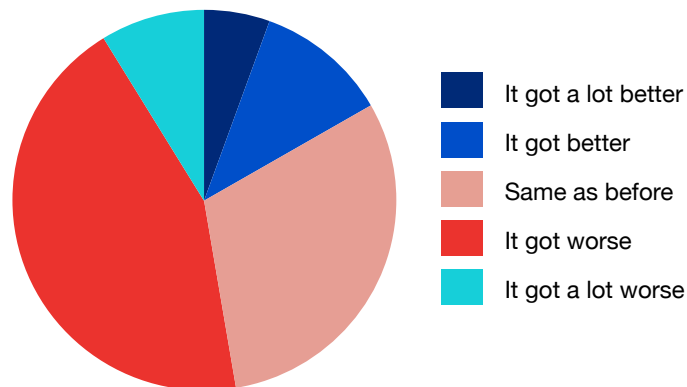
In addition to isolation and uncertainties about the future, concerns around focus and concentration were also raised. For example, a respondent from the United Kingdom of Great Britain and Northern Ireland, studying in France, disclosed 'being able to use the university's studios for an audio engineering degree was indispensable for me. Plus, I was sharing a house with a lot of people including my now ex-boyfriend, a young mother, a baby, and two teenagers. This made it impossible to focus...'. Further, as a study conducted by Furman and Moldwin (2021) argued, 'many returned to family homes, where they were isolated from friends and lost the autonomy they had been cultivating while living independently'. Ironically, while establishments expected the students to be mature adults and keep up with the academic responsibilities as if 'nothing has changed', they were put under house rules by parents or guardians essentially 'infantilizing'

them during the pandemic. The rapidly evolving pandemic protocols and the endless instructions and Frequently-Asked-Questions (FAQ) pages from universities added an extra burden to students, especially international students dependent on a visa. Furthermore, meeting student mental health needs has also been demanding for teachers, as one Bangladeshi professor participating in the study reflected, 'I am more than a teacher now'. She mentioned how 'before pandemic, I used to take the class as a whole within 1 hour, but since pandemic I am taking classes over 2 hours, talking with them, giving lessons, listening to their problems, any support for mobile data or financial effort, etc.'

'How can we possibly study medicine online? We are clearly not able to understand the practical', reflected a concerned respondent from India. On the contrary, a professor from India called attention to the difficulty in analysing progress of individual students as 'most students copy each other's work and send it across as their own'. El Said (2021) also found that students with a low cumulative grade point average were more disadvantaged as they were deprived of support mechanisms provided on-campus, such as the support of the Mentoring Unit for students with learning difficulties.

In terms of the quality, more than half of the students reported that the quality of learning declined considerably since the start of the pandemic. Only 6.1% of teachers reported that all learning outcomes were attained, and this was especially low in Bangladesh, Brazil, Haiti and Nigeria.

Figure 6. Impact of online education on teacher-student relationship



As shown in Figure 6, both the students (43.6%) and teachers (53.1%) agreed that their relationships worsened, while a similar proportion of students (44%) reported deterioration of student-student relationships as well. A professor from India remarked, 'I don't even know who my students are in online mode'. Echoing similar concerns, El Said (2021) conferred that only half of the student

respondents agreed that online learning methods ensured student-student and student-instructor interactions. Illustrating an important issue, a professor from India commented that 'lack of face-to-face interaction has adversely affected the academic relationship with students, especially the newly admitted students in 2020'.

Youth voices from the ground

A student from Malaysia

'Tuition fees must be reduced ... Our students were forced to stay at home for class, were forced to stop school facilities, and did not step into the school half an inch! Facilities, electricity, water, air-conditioning, internet, library, laboratory, and computer fees are all inaccessible to us, so why don't they refund a penny? Let us also pay our own money to upgrade our own network in order to attend classes ... This is not what we want online! Where's the logic?'

A professor from India

'The quality of online teaching is not at par with offline teaching. The main reason is that students are not ready for this kind of teaching and secondly for teachers it's required to have some essential skills for online teaching.'

A professor from Bangladesh

'Students are randomly remaining absent – some due to network problems, some got involved in income generating activities due to financial struggle of families, some are going through long-term sickness.'

A student from the United Kingdom of Great Britain and Northern Ireland, studying in France

'Please open libraries. Not only the university libraries but the public ones too. Some people live in crowded houses, which make it extremely hard for them to study and work, making their financial situation, and their hope for a brighter future considerably worse.'

A student from Bangladesh studying in Saudi Arabia

'Faculties tend to teach the class like a meeting/conference rather than like a class. Some tries [sic] innovative techniques but most of those techniques fail due slow internet connections of our country.'

A student from India

'Mental Aspect is a very important part that has been ignored (in this survey). While staying at home and not being able to go out makes you a bit too stressed and mentally breaks you down and with that mental space to study and try to cope up with the classes and courses is a very difficult thing to do.'

Conclusion and recommendations

There are many stakeholders involved when it comes to higher education, including governments, non-governmental bodies, universities, parents and the community at large. Thus, keeping in line with the findings of the study, the recommendations are primarily addressed to governments and universities.

Governments

a. Develop financial assistance schemes for marginalized communities and female students – scholarships, awards and subsidies for renting and purchasing of devices

As one of the findings of this study discussed the disparity in access to internet devices, the development of a financial assistance scheme, especially for the marginalized, first-generation learners and women, is recommended. In tandem with the Sustainable Development Goals (SDGs), specifically SDG4, and the 2030 Agenda for equitable and affordable access to education, the focus should not only be on improving the digital infrastructure in general, but also on ownership of internet devices. Italy, France and Germany, among others, which are considered 'industrial countries' with a good broadband network, also felt the need to upgrade their digital infrastructure. Acknowledging the unequal access to internet, they invested more than €50 million each in their respective areas to improve connectivity, especially in the isolated pockets (Salmi, 2020).

b. Arrange awareness programmes – social and media campaigns encouraging guardians to support virtual learning

In line with the literature and the findings of students struggling to find a conducive learning environment at home, social and media campaigns targeted at parents and guardians to raise awareness about continuation of education should be organised. The importance of a balance between academic and household chores, designated space to study and digital infrastructure needs, among others, are key issues that should be addressed.

c. Include compulsory courses on mental health and well-being in undergraduate curriculum

To address mental health concerns, it is requested that governments introduce compulsory courses on mental health care, stress management, personal well-being, among others, in the undergraduate curriculum. The content of courses needs to be designed keeping in mind the various contexts, faiths, local heritage, and related factors.

Universities

d. Review methods of examination and develop new methods suitable for online learning

Based on the research findings, a review of learning and assessment methods is crucial. Taking lessons from the pandemic, it is proposed to adopt a flexible approach to learning and assessments.

The varied situations and contexts need to be taken into account to set realistic learning outcomes emphasizing critical understanding and analysis.

e. Arrange online extracurricular sessions to strengthen and maintain student-teacher and student-student relationships

It is recommended to encourage interaction and set-up mechanisms to facilitate peer-to-peer discussions within the virtual space. Universities should design simulations of social interactions online, lunch hours, ice-breaking activities, small group discussions, among others, to maintain student-teacher and student-student relationships.

Conclusion

This study, aiming to understand the perception of students and teachers on the impact of COVID-19 on access and quality of higher education, uncovered inequalities, especially in the Global South. With the help of survey forms in six languages, data were collected across five UNESCO regions. The research found that the pandemic reinforced gender disparities that exist in accessing higher education while also discussing the deteriorating teacher-student relationship and declining quality of learning during the pandemic. Further, the majority of responses received for open-ended questions revolved around concerns about mental health among both students and professors. In the end, recommendations for both governments and universities to support access to, and reassess quality of, learning and promote mental health care were identified.

References

- Attfield, I., Henderson, C., and Abdurazzakova, M. (2022). COVID-19 and girls' learning continuity in South Asia: Misplaced anxiety or justified fear? The Education and Development Forum (UKFIET). Retrieved from <https://girlseducationchallenge.org/blogs/blog-article/COVID-19-and-girls-learning-continuity-in-south-asia-misplaced-anxiety-or-justified-fear/>
- Berman, G., Shivit Bakrania, S. O., and Maria Rosaria Centrone, G. R. (2020). Ethical collection of data from children during the COVID-19 pandemic. Evidence for Action. Retrieved from <https://blogs.unicef.org/evidence-for-action/ethical-collection-of-data-from-children-during-the-COVID-19-pandemic/>
- Burki, T. K. (2020). COVID-19: Consequences for higher education. *The Lancet Oncology*, 21(6), p. 758. Retrieved from [https://doi.org/10.1016/S1470-2045\(20\)30287-4](https://doi.org/10.1016/S1470-2045(20)30287-4)
- El Said, G. R. (2021). How Did the COVID-19 Pandemic Affect Higher Education Learning Experience? An Empirical Investigation of Learners' Academic Performance at a University in a Developing Country. *Advances in Human-Computer Interaction*, 2021, e6649524. Retrieved from <https://doi.org/10.1155/2021/6649524>
- Furman, T. and Moldwin, M. (2021). Higher Education During the Pandemic: Truths and Takeaways. *Eos*. Retrieved from <https://eos.org/opinions/higher-education-during-the-pandemic-truths-and-takeaways>
- García-Morales, V. J., Garrido-Moreno, A., and Martín-Rojas, R. (2021). The Transformation of Higher Education After the COVID Disruption: Emerging Challenges in an Online Learning Scenario. *Frontiers in Psychology*, 12, p. 196. Retrieved from <https://doi.org/10.3389/fpsyg.2021.616059>
- Hajir, B., and Salem, H. (2020). COVID-19 and conflict: Challenges and hopes for an alternative future in higher education in Syria. The Education and Development Forum (UKFIET). Retrieved from <https://www.ukfiet.org/2020/COVID-19-and-conflict-challenges-and-hopes-for-an-alternative-future-in-higher-education-in-syria/>
- Hassan, M., Xuereb, A., Ahmed, N., Catlow, R., Fazeen, B., Stoepler, T., and van der Zwaan, B. (2021). Reducing the impact of COVID-19 on inequalities in higher education: A call for action to the international community—A joint Communiqué of the InterAcademy Partnership and the Global Young Academy. Global Young Academy. Retrieved from https://globalyoungacademy.net/wp-content/uploads/2021/07/GYA_IAP_COVID_Higher_Education.pdf
- Hayashi, R., Garcia, M., and Maddawin, A. (2020). Online Learning in Sri Lanka's Higher Education Institutions during the COVID-19 Pandemic (Sri Lanka). Asian Development Bank. Retrieved from <https://www.adb.org/publications/online-learning-sri-lanka-during-COVID-19>

- Koninckx, P., Fatondji, C., and Burgos, J. (2021). COVID-19 impact on higher education in Africa. OECD. Retrieved from <https://oecd-development-matters.org/2021/05/19/COVID-19-impact-on-higher-education-in-africa/>
- Marinoni, G., Hilligje, van't L., and Trine, J. (2020). The Impact of COVID-19 on Higher Education Around the World – IAU Global Survey Report, p. 50. International Association of Universities. Retrieved from <https://ejournals.bc.edu/index.php/ihe/article/view/14593>
- Moore, R. and Marshall, L. (2020). Access to digital learning during COVID-19 closures: Compounding educational inequality? Young Lives. Retrieved from <https://www.qeh.ox.ac.uk/in-the-media/access-digital-learning-during-COVID-19-closures-compounding-educational-inequality>
- Mukeredzi, T., Kokutse, F., and Dell, S. (2020). Student bodies say e-learning is unaffordable and elitist. University World News. Retrieved from <https://www.universityworldnews.com/post.php?story=20200422075107312>
- Rashid, S. and Yadav, S. (2020). Impact of COVID-19 Pandemic on Higher Education and Research. Indian Journal of Human Development, 14, 097370302094670. Retrieved from <https://journals.sagepub.com/doi/10.1177/0973703020946700>
- Salmi, J. (2020). COVID's Lessons for Global Higher Education—Coping with the Present while Building a More Equitable Future. Lumina Foundation. Retrieved from <https://www.luminafoundation.org/resource/COVIDs-lessons-for-global-higher-education/>
- Smith, A. C., White, M. M., McBride, C. A., Kimble, R. M., Armfield, N. R., Ware, R. S., and Coulthard, M. G. (2021). Multi-site videoconference tutorials for medical students in Australia. Retrieved from <https://doi.org/10.1111/j.1445-2197.2012.06212.x>
- United Nations Children's Fund (UNICEF) U-Report. (2021). The impact of COVID-19 on the mental health of adolescents and youth. UNICEF. Retrieved from <https://www.unicef.org/lac/en/impact-COVID-19-mental-health-adolescents-and-youth>
- United Nations. (2020). Policy brief: Education during COVID-19 and beyond. United Nations. Retrieved from <https://unsdg.un.org/resources/policy-brief-education-during-COVID-19-and-beyond>
- Wadud, M. (2020). Delayed online teaching in pandemic widens education gap. University World News. Retrieved from <https://www.universityworldnews.com/post.php?story=20200722154017758>
- Waller, R., Hodge, S., Holford, J., Milana, M., and Webb, S. (2020). Lifelong education, social inequality and the COVID-19 health pandemic. International Journal of Lifelong Education, 39(3), pp.243–246. Retrieved from <https://doi.org/10.1080/02601370.2020.1790267>
- Amanu, M., Anjum, A., Ayoola, R., Hu, C., Kolleh, R. L., Navarro, D. R. S., Rayhan, R., Rehman, A., Salama, N., and Traore, S. (2024). The COVID-19 pandemic and youth well-being: a global study. In: United Nations Educational, Scientific and Cultural Organization (UNESCO). (2024). Lest we forget. Youth lenses on coping in a post-COVID world. Insights from the Youth As Researchers Initiative on COVID-19



UNIVERSITY STUDENTS IN THE ERA OF COVID-19: USING TECHNOLOGY TO OVERCOME CHALLENGES IN HIGHER EDUCATION IN THE ARAB REGION

————— Authored by —————

**Michael Beshay, Sana Bukhari, Sondos Khattab,
Islam Qadous and Saad Uakkas**

Members of the regional youth-led research team for the Arab States, exploring the impact of COVID-19 on youth learning and the role of technology, in the context of the UNESCO Youth as Researchers (YAR) on COVID-19 initiative (2020–2022)

Acknowledgements

The research team would like to thank the Youth as Researchers (YAR) global team, as well as the United Nations Educational, Scientific and Cultural Organization's (UNESCO) Office in Cairo for their support in disseminating the survey and the UNESCO National Commissions in the Arab States for their help in reaching university students in their respective countries.

Special thanks to the staff of UNESCO's Office in Cairo, especially:

Jana El Baba for her support in the research proposal and design.

Heba Shama and Ms Marie Hanna for their support in reviewing this paper.

The following members participated in the preliminary design stages of the YAR Arab team: Emtethal AlKhalil, Yemen; Michael Beshay, Egypt; Sana Bukhari, Pakistan; Sondos Khattab, Egypt; Islam Qadous, State of Palestine; Mahmoud Sabri, Egypt; and Saad Uakkas, Morocco.

Abstract

In this study, the research team examines the factors impacting the successful implementation of online learning in Arab universities during the COVID-19 pandemic while highlighting how this transition affects learning and student well-being. This study showcases the main challenges that were identified by students in Arab universities during their education in the pandemic period. It then shows how digital technologies were used to respond to these challenges and the main benefits they had on students' learning. The study ends with recommendations shared by participants and the team for stakeholders to improve education and digital use in universities accordingly.

Keywords: higher education, COVID-19, inequality

Table 1*. Demographic profile of the sample (N = 448)

List of figures*:

Figure 1. Technology use proficiency level (in percentages)

Figure 2. Universities' faculty members' preparedness level to use technology in teaching according to participants (in percentages)

Figure 3. Participants' level of satisfaction with online learning (in percentages)

Figure 4. Effect of online learning on student participants' sleeping patterns (in percentages)

Figure 5. How respondents would want lectures to function in the future (in percentages)

*Source of table and all figures: UNESCO Youth As Researchers on COVID-19 initiative (2020-2022)

Introduction

The outbreak of the COVID-19 pandemic urged governments around the world to adopt preventive measures in order to decrease its spread. This caused daily life to be disrupted. A global survey in 2020 assessed youth concerns during the pandemic and identified education disruption as one of the top three challenges globally, especially in low- and middle-income countries (Rogobete, 2020). Education institutions were obliged to interrupt conventional education methods, like teaching in classrooms (UNESCO, 2021). Many educational institutions began to use distance/hybrid learning instead, which mainly relies on using technological tools in teaching and communication (UNESCO, 2021).

Online learning and technology use in education can be traced back to the 1980s (Adedoyin and Soykan, 2020). Educational institutions regularly considered online learning as a good-to-have alternative (Ribeiro, 2021). With the World Health Organization (WHO) and governments recommending and imposing social distancing measures, online learning became an emergency migration obligation (Adedoyin and Soykan, 2020).

University students in the Arab region have been adapting to several educational challenges caused by this disruption. It is necessary to identify the main challenges that students had to go through during the pandemic and to source best practices and solutions that different universities and students utilized to overcome these challenges; this is precisely what this study investigates.

Literature review

The pandemic affected higher education and raised multiple challenges for students and their universities. The United Nations Educational, Scientific, and Cultural Organization (UNESCO) conducted a global survey in April 2020 to assess that impact (UNESCO, 2021). The survey had valid responses from 57 countries and identified multiple findings. It was found that international mobility suffered a major setback. Moreover, research and extension activities were disrupted. With the reduction of job opportunities, the transition from higher education to the job market became more difficult for students. The pandemic had a varied impact on the student enrolment rate across countries of different income levels. According to responding governments, major concerns for students were first the disruption of study/campus/research activities, followed by financial concerns and then health (physical and mental well-being) concerns.

The report explained how the pandemic widened inequities and disparities between and within countries, especially in low-income countries, such as the Syrian Arab Republic and Yemen, who need to improve infrastructure, connectivity and protective measures for students in vulnerable situations. The report also highlighted the digitization of education as a major trend, as more and more countries switched to online or hybrid modes of teaching. The latter was the most popular model that universities adopted. The crisis spurred innovation within the education sector, leading to new ways of sustaining education and training: from radio and television to home-based

educational packages. Distance learning solutions have been developed thanks to rapid responses by governments and partners around the world in support of education continuity, including the Global Education Alliance advocated by UNESCO.

Multiple studies identified challenges faced by students during their online or hybrid education in the pandemic period. A study in Romania surveying 152 students mentioned that 74% of them faced different types of difficulties related to competences needed to operate online platforms, different malfunctions of the platforms and poor internet connection. The same percentage expressed fear of the freezing of the school year (Sălceanu, 2020). A study in the Russian Federation by Almazova et al. (2020) investigating challenges facing university teachers during the pandemic period surveyed 87 teachers. The main challenges identified were computer literacy levels and the readiness of students and academic staff for online learning. It raised concerns that methodological work in a digital educational environment differs from conventional teaching methods. Another study in Malaysia surveyed 284 university students to understand their experiences and difficulties during their studies in the pandemic period. Respondents expressed lack of readiness to adapt to the new situation and concerns about the implications of lockdowns on their academic performance (Nassr et al., 2020). Considering these different challenges, it is essential to assess the current situation for university students in the Arab region and identify the main issues faced by students during the pandemic.

With the shift of educational methods and systems, several opportunities have emerged, mainly related to technology use to curb the challenges faced during the pandemic. A study at the college of medicine of Alfaisal University in Riyadh, Saudi Arabia surveyed 209 students and 13 faculty members. Two thirds of students surveyed preferred either blended or online courses. Further, several advantages were associated with online learning, such as having access to recorded learning materials on the intranet platform, and the possibility to learn at the students' pace (Arain et al., 2022). A study on COVID-19 and management education shared reflections around challenges and opportunities for business schools and students during and after the pandemic (Brammer and Clark, 2020). This study noted significant innovation in their universities concerning the processes and timetables of academic

governance. This introduced greater agility and capacity for innovation into their programmes. The study findings also highlighted the importance of staff willingness to deploy new technologies and use of a variety of alternative ways to help students continue their learning. Witnessing the scale, scope, speed and quality of staff's adaptation, as well as students' receptivity to experiment with new ways of teaching and research, was one of the most positive experiences, as the study indicated.

With the identified potential that modern technology has to improve higher education and solve different challenges, this study aims to study the factors impacting the successful implementation of online learning in Arab universities during the COVID-19 pandemic while highlighting how this transition affects learning and student well-being.

Methodology

This study uses both qualitative and quantitative methods to collect data. The quantitative section of this study was conducted using a questionnaire designed to assess the experience of university students concerning various aspects of online education during the COVID-19 pandemic. The responses were then analysed using Statistical Package for Social Sciences – Version 21.

Following that, the qualitative part consisted of conducting semi-structured interviews of university students from the Arab region who had participated in the quantitative part of this study and were

willing to participate in the additional segment. A total of 10 interviews were conducted, recorded and transcribed and were then later qualitatively analysed to determine if they complemented or negated the results derived from the questionnaire. The interviews were also scrutinized to extract any new information that would contribute to the understanding of university student's experience of online education during the pandemic.

Sampling and data analysis tools

The sample consisted of 448 university students from the Arab region with an age range between 18 and 35 years, with a mean age of 22.74 years and standard deviation of 3.78. It should be noted that originally the sample consisted of 472 participants; however, 24 participants fell out of the inclusion

criteria for age and were thus excluded from the study. Furthermore, the sample consisted of 59% female and 38.8% male university students, while around 2.2% preferred not to disclose their gender. A breakdown of the demographic profile of the sample is presented in Table 1.

Table 1. Demographic profile of the sample (N = 448)

| Variables | Categories | N | % |
|----------------------|----------------------|-----|------|
| Gender | Male participants | 174 | 38.8 |
| | Female participants | 264 | 59 |
| | Undisclosed | 10 | 2.2 |
| Country of residence | Algeria | 2 | 0.5 |
| | Bahrain | 12 | 2.7 |
| | Egypt | 74 | 16.5 |
| | India | 1 | 0.2 |
| | Jordan | 70 | 15.6 |
| | Lebanon | 57 | 12.7 |
| | Libya | 14 | 3.1 |
| | Morocco | 32 | 7.1 |
| | Oman | 88 | 19.6 |
| | State of Palestine | 11 | 2.5 |
| | Qatar | 20 | 4.5 |
| | Saudi Arabia | 7 | 1.6 |
| | Syrian Arab Republic | 2 | 0.5 |
| | Tunisia | 5 | 1.1 |
| | United Arab Emirates | 26 | 5.8 |
| Yemen | 27 | 6.0 | |

| Variables | Categories | N | % |
|---------------------------|------------------------|-----|------|
| Residential status | Citizen | 389 | 86.8 |
| | Expatriate | 43 | 9.6 |
| | Immigrant | 7 | 1.6 |
| | Student visa holder | 8 | 1.8 |
| | Refugee | 1 | 0.2 |
| Living arrangement | Alone | 25 | 5.6 |
| | With family | 409 | 91.3 |
| | With friends/roommates | 14 | 3.1 |
| University type | Public | 313 | 69.9 |
| | Private | 135 | 30.1 |
| Education level | Undergraduate | 296 | 66.1 |
| | Graduate | 152 | 33.9 |

The analysis focused mainly on determining the frequency and percentages of responses on each answer reported by respondents. To generate a graphical representation of these results, Microsoft Excel was used. The data were also analysed with the intention to make comparisons between various categories of variables, such as gender,

age, university type, among others. However, since these comparisons failed to generate any significant differences, possibly indicating homogeneity in the data, the final paper consists of results of the analysis conducted on the sample as a whole.

Findings and analysis

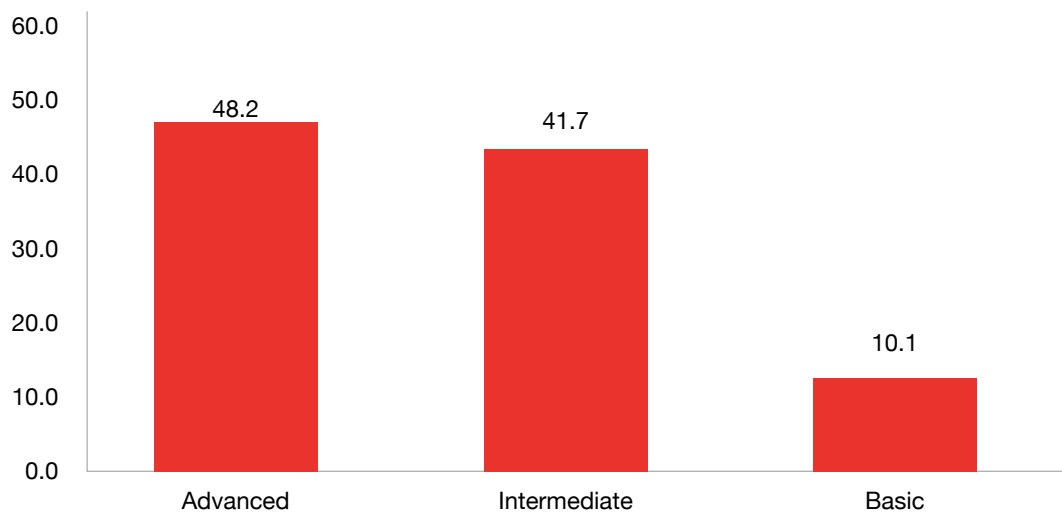
The quantitative and qualitative findings of this study can be divided into the following themes:

Technology proficiency of the university students

The questionnaire employed in this study consisted of items that were designed to assess the degree to which university students in the Arab region are proficient in use of technology for online education.

According to the responses gathered, around 90% of students rated their technology proficiency as either advanced or intermediate, while the remaining minority of 10% rated it as basic (see Figure 1). In addition to that, around 95% of students reported that since the implementation of the online medium of education, their technological abilities and internet research skills were enhanced even more.

Figure 1. Technology use proficiency level (in percentages)



Upon exploring this theme in the semi-structured interviews, it was found that some students initially perceived the prospect of online learning as difficult; however, they were able to adapt and get better at it with time. For example, a first-year science student after being asked, 'How could you manage to adapt to technology usage and online learning?', said: 'We took time to adapt to technology use, since we didn't have online learning before; we needed more skills for technology use. We needed time to manage our time in the new lifestyle...'

Another student enrolled in a chemistry programme reported that their internet research skills improved since the implementation of online learning, stating: 'I was able to find more information online and get a better base and knowledge about topics. I now have my own personal resources.'

Adaptability of educational institutions to online education

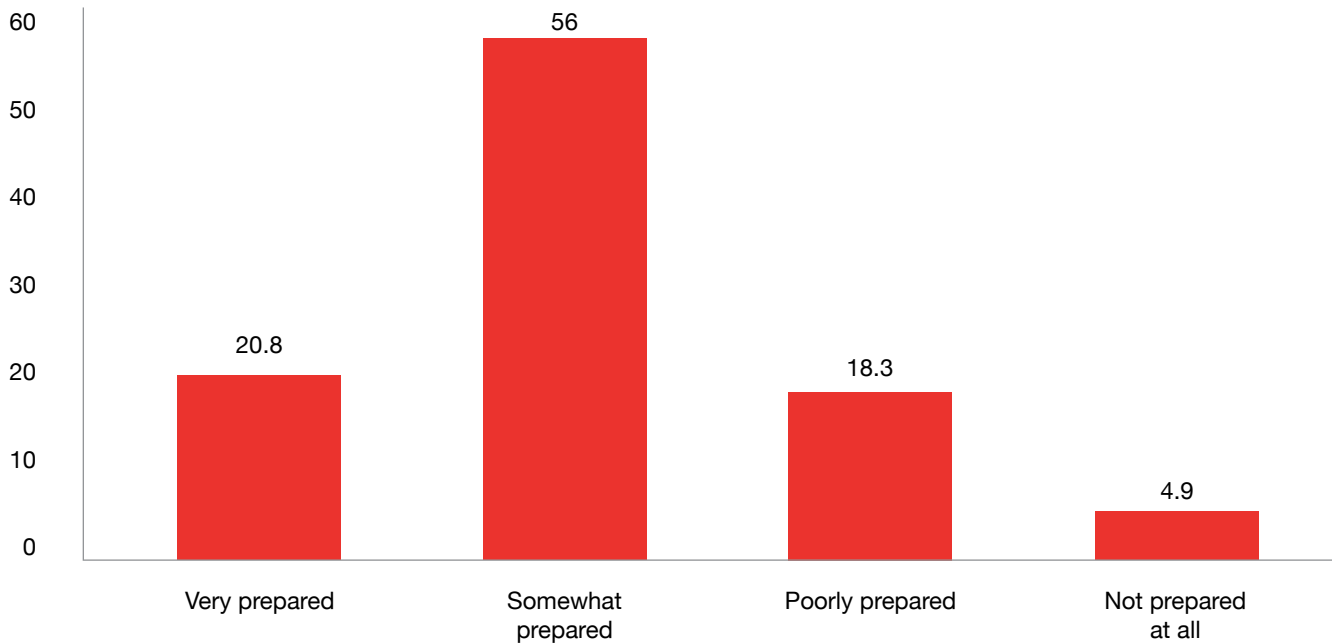
Another theme that emerged in this study was the adaptability of universities to the online education system. The questionnaire explored Arab university students' perception of how well and how quickly their respective universities were able to transition from an in-person/face-to-face mode of instruction to an online mode of instruction. According to the results, the majority of students, around 70%, reported that their universities were able to have a quick transition. However, around 30% described their university having a slow transition.

On the other hand, only around 40% of respondents noted that their universities provided them with adequate training to help them adapt to online classes. However, it should be considered that universities that were already technologically well-equipped have been better prepared to assist their students, as a student from Jordan studying energy engineering reported in his interview: 'With the start of COVID-19... the university made sessions to teach us to use online platforms. Our university is a technical one so they are used to using technology...' Apart from that, universities with good financial resources were also able to better assist their students, as one interviewee stated:

'Some students had low internet or no access to devices. The university provided over 100 tablets/laptops... they also provided internet credit for students. For students with low quality laptops, the university linked them with existing high level laptops in the university.'

Furthermore, more than half of the respondents, around 57%, reported that their faculty members were only somewhat proficient in using the technology related to online education (Figure 2). According to the information gathered through the interviews, it was also found that some faculty members relied on their students to help them use said technologies: '... for professors it differs, they had to catch up on technology use, some needed training and support from students.'

Figure 2. Universities' faculty members' preparedness level to use technology in teaching according to participants (in percentages)



While some professors managed to adequately teach using an online system, some were still lacking in other areas, as another student noted in their interview: 'My professors used technology and explained in a good way. They made an effort to make things easy for us... They weren't prepared for the exam procedure, they didn't accept to do online exams.'

Online learning support systems: professors, colleagues and internet access

Having an understanding and a caring professor was very important, according to the answers of the survey. Almost 87% of the students answered that it was very important. Through the interviews, there were mixed reviews about the students' experiences with their professors. For example, a first-year from Oman noted: 'Some professors were good, others didn't know how to explain properly online.'

As for having collaborative colleagues, more than half the students felt it was very important. A student explained in an interview that seeing other students studying in the library pre-COVID-19 was motivating, and that interacting through social media was not the same. Another student said: 'Online, I can't connect with my colleagues ... but face-to-face, you interact with other students and get to know them better.'

Being motivated to study was also an important factor in online learning for 82% of the students that filled the survey, with only 0.2% thinking it was not important to be motivated to study. Another factor that affected the quality of online learning was having a suitable learning environment at home. Almost 75% of the students stated that it was very important. One student explained that the 'ability to concentrate decreased for many students as it is not easy for everyone to provide an optimal study environment at home.'

Extracurricular activities

33% of the students stated that during COVID-19, their universities organized extracurricular activities online, but almost 22% did not organize any activities at all. Lack of interaction caused a decrease in the frequency of activities, as stated by a student in an interview. He noted: ‘...we had competitions online, we had no field visits, we still had talks... but with less people attending them. There are activities by clubs but there is a lack of interaction.’ More than half of the students said that in the future, they would like extracurricular activities to be conducted through a hybrid system, with some conducted online and others conducted face-to-face.

Internet connection

According to the survey, internet connection played a huge role in the students’ experience with online learning. 88.6% of the students who filled out the survey said that it was very important to have a good internet connection. A business student from Yemen stated through an interview: ‘Internet connection is essential for online learning, and universities should accommodate that all their students have a good internet connection.’ Some students faced difficulties such as poor internet connection. For example, an engineering student from the Syrian Arab Republic said: ‘In Syria during corona it was also hard because we had war as well, it was hard to deal with technology because internet is slow so we couldn’t deal with online learning, most

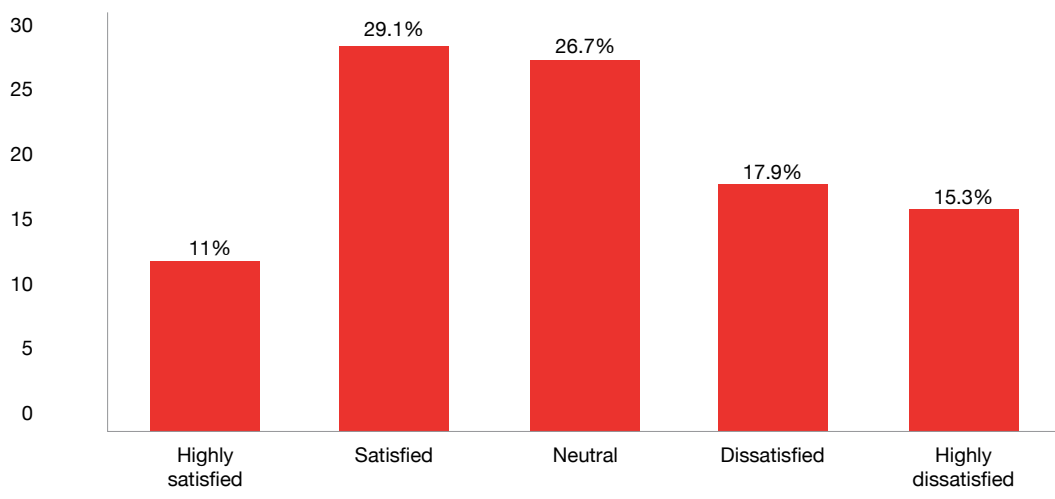
of our professors are old and have no experience in technology which didn’t make it easy, the doctors used to record videos in the university and send it to us’. Other students were more concerned about technical issues occurring during exams, which made it more stressful for them.

Adaptation to and satisfaction with online learning

43% of students adapted quickly to the online learning system, but around 10% were not able to adapt. A graduate student from Oman said, ‘For me it wasn’t very difficult to switch to online learning because even before the pandemic we also used to have online discussion rooms’, while other students discussed the difficulties of switching to online learning with no previous training for the students or professors. Almost 40% of the students felt that their participation in class decreased with online learning, while 41% stated that it stayed the same. One student stated: ‘... I usually like to give my opinion and participate, and at the beginning of university I was excited and eager to study, but eventually my participation slowly decreased due to stress.’

Respondents had different levels of satisfaction with online learning (Figure 3). 37.7% were satisfied while 35% were dissatisfied. One participant explained: ‘I felt I am losing my passion, felt pressure and responsibility, also sometimes felt good with the new experience.’

Figure 3. Participants’ level of satisfaction with online learning (in percentages)

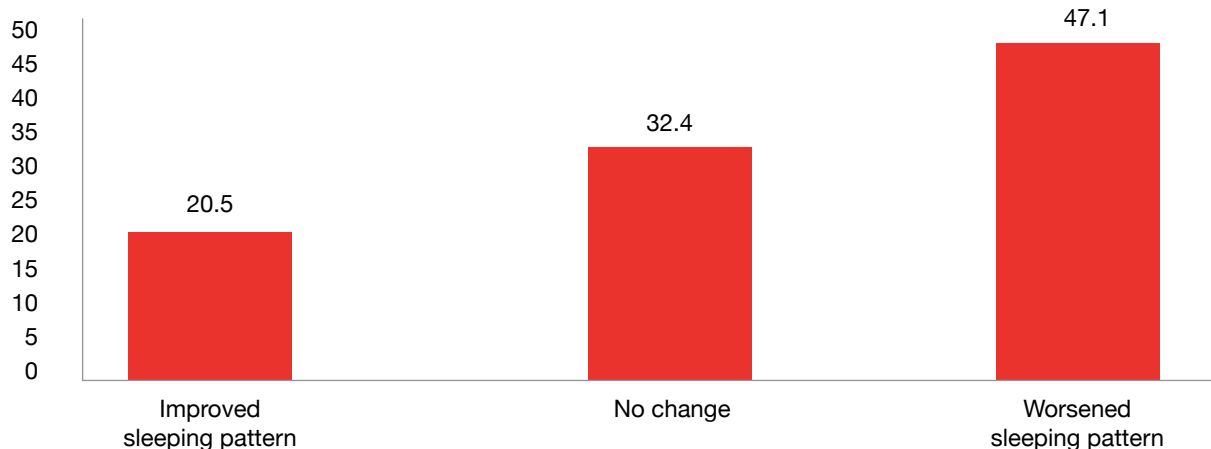


Impact on personal life and mental health

Respondents had different time management plans. 53% mentioned being able to better manage their time while learning online compared to in-person studies, while 46% indicated the opposite. 70% of respondents spent three to seven hours a day on online learning, while 13% spent over seven hours, and 18% spent less than three hours. A participant explained that time management was challenging, as they lacked estimation on when to finish studying for their courses, and levels of concentration and comprehension decreased. Another participant indicated that not needing transportation gave them more time and flexibility during the day.

Online learning seemed to have a positive impact on students' stress levels, and a negative influence on their procrastination and sleep pattern: 52% of respondents found online classes less stressful than in-person ones, while 27% disagreed. As for online exams, 47% found them less stressful than in-person ones, while 23% disagreed, and 11% had not had exams yet. 69% of respondents felt that online classes increased their levels of procrastination, compared to in-person ones, and only 13% disagreed. Online/hybrid learning also had different effects on students' sleeping patterns (Figure 4). 47% felt their sleeping patterns worsened, and only 20% felt they improved.

Figure 4. Effect of online learning on student participants' sleeping patterns (in percentages)



A respondent explained how the constant availability of courses and lack of in-person interaction and control of professors contributed to the increase in procrastination in online learning settings. Another respondent detailed how stress levels increased during online exams for them

because of internet instability, technical mistakes in questions and lack of professors' support due to low technology proficiency. A couple of participants also complained about the ease of cheating for students during online exams, which made it less fair for others.

Discussion

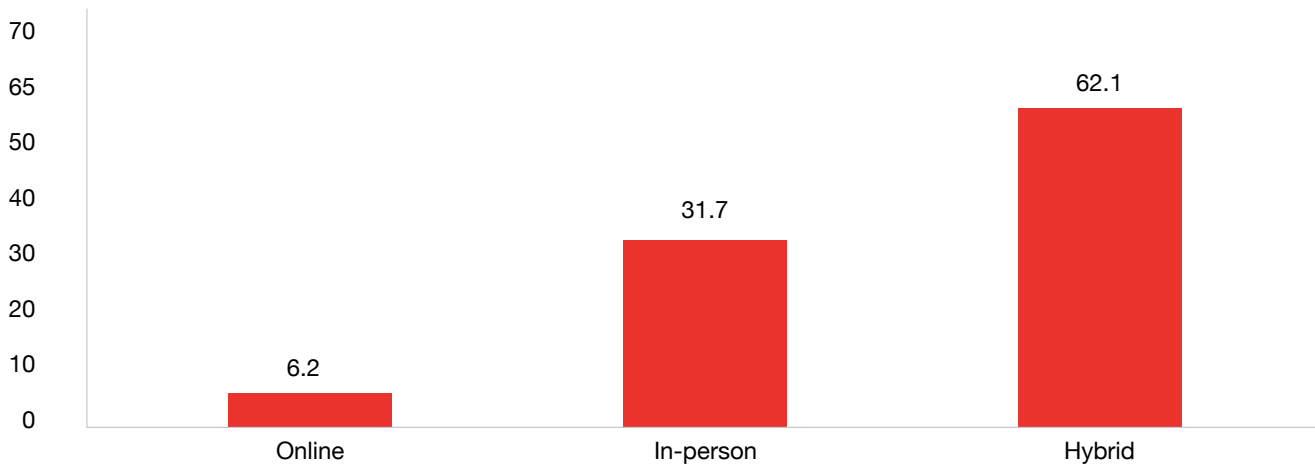
This study found that online learning in the COVID-19 pandemic had more of a negative effect on students' perceived quality of education, level of understanding of coursework, grades and their attendance and participation in class. This is in line with main findings from the literature which indicate a decrease in the level of course completion (Bird et al., 2020) and grades. A study by Kofoed et al. (2021) randomly assigned students to in-person or online modes of learning during the COVID-19 pandemic. The study found that online learning reduced students' final grades and made them feel less connected to their instructors and peers. These results can be explained by the surprising nature of the pandemic pushing for an abrupt switch to online learning without much time to prepare. In respect to that, 56% of respondents indicated that their universities were somewhat prepared to use technology in teaching, while 18% felt they were poorly prepared and 20% said that they were very prepared.

Other challenges facing students that were identified in this study were the lack of interaction with both professors and peers, technical platform

and internet problems, challenges in concentration and challenges in time management. Around half of respondents (53%) felt they could manage their time better during online learning settings. A considerable percentage of respondents also felt online learning increased their procrastination level (69%) and worsened their sleep pattern (47%).

Even with the sudden shift to online learning, respondents indicated several benefits and positive notes. These included saving time and spending on transportation (69%), learning materials being accessible from anywhere (60%) and learning being more flexible (40%). According to respondents, online learning (52%) and exams (47%) were less stressful than in-person ones. Participants were quickly able to adapt their lifestyle to the online learning system (62%).

Respondents felt that online learning brought an added value but was not enough on its own. They preferred having hybrid learning (62%) compared to online learning on its own (6%) after the pandemic (see Figure 5).

Figure 5. How respondents would want lectures to function in the future (in percentages)

Participants also shared some recommendations to improve the quality of online learning. These concerned professors, the educational system, and the online learning system. For professors, respondents suggested capacity-building programmes relevant to digital tools and technology use, adopting engaging and interactive learning methods, such as inverted classes, and having regular evaluation systems of professors by students. For the educational system, participants suggested an optimal

study time, ensuring students enjoy the learning experience, taking care of students' mental health and implementing online learning in the universities' and ministry's programmes along with adequate regulations to ensure its quality. As for online learning, recommendations were to update learning platforms and make them user-friendly, to ensure adequate and affordable internet access for students and to offer access to appropriate devices, especially for those in need.

Conclusion and recommendations

This study aimed to investigate the factors impacting the successful implementation of online learning in Arab universities during the COVID-19 pandemic while highlighting how this transition affected learning and student well-being. Quantitative data were collected through an anonymous online survey shared on social media, as well as qualitative data collection by conducting interviews with a sample of students who agreed to be interviewed in the survey and shared their contact information.

Students in Arab universities faced multiple challenges in their education and lifestyle due to the pandemic. It negatively affected their education, including grades, level of comprehension and participation. It reduced their interactions with peers and professors and affected their personal life, including poor time and sleep management. On the other hand, most students agreed that online exams were less stressful than in-person exams.

Internet connection played a large role in the quality of education of students, differing from region to region. For example, students in the United Arab Emirates did not face any connectivity problems, while students in the Syrian Arab Republic suffered greatly from it. In the future, different indicators of internet quality, such as internet speed and access to the internet, could be studied to analyse the different internet connections in different countries and their influence on students.

As for those who had practical aspects in their studies, such as medicine, most of the students interviewed mentioned that their universities either postponed these practical lessons, or they were conducted through videos and hybrid systems. Students had mixed opinions on whether this was suitable or not, but most were not satisfied with the delay or compromise in laboratory work, as it did not give them the full experience.

Online learning and technologies proved to have some positive benefits tackling some of these challenges. It reduced time and money consumption on transport and offered more flexibility and access to education for students. It was also less stressful for students. Yet, several challenges were raised which limited optimal access and use of online learning technologies. These included lack of internet or appropriate devices, absence of appropriate learning spaces, absence of a supporting environment at home, lack of interactivity during classes, longer study times and lack of preparedness of professors and technical platforms to offer a suitable learning experience to students.

This study found that online learning can be a useful tool to improve the quality of education, especially in times of crisis. In order for this to occur, though, universities must tackle the challenges raised and improve education quality while combining it with in-person sessions to offer a comprehensive hybrid learning experience that is able to offer

social interactions for students, and at the same time, build on the benefits of digital technologies. To achieve that, the YAR research team wants to share this set of recommendations with Ministries, universities in the Arab States region, and other relevant stakeholders, such as youth organizations and student councils:

- Adopt adequate policies that regulate online learning in universities in the Arab States region, and ensure its quality and equitable access
- Establish capacity-building programmes for professors to ensure their preparedness to optimally use digital technologies and offer students an interactive learning experience
- Build on best practices to establish a balanced hybrid learning programme for students allowing both engagement and remote access to education

- Establish regular evaluation systems for professors by students
- Take measures to ensure care and support for students' mental health
- Offer affordable access to good quality internet and devices for students

In the end, digital technologies have a valuable addition to offer if included in the educational system of universities in the Arab States region, and adopting a balanced hybrid method of learning. As one of the participants said: 'Online learning should be a well-prepared systemic tool, not a crisis management solution.' With adequate preparation for professors, infrastructure and curriculum, online learning can successfully have its added value in Arab universities.

References

Adedoyin, O. B. and Soykan, E. (2020). COVID-19 pandemic and online learning: the challenges and opportunities. *Interactive Learning Environments*, pp.1–13. Retrieved from <https://doi.org/10.1080/10494820.2020.1813180>

Almazova, N., Krylova, E., Rubtsova, A. and Odinokaya, M. (2020). Challenges and Opportunities for Russian Higher Education amid COVID-19: Teachers' Perspective. *Education Sciences*, 10(12), p. 368. Retrieved from <https://doi.org/10.3390/educsci10120368>

Arain, S. A., Ali, M., Arbili, L., Ikram, M. F., Kashir, J., Omair, A., and Meo, S. A. (2022). Medical Students and Faculty Perceptions About Online Learning During COVID-19 Pandemic: Alfaisal University Experience. *Frontiers in public health*, 10, 880835. Retrieved from <https://doi.org/10.3389/fpubh.2022.880835>

Bird, K. A., Castleman, B. L. and Lohner, G. (2020). Negative Impacts From the Shift to Online Learning During the COVID-19 Crisis: Evidence from a Statewide Community College System. *Ed Working Papers*. Retrieved from <https://doi.org/10.26300/gx68-rq13>

Brammer, S. and Clark, T. (2020). COVID-19 and Management Education: Reflections on Challenges, Opportunities, and Potential Futures. *British Journal of Management*, 31(3), pp.453–456. Retrieved from <https://doi.org/10.1111/1467-8551.12425>

Kofoed, M., Gebhart, L., Gilmore, D. and Moschitto, R. (2021). Zooming to Class?: Experimental Evidence on College Students' Online Learning during COVID-19. IZA Institute of Labor Economics (online). Available at: <https://docs.iza.org/dp14356.pdf>

Nassr, R. M., Aborujilah, A., Aldossary, D. A. and Aldossary, A. A. (2020). Understanding education difficulty during COVID-19 lockdown: Reports on Malaysian university students' experience. *IEEE access : practical innovations, open solutions*, 8, pp.186939–186950. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/35127298/>

Ribeiro, R. (2021). How university faculty embraced the Remote Learning Shift. *Technology Solutions That Drive Education*. Retrieved from <https://edtechmagazine.com/higher/article/2020/04/how-university-faculty-embraced-remote-learning-shift>

Rogobete, E. (2020). COVID-19 Youth Survey: Report. Global Youth Survey. Retrieved from https://cdn.who.int/media/docs/default-source/epi-win/COVID-19-survey_report_for_who---final.pdf?sfvrsn=f23bd740_4

Sălceanu, C. (2020). HIGHER EDUCATION CHALLENGES DURING COVID-19 PANDEMIC. A CASE STUDY. Central and Eastern European Online Library, XVI(1), pp.104–114. Retrieved from <https://www.ceeol.com/search/article-detail?id=892150>

United Nations Educational, Scientific and Cultural Organization (UNESCO). (2021). COVID-19: reopening and reimagining universities, survey on higher education through the UNESCO National Commissions. Unesdoc. unesco.org. Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000378174>



PERCEIVED BARRIERS IN ACCESSING PROFESSIONAL MENTAL HEALTH SERVICES AMONG YOUTH IN ASIA-PACIFIC DURING THE COVID-19 PANDEMIC

————— Authored by —————

**Wynona Eurj M. Curaming, Shivangshi Mitra,
Ayesha Priyadarshini Mohanty, Mustakim Moyeed,
Apabrita Mitra Sarkar and Faye Simanjuntak**

Members of the regional youth-led research team for Asia-Pacific, exploring the impact of COVID-19 on youth well-being and mental health, in the context of the UNESCO Youth as Researchers (YAR) on COVID-19 initiative (2020–2022)

Acknowledgements

We express our gratitude to the Youth as Researchers (YAR) Team and the United Nations Educational, Scientific and Cultural Organization's (UNESCO) Office in Bangkok, particularly to Sue Vize (now Head of the UNESCO Office in Dhaka), the Steering Committee and the Ethics Committee. This work is a product of their persistent support and encouragement. We would also like to express special thanks to the Make a Difference Leadership Foundation for providing us a community platform to interact and undergo research training. We offer our earnest appreciation for this enriching learning opportunity.

This paper could not have been completed without the guidance and relentless cooperation of Undral Ganbaatar, Coordinator for the UNESCO YAR Asia-Pacific Well-being Team. We extend our special thanks to Rommel Curaming for his feedback during the review process.

Last but not least, we express our gratitude to all the survey respondents within the region for their precious time and sharing invaluable insights from their experiences.

Keywords: mental health, university students, COVID-19

List of tables*:

Table 1. Study participant categorized responses

*Source of table: UNESCO Youth As Researchers on COVID-19 initiative (2020-2022)

Abstract

The COVID-19 pandemic has negatively affected the mental health and general well-being of many, including university students in the Asia-Pacific region. Accessing professional mental health services can help alleviate the problem. However, a variety of barriers exist, from within the individual and the community at large. This research serves as a pilot study to understand the impact of COVID-19 on the mental health and general well-being of university students in the Asia-Pacific region. The most potent perceived barriers in accessing professional mental health services have also been identified. The method employed was an online questionnaire which recruited youth in the Asia-Pacific region (aged 18–25 years) through convenience sampling. The sample included 349 youth from 12 countries. The quantitative results suggest that the top three barriers to accessing mental health services were as follows: (1) fear of confidentiality and trust, (2) lack of social support systems and (3) embarrassment to seek treatment. For respondents previously diagnosed with mental health challenges but who could not access mental health services during the pandemic, the top three barriers were: (1) 'Fear or stress of the act of seeking help', (2) 'Believe that I could overcome by myself' and (3) 'Cost of mental health treatment'. The qualitative findings suggest that 'traditional belief systems', stigmas and insufficient mental health services pose a barrier as well. Based on these findings, the team has formulated four policy recommendations for governments, non-governmental organizations (NGOs) and educational institutions.

Introduction

Statement of problem

What are the perceived barriers faced by university students in Asia-Pacific in accessing mental health services?

The Asia-Pacific region has some notable characteristics such as complex sociocultural and economic environments, rise in forced displacement, migration, inequalities and violence that shape the general state of mental health of its population (WHO, 2020). In addition, certain areas like South Asia have disjointed and inaccessible health care systems (Nambiar et al., 2017), which extends to mental health care infrastructure.

Youth are most vulnerable to mental health problems (WHO, 2020). Over 60% of the world's youth lives in the Asia-Pacific region (UNESCAP, 2012). This translates to more than 750 million young women and men aged 15 to 24 years (UN Youth, 2012). A significant number of these individuals are university students in the 18–24 age group. Numerous lockdowns since COVID-19 hit, caused them to be confined to their homes and resulted in severe disruption in their education, thereby having an adverse impact on their mental health and well-being.

One year into the pandemic, it was found that of the 65% of students who reported having fair or poor mental health, only 15% engaged in college-offered counselling (Ezarik, 2021). In the Asian context, this is evident from the findings of a study conducted across two countries in East and South-East Asia that said there was a distinct hesitance among young adults to seek counselling for mental health conditions (Shi et al., 2020).

Research objectives

The primary objective of this research is to identify the perceived barriers among youth (aged 18–25 years) in the Asia-Pacific region in accessing mental health services and the degree of effect the pandemic has had on their mental health and mental health-related infrastructure (UNESCAP, 2020). By supplementing primary data with secondary data, the secondary objective is to propose policy recommendations for greater accessibility of mental health care for youth that promotes their general mental well-being.

Contextual information

The research shed light on perceived barriers relevant to affordability and sociocultural stigma. Presently, it is imperative that these be mitigated to remedy the fissures in accessing mental health services. Further, in the future, this pilot study can be extended by conducting a stratified study. This research has implications in the realm of public health as well as for the professional knowledge, practice and development of the researchers.

Report structure

The second section of the study provides a review of relevant literature, whereas the third section presents the methodological approach adopted. The fourth section presents the main findings, which are then discussed and analyzed in a subsequent fifth section. Section six presents the YAR team's recommendations and the final, seventh, sections provides the overall conclusions of the study.

Literature review

Varied studies have been conducted to explicate the impact of the pandemic on people's health and health care provisions worldwide. This review will focus on the impact of COVID-19 on mental health and the perceived barriers in accessing mental health services. These two themes have been studied in diverse geographical contexts, but this paper is focused on the Asia-Pacific region.

Impact of COVID-19 on mental health

Despite the escalating need for mental health services in the wake of the COVID-19 pandemic, 93% of the countries suspended these services (COVID-19 disrupting mental health services in most countries, WHO survey, 2020). Mental health disorders, such as stress, anxiety, insomnia and depressive symptoms were suggested to be linked to the COVID-19 pandemic (Torales et al., 2020). Prior to the pandemic, there prevailed a high occurrence of mental health disorders such as anxiety and depression in certain Asian countries (Hossain et al., 2021). The increased prevalence of

anxiety and depression in countries such as those in South Asia during the pandemic was suggestive of the heavy psychosocial burden they have had to bear (Hossain et al., 2021). A study conducted during the COVID-19 pandemic across four South-East and East Asian countries on higher education students suggested that 38% of the respondents reported mild to moderate depression, anxiety and stress (Jiang et al., 2021). Given this is one of the few studies focused on assessing youth mental health in relation to the pandemic, this is particularly significant to the research.

In addition, the COVID-19 pandemic severely impacted those with pre-existing mental health disorders due to the attached stigma, risk of infection and the previously low priority accorded to morbidities of mental health, which triggered or worsened pre-existing psychological conditions (Roy et al., 2020). Further, an article published in JAMA Psychiatry proposed that COVID-19 may be associated with a colossal risk of suicide (Xiang et al., 2020). These findings are particularly noteworthy for this study.

Perceived barriers in accessing mental health services

The existing related literature mostly concerns perceived barriers that can be classified as attitudinal, cultural, low perceived need and structural barriers (Shi et al., 2020). These include negative attitudes associated with seeking help for mental health, preference to resolve problems themselves, fears pertaining to discrimination, choice for alternative treatments, self-stigma, family's opposition to seeking help, the denial of the psychological needs or the gravity of the illness, lack of confidentiality, cost, insurance and deficient access to psychological health information and resources (Shi et al., 2020). Several studies across geographical contexts focused on attitudinal and structural barriers, such as stigma associated with mental health and the insufficient dissemination of information, affordability, the inability to recognize mental health problems and the inadequate acceptance of mental health problems in accessing mental health services

(Devkota, 2021; Tristiana et al., 2018; Memon et al., 2016). These barriers can also manifest in the insufficient coverage of psychological resources by insurance, opposition by family, social ostracization and the massive social stigma attached to mental health (Tristiana et al., 2018). Given the recurring emergence of these barriers across geographical contexts, these are markedly important for this study.

Overall, existing literature corroborates that the COVID-19 pandemic has led to the increasing prevalence of anxiety and depression. Further, there is consistent evidence that attitudinal and structural barriers to accessing mental health facilities exist. Nonetheless, there is a lack of robust research on the mental health impact of COVID-19 and the barriers to seeking professional help during the pandemic for the specific demographic of university students in the Asia-Pacific region.

Methodology

The questionnaire

The anonymous online questionnaire combined closed and open-ended questions, mostly of quantitative type. The questions were designed to gather data on general mental health conditions and perceived barriers to accessing mental health services. The questionnaire was divided into four sections: General Information, Understanding You, Understanding Support Systems and Structural Systems impacting Mental Health and Well-being. Demographic information was collected alongside self-reporting of respondents' mental health disposition, the level of social support systems available and access to any professional mental health services during the pandemic. Views on psychological support services at their university and the levels of internalized stigma around mental health were also gathered. The total number of questions varied depending on whether the respondent reported that their mental health was affected by the COVID-19 pandemic, whether they were clinically diagnosed and whether they accessed professional mental health services during the pandemic.

The survey was open for two weeks from 25 February 2021 to 10 March 2021. Respondents were recruited through convenience sampling. Each member of the team disseminated the survey link to all their networks through social media and encouraged peers to supplement the study. The survey link was also shared on the United Nations Educational, Scientific and Cultural Organization (UNESCO) Youth as Researchers (YAR) website alongside surveys from other YAR teams.

Ethical safeguarding

Before dissemination, the survey instrument was reviewed and approved by the UNESCO Ethics Committee. Detailed information about the study was provided and only after consent was the survey conducted. Participants were allowed to skip any questions they did not want to answer or stop answering the questions entirely at any point.

The survey sample

A total of 349 individuals from 12 countries across the Asia-Pacific region filled out the questionnaire. Region-wise, most of the respondents were from South Asia (62%). The majority (82%) originated from India, Bangladesh and Indonesia. The sample included 210 women (60.2%), 118 men (33.8%), 3 non-binary (0.860%), 4 who preferred not say (1.15%) and 14 of unknown gender (4.01%). 71.6% of the 250 respondents were aged 19–21 years, while 83 respondents were aged 22–25 years (23.8%). The age of 16 respondents was unknown. By type of residence, 75.5% of respondents lived in urban areas while 17% lived in suburban areas. Most (n=260, 74.5%) respondents were studying at the time, whereas a small proportion (n= 24, 6.88%) had recently graduated and the remainder (n=65, 18.6%) were unknown.

Table 1. Study participants' categorized responses

| Category of survey respondent | Number | Total |
|---|--------|-------|
| Reported that COVID-19 negatively affected well-being | | 156 |
| Did not access mental health services and not clinically diagnosed during the pandemic | 144 | |
| Accessed mental health services and diagnosed with mental health challenges during the pandemic | 12 | |
| Clinically diagnosed with mental health challenges before COVID-19 | | 38 |
| Accessed mental health services during the pandemic | 15 | |
| Did not access mental health services during the pandemic | 23 | |
| Neither diagnosed nor reported that COVID-19 negatively affected their well-being | | 89 |
| Inadequate data to fall under any category | | 66 |

Methods of analysis

MATLAB was used to analyse and visualize the quantitative data set. The multiple variables (inclusive of age, gender, region of residence, country of residence, country where university is situated, level of support systems, prominence of stigmas by location, community perspectives on mental health and the services available) were correlated with each other. The common perceived reasons for not seeking help on mental health challenges were thereby ranked in order.

Thematic analysis was applied for the final two survey questions. These answers pertained to the respondents' lived experiences and subjective opinion. Respondent answers were correlated by region, gender, age and area of residence.

Limitations

This methodology has several limitations. The survey was offered in English to people with internet access. The sample size was small considering the large population of youth aged 18–25 within the Asia-Pacific region. While the region comprised 46 countries, respondents were from only 12 countries. The survey may not be adequately representative, as the sample was recruited through convenience sampling, not random sampling. With regard to the qualitative questions, many answers were subjective by design (for example, if the mental health services at the respondent's university improved, declined or stayed the same during the pandemic), as the research question seeks to measure perceived barriers. Furthermore, it is difficult to isolate the degree of impact different barriers had when respondents tried accessing mental health services. Lastly, there is limited existing literature on barriers to mental health service access for the specific target demographic (university students and recent graduates in the Asia-Pacific region) to compare the data set with.

Findings

Quantitative results

Self-reported mental health and well-being status:

COVID-19 and its implications have negatively affected the majority of the respondents. 63.7% of respondents who answered the question ‘Do you think the onset of COVID-19 and its implications negatively affected your mental health and well-being?’ selected ‘Yes’.

For participants who reported that the onset of COVID-19 and its implications ‘did not’ negatively affect their mental health and well-being (n=89), a question was posed further if they ‘experienced any depressive symptoms listed on Patient Health Questionnaire 9’. Many of those respondents answered that they experienced at least one mild depressive symptom more often during the pandemic.

Barriers to accessing mental health services:

The top five reported barriers for university students to seeking help for mental health challenges were: (1) fear of confidentiality and trust (45.27%), (2) lack of social support systems (44.98%), (3) embarrassment (44.13%), (4) not wanting to be labelled crazy or weak (42.97%) and (5) denial that the problem exists (41.83%).

Least-reported barriers emerged as (1) not wanting to be prescribed medication (14.32%), (2) lack of insurance (19.19%) and (3) fear of being institutionalized (20.91%).

For respondents who were previously diagnosed with mental health challenges but could not access it during the pandemic, the top 5 barriers were (1) ‘Fear or stress of the act of seeking help’, (2) ‘Believe that I could overcome it by myself’, (3) ‘Cost of mental health treatment’, (4) ‘Lack of family support’ and (5) ‘Lack of privacy’. Concerns related to the characteristics of the provider was the lowest-ranked barrier.

Perceived stigma was a key barrier. In the section of ‘Mental Health and Well-being’ (Part 2), the scores reflected the level of perceived mental health stigma adapted from the validated survey ‘STIG-9’ (Gierk et al., 2018). The higher the score, the less the perceived mental health stigma. Predictors for higher perceived stigma were being a man and attending public universities. The statistical parameters did not vary significantly among roots (rural, suburban, urban), current academic status and age.

Similarly, internalized stigma prevents respondents who reported having their mental health and well-being negatively affected by the pandemic, but were not clinically diagnosed, from seeking help. This was reflected in the questions based on the ISMI 29 questionnaire to measure internalized stigma. Predictors for higher internalized stigma were belonging to the 22–25-year age group (compared to the 18–21-year age group), attending public universities, identifying as non-binary and being a recent college graduate (compared to currently studying or just enrolled).

Availability and awareness of professional mental health services was another barrier. Among psychological support systems offered at university level, one-on-one counselling, one-on-one conversations with teachers and workshops/wellness campaigns were the top three options reported. About 60 respondents reported having no mental health services at their university, whereas about half (n=127) had one-on-one counselling available at their university. Nearly 100 respondents were 'unaware' of the psychological services available at their university. About 40 reported 'improved' psychological services at their university during the pandemic while only a few (n=15) reported 'worsened services'.

Qualitative results

In the question pertaining to cultural barriers faced by those undergoing mental health challenges, region of residence was a significant marker. For responses from South Asia, the key words and phrases present were 'stigma', 'taboo', 'ostracization', 'lack of awareness', 'lack of affordable and professional mental health services', 'misconceptions' and 'trivialization of mental health'. To quote a respondent, 'Patients of mental illnesses are mostly, if not always, shunned, shamed and laughed at by society.' Respondents from South-East and East Asia repeatedly stated that their community viewed mental health problems as a result of a lack of faith or religious belief. They reported that their community labelled people struggling with mental health as 'crazy', 'does not pray enough' and 'weak on the surface.' Respondents viewed 'traditional belief systems' as barriers in the way of their seeking help.

Common themes arose in responses regardless of gender. Respondents repeatedly mentioned that patriarchal setups and sexism were part of the problem. Some respondents expressed that societal norms acted as a deterrent to seeking mental health care. Many respondents raised concerns about the lack of adequate mental health infrastructure and affordable medical assistance to youth to cope with mental health problems.

In the next question about requisite mental health support in the community, responses had three common themes irrespective of demographic. First, it was to improve the state apparatus and infrastructure for mental health services. These included 'narrative or group therapy', 'psychoanalysis' and establishing 'suicide and crisis helplines, particularly in semi-urban and rural areas'. Affordable institutional counselling services, as indicated by the keywords 'free' and 'subsidized', were deemed necessary by several respondents across all demographics. Second, holistic systems of care in society were called for. A desire for greater 'understanding' of mental health was expressed as participants stated needing more awareness-raising initiatives, 'social acceptance' and 'de-stigmatization' (an oft-repeated word). Normalization of conversations regarding individuality and sexual, political and cultural identity was also desired. Third, marginalized representation in psychological studies was also mentioned. A respondent suggested stepping out of 'elite' enclaves of learning. Another said, 'The eastern culture and its implications have not been studied by Freud, Lacan or anybody for that matter.'

Analysis and discussion

The findings have multiple implications for mental health service providers. The fact that a large number of respondents are unaware of whether mental health resources exist within their universities implies that they are not adequately advertised. Youth do not access these services, if available, primarily due to 'fear of confidentiality and trust'. The inadequate trust is connected to existing stigmas around mental illness and seeking help. The stigmas are also furthered in structural systems within larger society where laws may discriminate against people who have been diagnosed with mental illness and delay their course of treatment or disadvantage them in a financial capacity.

For instance, the Indian Mental Health Care Act of 2017 empowers affordable and quality accessibility to mental health services for all by directing mental health services to be established across all districts in India (Mishra and Galhotra, 2018). Yet, the existing deficiencies in mental health infrastructure at the district level demand that the financial burden be carried by the state, despite there being no mention of budgetary allocations for the same (Math et al., 2019). The Act fails to map the division and allocation of funds between the centre and state governments and how this is to be implemented to help consumers access mental health services (Mishra and Galhotra, 2018).

Prior research in four countries in the Asia-Pacific region aligns with the finding that most youth reported that their mental health was negatively impacted by COVID-19. In the Asia-Pacific region, 'up to 38% of the students reported mild or moderate depression, anxiety, and stress, while 20.5% reported severe or extremely severe anxiety' (Jiang et al., 2021). Prior literature (Xiong et al., 2020) corresponds with the survey findings about high rates of depressive symptoms among the general population during COVID-19. The same research found that being a student and of a younger age group are also risk factors for distress.

Existing literature supports that higher levels of stigma towards mental health exist among men compared to women (Chatmon et al., 2020). They persist due to traditional cultural norms in broader society and are enforced with gendered expectations around toxic masculinity and hegemonic masculinity (Ran et al. 2021).

A published research piece that does not concur with the findings suggests that mental health services at universities in Asia-Pacific were reported mostly to be about the same during COVID-19 compared to before. Only 4.3% of respondents reported that their university's mental health services got worse, whereas according to a previous UNESCO study, 78% reported at least partial disruptions to school mental health services (COVID-19 disrupting mental health services in most countries, WHO survey, 2020).

Top perceived barriers differ depending on the demographics. Prior literature (Tristiana et al., 2018) on families of patients with mental illness in Indonesia found that affordability, availability and stigma were key barriers to accessing mental health services. Affordability aligned with the top barriers (third highest barrier) for survey respondents who were previously diagnosed with mental health challenges but could not access services during the pandemic. Stigma also aligns with the findings since 'fear of confidentiality and trust', 'embarrassment' and 'not wanting to be labelled crazy or weak' were closely correlated

with stigmas surrounding mental health. On the other hand, a meta-analysis of literature around the barrier for Chinese adults showed that wanting to deal with the issue by oneself and seeking alternative support (beside professional mental health services) were among the top barriers to accessing mental health services. This does not align with the findings about barriers to university students. However, wanting to deal with the issue by oneself is a top barrier, as stated by respondents who were previously diagnosed with mental health challenges but could not access services during the pandemic.

Recommendations

This study has shown that the concept of access is much more nuanced than the provision of needed services. Inadequate mental health literacy manifests as a notable barrier to accessing mental health services, as proven by persistent stigmas and how ‘embarrassment’ and ‘fear of being labelled crazy or weak’ are among top-ranked barriers. Trust in service providers about confidentiality is also a major barrier. To address the challenges, identified through the research, on mental health, the following recommendations are proposed:

1. **A minimum of 4% of the national budget to be dedicated to the mental health care sector specifically.** This calls for establishing a Ministry of Mental Health and Research in each country to regulate state bodies and ensure that they have requisite funds to invest in early detection and quality treatment. This shall reduce the financial burden on respondents as a barrier to access the needed service.
2. **Greater funding must also be provided for ground research and equitable policy development** such that scaling up of priority areas provides for better understanding of context and support supervisions and manifest long-term sustainability.
 - a. Future research in this particular context can be conducted through a survey addressing the availability of professional mental health services at tertiary education institutions across the region. It can also identify the behaviour, descriptive and injunctive norms and self-efficacy in reluctance to seek professional help. It is to be noted here that the research should be conducted in vernacular languages to assess the cultural variations in data collected.
3. **Advocacy efforts must aim at ending stigmatization:** Mental Health literacy was an under-recognized barrier indicated by this study. To combat this, governance measures must incorporate the following:
 - a. The Ministry of Health (or similar institution) working in coordination with the Ministry of Information Technology (or similar institution) to combine technological-based advocacy and awareness.
 - b. Synchronizing institutional mental health services with the United Nations Sustainable Development Goals so that technological innovations can help evidence-based measures on improving mental health regulation and promotion.
 - c. Facilitating collaboration between grass-roots mental health groups to increase accessibility and monitoring of prescription medication for youth in Asia-Pacific.
 - d. Creating and disseminating a curriculum to equalize youth-oriented mental health services.
- b. Additionally, the research must holistically examine the internal and external factors impacting the youth respondents’ mental health, inclusive of economic, social and political considerations.

- e. In rural and suburban areas, supporting community leaders in promoting mental health literacy and prevention of mental health challenges, improving knowledge and developing positive attitudes towards services.
4. **Combine existing health care and mental health resources:** The development of health care policies can be provided with primary screening at the university level through technology and can be linked to national health care plans. This shall provide comprehensive patient autonomy and care.
 5. **Develop evidence-based quality reports** to ensure quality assurance (measures to ensure quality of services), control and monitoring (using indicators to ensure the said recourse is of benefit to the patient) and evaluation through previous consumers of the services to ultimately improve the trust deficit.

Conclusion

While the effects of the COVID-19 pandemic have been felt worldwide, the lived experiences of different regions have evinced distinct responses. Not only has the pandemic caused a decline in the mental health of youth, it has also exacerbated the fissures in the already under-funded and deficient mental health structures in the Asia-Pacific region. Cultural stigma around accessing mental health services and having mental health problems persists.

This pilot study aimed to bring to the fore the amplification of mental health challenges in youth of the Asia-Pacific region during the pandemic and the perceived barriers faced by university students in accessing mental health resources. This was achieved through an online questionnaire disseminated through social media networks. The top barriers found were embarrassment, lack of social support systems and the fear of breach of confidentiality and trust. Affordability of mental health services and resources are further deterrents, in addition to the belief of being able to

overcome this adversity through one's own effort and willpower, and the fear or stress associated with seeking help.

In light of this, the recommendations include the allocation of a minimum of 4% of the national budget for developing mental health infrastructure, advocating for mental health awareness to overcome mental health illiteracy and stigmas, introducing community-based interventions with sectoral collaborations to promote improved knowledge, implementing mental health legislative policies furthered by research and synchronizing existing health care and university mental health resources into a single social security plan. Although the respondents had differing opinions on what mental health support is needed that their community lacks, they unanimously agreed that the willingness to help others, coupled with empathy and mutual respect, were integral to circumventing, or at least mitigating, the looming 'mental health pandemic'.

References

- Chatmon B. N. (2020). Males and Mental Health Stigma. *American Journal of Men's Health*, 14(4), 1557988320949322. Retrieved from <https://doi.org/10.1177/1557988320949322>
- Devkota, G., Basnet, P., Thapa, B., and Subedi, M. (2021). Factors affecting utilization of mental health services from Primary Health Care (PHC) facilities of western hilly district of Nepal. *PloS one*, 16(4), e0250694. Retrieved from <https://doi.org/10.1371/journal.pone.0250694>
- Gierk, B., Löwe, B., Murray, A. M., and Kohlmann, S. (2018). Assessment of perceived mental health-related stigma: The Stigma-9 Questionnaire (STIG-9). *Psychiatry Research*, 270, pp.822–830. Retrieved from <https://doi.org/10.1016/j.psychres.2018.10.026>
- Hossain, M. M., Rahman, M., Trisha, N. F., Tasnim, S., Nuzhath, T., Hasan, N. T., Clark, H., Das, A., McKyer, E., Ahmed, H. U., and Ma, P. (2021). Prevalence of anxiety and depression in South Asia during COVID-19: A systematic review and meta-analysis. *Heliyon*, 7(4), e06677. Retrieved from <https://doi.org/10.1016/j.heliyon.2021.e06677>
- Jiang, N., Yan-Li, S., Pamanee, K., and Sriyanto, J. (2021). Depression, Anxiety, and Stress During the COVID-19 Pandemic: Comparison Among Higher Education Students in Four Countries in the Asia-Pacific Region. *Journal of Population and Social Studies (JPSS)*, 29, pp.370–383. Retrieved from <https://so03.tci-thaijo.org/index.php/jpss/article/view/244216>
- Math, S., Basavaraju, V., Harihara, S., Gowda, G., Manjunatha, N., Kumar, C., and Gowda, M. (2019). Mental Healthcare Act 2017 – Aspiration to action. *Indian Journal of Psychiatry*, 61(10), pp.660–666. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/31040454/>
- Mishra, A., and Galhotra, A. (2018). Mental Health care Act 2017: Need to Wait and Watch. *International Journal of Applied and Basic Medical Research*, 8(2), pp.67–70. Retrieved from https://doi.org/10.4103/ijabmr.IJABMR_328_17
- Memon, A., Taylor, K., Mohebati, L. M., Sundin, J., Cooper, M., Scanlon, T., and de Visser, R. (2016). Perceived barriers to accessing mental health services among black and minority ethnic (BME) communities: a qualitative study in Southeast England. *BMJ open*, 6(11), e012337. Retrieved from <https://doi.org/10.1136/bmjopen-2016-012337>
- Nambiar, D., Razzak, J., Afsana, K., Adams, A., Hasan, A., Mohan, D., and Patel, V. (2017). Mental illness and injuries: Emerging health challenges of urbanisation in South Asia. *BMJ: British Medical Journal*, 357. Retrieved from <https://www.jstor.org/stable/26948742>
- Ran, M.-S., Hall, B.J., Su, T.T., Prawira, B., Breth-Petersen, M., Li, X.-H., and Zhang, T.-M. (2021). Stigma of mental illness and cultural factors in Pacific Rim region: a systematic review, *BMC Psychiatry*, 21(1). Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7789475/>

Roy, A., Singh, A. K., Mishra, S., Chinnadurai, A., Mitra, A., and Bakshi, O. (2021). Mental health implications of COVID-19 pandemic and its response in India. *The International Journal of Social Psychiatry*, 67(5), pp.587–600. Retrieved from <https://doi.org/10.1177/0020764020950769>

Shi, W., Shen, Z., Wang, S., and Hall, B. J. (2020). Barriers to Professional Mental Health Help-Seeking Among Chinese Adults: A Systematic Review. *Frontiers in Psychiatry*, 11, p. 442. Retrieved from <https://doi.org/10.3389/fpsy.2020.00442>

Torales, J., O'Higgins, M., Castaldelli-Maia, J. M., and Ventriglio, A. (2020). The outbreak of COVID-19 coronavirus and its impact on global mental health. *The International Journal of Social Psychiatry*, 66(4), pp.317–320. Retrieved from <https://doi.org/10.1177/0020764020915212>

Tristiana, R., Yusuf, A., Fitryasari, R., Wahyuni, S., and Nihayati, H., (2018). Perceived barriers on mental health services by the family of patients with mental illness. *International Journal of Nursing Sciences*, 5 (1), pp.63–67.

United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP). (2012). Youth in Asia-Pacific. UNESCAP. Retrieved from <https://www.unescap.org/resources/youth-asia-pacific>

United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP). (2020). List of countries in the Asia-Pacific region and subregions | Progress Assessment Methodology. UNESCAP. Retrieved from <https://data.unescap.org/dataviz/methodology/list-of-countries-in-the-asia-pacific-region-and-subregions.html>

World Health Organization (WHO). (2020). COVID-19 disrupting mental health services in most countries, WHO survey. WHO. Retrieved from <https://www.who.int/news/item/05-10-2020-COVID-19-disrupting-mental-health-services-in-most-countries-who-survey>

World Health Organization (WHO). (2020). Guidelines On Mental Health Promotive and Preventive Interventions For Adolescents. (WHO) Retrieved from <https://www.who.int/publications/i/item/9789240011854>

Xiang, Y. T., Jin, Y., and Cheung, T. (2020). Joint International Collaboration to Combat Mental Health Challenges During the Coronavirus Disease 2019 Pandemic. *JAMA psychiatry*, 77(10), pp.989–990. Retrieved from <https://doi.org/10.1001/jamapsychiatry.2020.1057>

Xiong, J., Lipsitz, O., Nasri, F., Lui, L., Gill, H., Phan, L., Chen-Li, D., Jacobucci, M., Ho, R., Majeed, A., and McIntyre, R. S. (2020). Impact of COVID-19 pandemic on mental health in the general population: A systematic review. *Journal of Affective Disorders*, 277, p. 55–64. Retrieved from <https://doi.org/10.1016/j.jad.2020.08.001>



TRANSITIONING TO ONLINE PLATFORMS: HOW COVID-19 RESTRICTIONS AFFECT HIGHER EDUCATION STUDENTS' LEARNING IN EAST ASIA AND AUSTRALIA

————— Authored by —————

**Susan Cheong, Yuria Kubo, Astuti Kusumaningrum,
Munkhzul Mikhaabaatar, Yujin Song and Yanjin Zhu**

Members of the regional youth-led research team for the Asia-Pacific region, exploring the impact of COVID-19 on youth learning, in the context of the UNESCO Youth as Researchers (YAR) on COVID-19 initiative (2020–2022)

Acknowledgements

We would like to thank the Youth as Researchers (YAR) on COVID-19 initiative for giving us the opportunities to carry out this study by youth and for youth. Their expertise in social science research and policy advocacy has enabled us to complete this research journey. We are also grateful to the YAR Steering Committee, Coordination Team and Training Team, including Sue Vize and David Young, as well as our coordinators, Yang Min and Jinglan Zhou. Last but not least, we would like to give thanks to all colleagues and participants for sharing their valuable perspectives with us during the difficult times with COVID-19.

Abstract

Higher education institutions (HEIs) globally have shifted to emergency remote teaching (ERT) due to the COVID-19 pandemic. Consequently, students have faced various challenges in adjusting to this situation. This study investigated their experiences of transitioning to online learning and their needs. 327 students aged between 18 and 35 years who were enrolled in HEIs in Australia, China, Japan, Mongolia and the Republic of Korea anytime between January 2020 and April 2021 completed an online questionnaire. The preliminary analysis suggested that the majority of students (80%) faced issues during ERT. The most prominent issues were lack of personal space to learn at home (38%), heavy workload (35%) and no opportunity for lab or practicum work (32%). Reduction in tuition fees (71%), access to free internet (62%) and library (51%) and flexibility to do assignments individually or in groups (43%) were the most demanded support needed by students overall. During ERT, student's surrounding circumstances (e.g. student's financial situation, study environment, internet access, disconnection from learning communities) are important components to their learning. Therefore, it is important for HEIs and relevant stakeholders to design student support services to respond to the students' most critical needs.

Keywords: higher education, online learning, emergency remote teaching, challenges

List of tables and figures*:

Table 1. COVID-19 situations and HEIs' responses in the researched countries

Table 2. Participants' demographic information

Table 3. Experienced challenges during online learning

Table 4. Available/provided student support from HEIs

Table 5. Students' needs for support from HEIs

Table 6. Students' needs for support from outside the HEIs

Figure 1. Overall experiences of online learning during COVID-19

Figure 2. Average time spent on online learning per day

Figure 3. Students' perceived helpfulness of HEIs

*Source of all tables and figures: UNESCO Youth As Researchers on COVID-19 initiative (2020-2022)

Introduction

The sudden outbreak of COVID-19 led to global school closures, with higher education institutions (HEIs) being no exception (World Bank, 2020b). HEIs had to shift to emergency remote teaching (ERT), urging all parties – administrators, instructors, students – to adapt to the unique challenges of COVID-19 (Hodges et al., 2020). Students, in particular, were one of the most affected groups during ERT, wherein their learning outcomes may be adversely affected (Aguilera-Hermida, 2020). Existing studies illustrate the complex situation where students struggle with learning online despite their daily use of digital tools (e.g. Nambiar, 2020). Consequently, HEIs are requested to address reported issues to ensure the quality of students' learning experiences (Hodges et al., 2020). Improving ERT requires students' perspectives, as they are its primary recipients (Aguilera-Hermida, 2020). Especially for education practice involving technology, students' perspectives are informative in bettering instruction and other university practices (Hämäläinen et al., 2017); nevertheless, students still end up becoming passive recipients of mandates without being given the opportunity to contribute to decision-making processes (Lac and Mansfield, 2018). Considering this issue of youth engagement, this study highlights higher education student voices.

Substantial studies have investigated student perspectives at HEIs during ERT. However, it is still meaningful to explore the student voice because their views change as they experience ERT for a sustained period (Shim and Lee, 2020). This study was conducted between February and April 2021, which was almost one year into ERT since the first COVID-19 outbreak; thus, the findings can extend earlier investigations of 2020. Furthermore, this study investigated five countries in the East Asia and Australia region: Australia, China, Japan, Mongolia and the Republic of Korea. These countries emerged as worthy of study for two reasons. First, they are located in the first-identified region of COVID-19 cases where HEIs implemented immediate measures and experienced the longest transition period (Table 1). Second, Butler-Henderson et al. (2021) indicated the uneven research attention paid to different countries and limited collaborative research concerning more than two countries. Therefore, this study is conducted with the international collaboration of six young researchers, including under-researched countries.

Table 1. COVID-19 situations and HEIs' responses in the researched countries

| Country | First confirmed case | HEIs' responses |
|-------------------|----------------------|---|
| Australia | 25 January 2020 | Temporary school closures & ERT started in mid-March, 2020 ¹ |
| China | 10 December 2019 | Temporary school closures & ERT started in January, 2020 ² |
| Japan | 16 January 2020 | Temporary school closures & ERT started in mid-February, 2020 ³ |
| Mongolia | 10 March 2020 | ERT as a preventive measure started in February, 2020 ² |
| Republic of Korea | 20 January 2020 | Postponed the beginning of semester by two weeks, shifted to ERT from mid-March (2020) ⁴ |

¹(TEQSA, 2020), ²(Crawford et al., 2020), ³(Nae, 2020), ⁴(Bozkurt et al., 2020)

Taken together, this study sought to understand how the rapid transition to online learning during COVID-19 affected students' learning processes in East Asia and Australia. By exemplifying their struggles, it is hoped to identify crucial support areas that need to be addressed, informing HEIs and relevant stakeholders to devise future support provision for their students. In this paper, the existing literature is reviewed to discuss ERT transitions at HEIs, followed by the methodology section. Findings and a discussion are then presented. Based on the analysis, this study concludes with several recommendations for HEIs and relevant stakeholders.

In detail, this study seeks to answer the following questions:

1. How are students' experiences of online learning during COVID-19?
2. What kinds of challenges have they faced in adopting online learning and how have these challenges affected their learning during COVID-19?
3. How do the international students experience the challenges compared to local students?
4. What kinds of support are available for the students, and how accessible are these supports?
5. What kinds of further support do students want to improve their online learning experience?

Literature review

COVID-19 and ERT

Online education has long been an integral part of education prior to COVID-19. It has been well-recognized as enabling cognitive and socio-affective activities that are key to learning (Harasim, 2000). Its forms have diversified since the 1980s, and today's examples range from online degree programmes to blended learning (Harasim, 2000; Hodges et al., 2020). However, ongoing online education amid COVID-19 considerably differed from the typical well-planned online education models. As such, Hodges et al. (2020) defined it as emergency remote teaching (ERT). ERT ensures access to learning during the crisis by temporarily using the fully online delivery mode, with the intent to eventually return to the face-to-face approach once the crisis is averted. To serve this purpose, implementation of ERT had to be achieved quickly by utilizing the limited resources at hand, putting the quality of offered programmes at risk. Considering this situation, involved stakeholders and researchers have been exploring issues of ERT to improve the current students' learning experience and prepare for future crises requiring ERT.

Students' experiences of challenges during ERT

Ample studies have explored the challenges students face when transitioning to ERT during COVID-19. Identifying these challenges is important in fostering a learning environment where online technologies progressively dominate students' learning. Specifically, Adnan and Anwar (2020) and Shim and Lee (2020) found that limited internet access was one major technical challenge students faced, with signal unavailability and instability being the most prominent barrier in some countries,

such as Pakistan and the Republic of Korea. While most youth are comfortable with digital communication, given the current generation's competency in using it, the majority still struggle in using online learning channels and tools effectively under ERT (Aguilera-Herminda, 2020). Most studies have found the dearth of proper interaction between instructors and students to be a universal academic challenge that has hindered students' learning (Adnan and Anwar, 2020; Nambiar, 2020; Shim and Lee, 2020). The lack of academic interaction and support of HEIs potentially begets unfamiliarities in the learning context wherein students are left to fill in the gaps in understanding materials on their own. In particular, Shim and Lee (2020) found that students struggled with understanding practical subjects without practicum opportunities (Nambiar, 2020). Furthermore, there arise challenges such as increased workload and difficulties in completing coursework, leading to poorer learning outcomes; the insufficient socialization with peers has also created difficulties in group projects and class participation (Adnan and Anwar, 2020).

Psychological challenges – lack of motivation and connectedness, which generally stem from face-to-face engagement – have also been reported under ERT (Adnan and Anwar, 2020; Dembereldorj, 2020; Nambiar, 2020). Nambiar (2020) found that students struggled to manage multiple subjects scheduled on the same day for a long period of time, leading to them experiencing information overload, fatigue and reduced concentration during online learning. Concurrently, this precipitates physical challenges, with headache, backache and eye strain being the most commonly reported (Nambiar, 2020). Furthermore, as homes have become a common location for learning, this also means lack of privacy and more home distractions;

environmental challenges such as family issues, poor digital infrastructure and lack of supportive home environments can make it harder for students to engage in online learning (Nambiar, 2020). While these challenges are universal, some challenges are experienced more profoundly by certain groups. Financial challenges, for instance, are felt more by students who come from international backgrounds, socio-economically disadvantaged backgrounds or less developed countries (Day et al., 2021; Nambiar, 2020). At the bare minimum, these students need to be able to afford constant internet accessibility and appropriate digital devices for online learning. The challenge is further compounded by the lack of reduction in tuition fees whereas the quality of classes has decreased (Dembereldorj, 2020). Many international students were forced to return home following the campus closure while enduring the uncertainties of international travel and immigration policies. Considering the recent efforts of internationalization at HEIs, international students should be supported to endure both short- and long-term impacts of ERT measures (World Bank, 2020a; 2020b). Taken together, these challenges create immense stress for all students globally, affecting their motivation and participation.

Student support during ERT

Given the diverse nature of reported challenges, it is decisive that student support provision reaches various aspects of their lives. This is because all these areas can influence the effectiveness of students' online learning experiences (Hodges et al., 2020). Some studies investigated student support availability, usefulness and needs for adapting to online learning during ERT. For instance, Mollenkopf and Gasskill (2020) identified certain useful support from instructors such as flexibility with assignments and awareness of students' workload. Shim and Lee (2020) focused on students' needs, reporting network stabilization and activating interaction with professors and peers as among the most desired improvements in the Republic of Korea. Student support was also provided by institutions and other educational services as Bozkurt et al.

(2020) introduced examples of some Japanese universities, planning to help with students' remote learning expenses and to offer tuition reduction or emergency scholarships. Effective ERT, however, still requires student support applied to even wider students' surroundings (Aguilera-Herminda, 2020). In contrast with ERT, students' face-to-face learning is successful owing to diverse support such as library resources, housing conditions, careers and health services (Hodges et al., 2020). Hence, the student support system in ERT should reach different areas of students' lives, rather than merely their learning. Therefore, student support, surrounding their learning, was further explored to fill the notch in the literature concerning kinds of available student support.

To address support for students' varied needs in ERT, support needs to come from multiple players, rather than just instructors. Kouzkurt et al. (2020) signify building support communities and sharing tools and knowledge as essential in surviving during COVID-19, and highlight support examples of for-profit educational companies, such as Pearson and Google, offering their services for free. Alongside private sectors, public sectors supporting HEIs are also key support providers. In the Republic of Korea, for example, there is a government organization that instilled a server space for HEIs as well as a device rental scheme and financial support for students; conversely, the Australian Federal Government arranged emergency funding for universities which were only sufficient to support domestic students but not internationals (Bozkurt et al., 2020). These examples illustrate that HEIs require external support to implement student support. Likewise, it is unrealistic for instructors to improve the current ERT practice on their own as they cannot be the dominant provider of support schemes in HEIs (Aguilera-Herminda, 2020; Shim and Lee, 2020). Despite this emerging understanding that student support needs different contributors beyond HEIs, many studies have focused on how instructors should do better during ERT. Thus, this research explores broadly how different parties should be involved.

Methodology

A quantitative approach was used to answer the research questions, considering its advantage in learning and understanding the trends that happen in a large group of people (Goertzen, 2017). This study employed online survey questionnaires for two reasons. First, surveys can uncover unobservable data such as people's perspectives and beliefs (Bhattacharjee, 2012), allowing to understand challenges that participants experienced and their ideas for future support under ERT. Second, online surveys, in particular, offer cost efficiency and pose no need for direct human contact (Toepoel, 2017), which were pivotal strengths in conducting youth-led research amid COVID-19. Figure 1 shows the data generation flow.

A common pitfall in survey research is the lack of careful development of instruments, and the consequent failure to collect meaningful data (Toepoel, 2017). To address this potential issue, all questions were reviewed multiple times to ensure they were designed around the research questions. The answers employed various formats including yes/no, Likert-scale and checkboxes. The draft survey was assessed by the United Nations Educational, Scientific and Cultural Organization (UNESCO) YAR Ethics Committee and further piloted with fellow youth researchers, meeting the research criteria.

Instructions and question formats were modified based on the pilot outcomes. The finalized survey in English was translated into four languages: Chinese, Japanese, Korean and Mongolian, extending this research to more participants with different language preferences, and then inspected by bilingual colleagues to render reliability.

The surveys were disseminated between 7 March and 30 April 2021. They incorporated the detailed research information and a stage to consent to voluntary participation before moving forward to the questions. Participants were informed of their rights, including that of withdrawing from the research at any stage. A total of 342 students participated in the surveys. Participant criteria were youth aged between 18 and 35 years enrolled in HEIs in Australia, China, Japan, Mongolia and the Republic of Korea anytime between January 2020 to April 2021. Only 327 matched these criteria and completed the surveys (Table 2), thus their data were analysed.

Table 2. Participants' demographic information

| Demographic information | Variable | Number | % |
|------------------------------|-------------------|--------|------|
| Institution locations | Australia | 48 | 14.7 |
| | China | 46 | 14 |
| | Japan | 65 | 19.8 |
| | Mongolia | 117 | 35.8 |
| | Republic of Korea | 51 | 15.7 |
| Gender | Male | 106 | 32.4 |
| | Female | 216 | 66.1 |
| | Other | 5 | 1.5 |

| Demographic information | Variable | Number | % |
|-------------------------|-------------------|--------|------|
| Age | 18-24 | 252 | 77 |
| | 25-35 | 75 | 23 |
| Student group | Domestic | 246 | 75.2 |
| | International | 81 | 24.8 |
| Education level | College | 30 | 9.2 |
| | Vocational school | 1 | 0.3 |
| | Undergraduate | 216 | 66 |
| | Postgraduate | 80 | 24.5 |

The surveys were initially disseminated on multiple online platforms (e.g. LinkedIn, Facebook, WeChat) along with short copyable URLs and a research poster. Using the convenience sampling method, the research team and YAR network were used to engage students' participation. The convenience sampling method was chosen considering the research purpose, researchers' availability of time, resources and access to respondents. This sampling strategy allowed students to participate based on their accessibility and eligibility to the specific research criteria and served exploratory purposes (Bornstein et al., 2013). Furthermore, student associations and HEIs were contacted to increase the survey take-up rate, particularly in Australia and China. With surveys closed, all data in five languages were transferred from Google Forms to a comma-separated values (CSV) file. The data sets in non-English languages were then translated into English (including the translation of options of 'other') and cleaned from missing input. All five different data sets were then merged into central data. The R. Package was used for the data cleaning and analysis process.

Ethics approval was granted by the UNESCO YAR Ethics Committee before data collection proceeded, including the pilot stage. This study presented minimal risk to participants without inquiring about sensitive information that might cause discomfort to them. The surveys did not ask for any identifiable information such as name and school, safeguarding participants' anonymity. Data confidentiality was also ensured, as only the researchers had access to the survey results.

Despite the careful research design, some limitations need to be acknowledged. First, the sample sizes for all five countries were different, leading to an unbalanced representation of each group. However, the differing sample size did not detract from the research aim since its purpose was not to generalize the findings to a larger population but to exemplify varied students' perspectives to understand their experiences of transitioning to online. Second, online surveys present a disadvantage such that they can be dominantly accessed by those who are available online (Bryman, 2012). Thus, it is likely that this research could not reach a population with disabilities that may obstruct them from using online tools as well as those with limited internet stability.

Preliminary findings

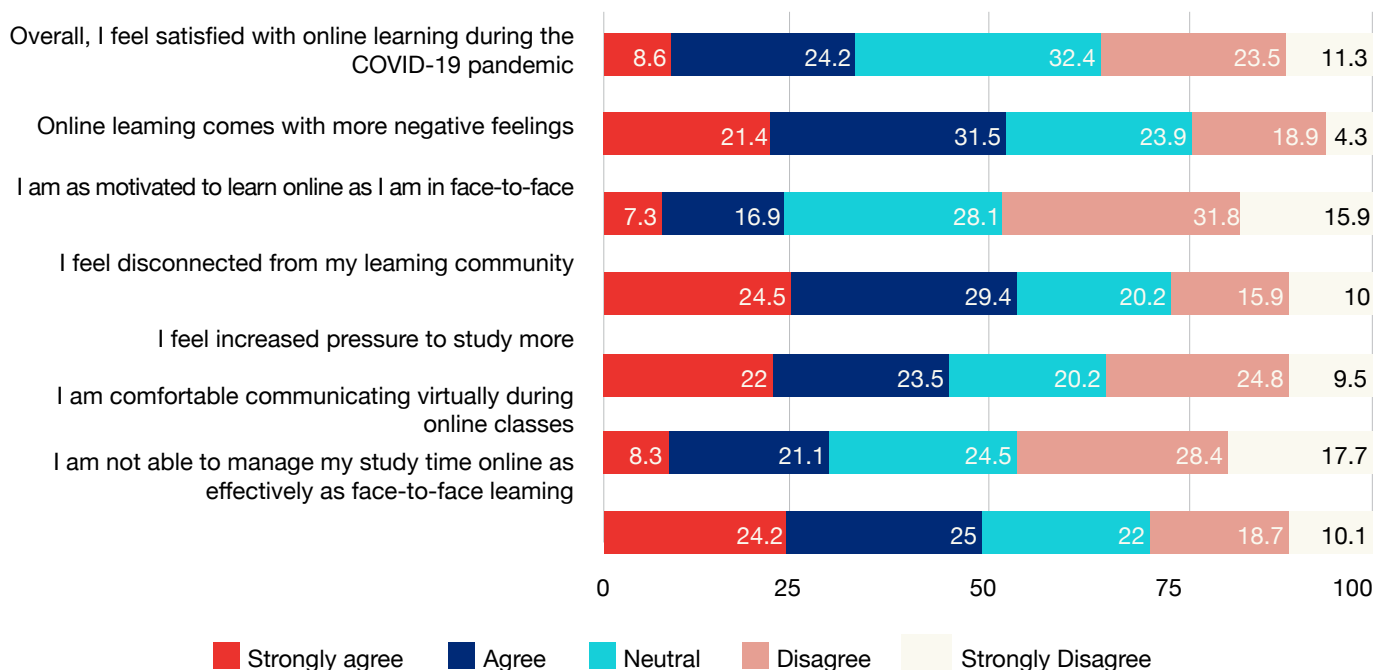
Overall experience of online learning under ERT

Overall, the students' satisfaction with their online learning experiences during COVID-19 was mixed. 32.4% of those surveyed answered neutrally to the statement 'I feel satisfied with online learning'. There were slightly more students falling into the disagreed domain than into agreed (Figure 3). Approximately half of the students found it easy (32.7%) or very easy (18.3%) to familiarize themselves with online learning software and hardware, while 15% found it either difficult (13.8%) or very difficult (1.2%). One third (33.9%) reported their experiences of familiarizing themselves with the

tools to be neutral. Figure 2 captures the overall experiences of online learning.

The data showed that more than half of the students (52.9%) agreed that online learning comes with more negative feelings. It also stands out that over 50% felt disconnected from their learning communities. The data further highlight that almost half of the students disagreed with being motivated to learn online as compared to face-to-face (47.7%) and being comfortable communicating virtually during online classes (46.1%).

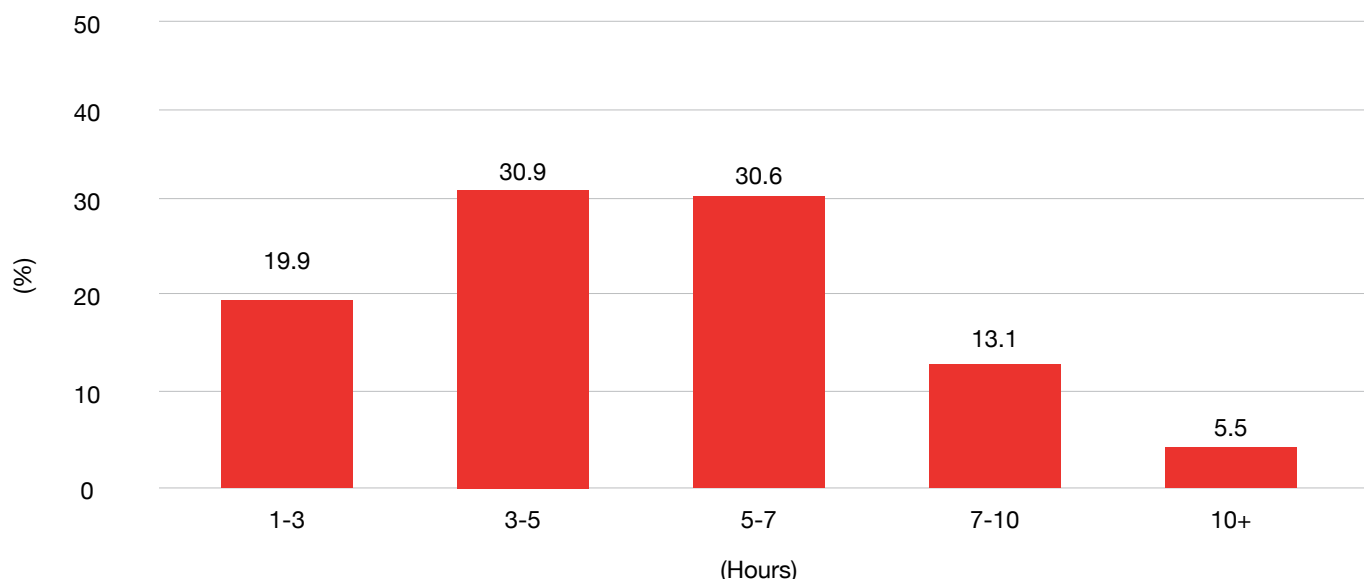
Figure 1. Overall experiences of online learning during COVID-19



Regarding impacts on learning hours, the majority reported that their learning hours have either increased (40.1%) or decreased (40.7%) after teaching shifted to ERT. Only 16.2% did not experience any changes in learning hours during the transition to online learning. A closer look at their learning hours during COVID-19 revealed

that the average hours students engaged in online learning per day varied (Figure 2). About half of the students spent less than five hours on online learning per day, with the other half spending over five hours. Approximately one in five students (18.6%) participated in online learning for over seven hours per day.

Figure 2. Average time spent on online learning per day



Experienced challenges and their influence on students' learning

Most students (80.1%) faced issues during emergency remote (ER) learning, compared to 19.6% who did not.

Specifically, the international students faced significantly more challenges ($t = -2.216, p = 0.028$) compared to the domestic students. On average, international students experienced one more challenge than their local counterparts. Overall, the challenges experienced by the students can be seen in Table 3. Lacking personal space to learn at home (37.6%) was the most prominent issue, while the heavy workload (e.g. learning to use e-learning

tools on top of the study) (34.5%) and no practicum or lab work (32.1%) were the students' second and third concerns during ER learning. On a psychological level, 29.4% of students found it hard to concentrate, and 27.8% struggled with procrastination during online learning. Regarding technological issues, the problem of software malfunction affected 27.4% of students, and 26.0% had limited access to internet service. However, not many – 4.6% – struggled with no access to digital devices. Correspondingly, students further faced academic issues of limited supervision on assignments (12.5%) and the need to alter or modify the research work (4.0%) during ER learning.

Table 3. Experienced challenges during online learning

| Theme | Variable | Number | % |
|----------------------|---|--------|------|
| Environmental | Lack of personal space to learn at home | 123 | 37.6 |
| Academic | Heavy workload | 113 | 34.6 |
| | No opportunity for practicum or lab work | 105 | 32.1 |
| | Limited supervision on my assignment/work | 41 | 12.5 |
| | Need to alter/modify the research work | 13 | 4.0 |
| Psychological | Hard to focus/concentrate | 96 | 29.4 |
| | Procrastination (delaying or postponing a task and assignment) | 91 | 27.8 |
| Technological | Software malfunction | 90 | 27.4 |
| | Limited access to internet service | 85 | 26.0 |
| | No access to digital devices (e.g., laptops, tablets, printers) | 15 | 4.6 |

The students revealed unique issues in addition to the aforementioned ones. Academically, students thought ‘lacking discussion with peers’ was one of their challenges. The increased workload was among these issues, with having to watch the pre-recorded lecture and then attending the actual one and increased assignments compared to face-to-face learning being the factors. The students also commented on teachers’ instructions, such as their inexperience in using online teaching methods, and the confused online courses delivered by lecturers, as challenging issues. Several had commented on the compromised quality of teaching:

‘The amount of information gained from online courses is only around 30% compared to face-to-face ... with the online course, all the professors do is to finish the slide’.

Physical issues such as eye fatigue were also reported as one student shared the following: ‘attend the class online all day and do (my) homework all night long, which is bad for (my) health’. Psychologically, ‘lack of motivation’ and ‘loneliness’ were the commonly reported ones.

Available student support during online learning under ERT

During ERT, only a fraction of students reported receiving support from their enrolling HEIs or other entities outside HEIs. Only 33% reported positively that their HEIs were helpful to extremely helpful in ensuring and assisting student’s learning during COVID-19 while 67% reported negatively (Figure 4). Table 4 shows that the accessibility of various student support was low overall, as most support was accessed by less than 20% of those surveyed apart from the provision of seminar recordings. In particular, financial support was the least accessible. Some unique support reported by students is ‘mail delivery service of library books’ and ‘(provision of) learning softwares and tutorials for using softwares.’ Furthermore, in the open-ended question, several students emphasized that they did not receive any meaningful support from their HEIs.

Figure 3. Students' perceived helpfulness of HEIs

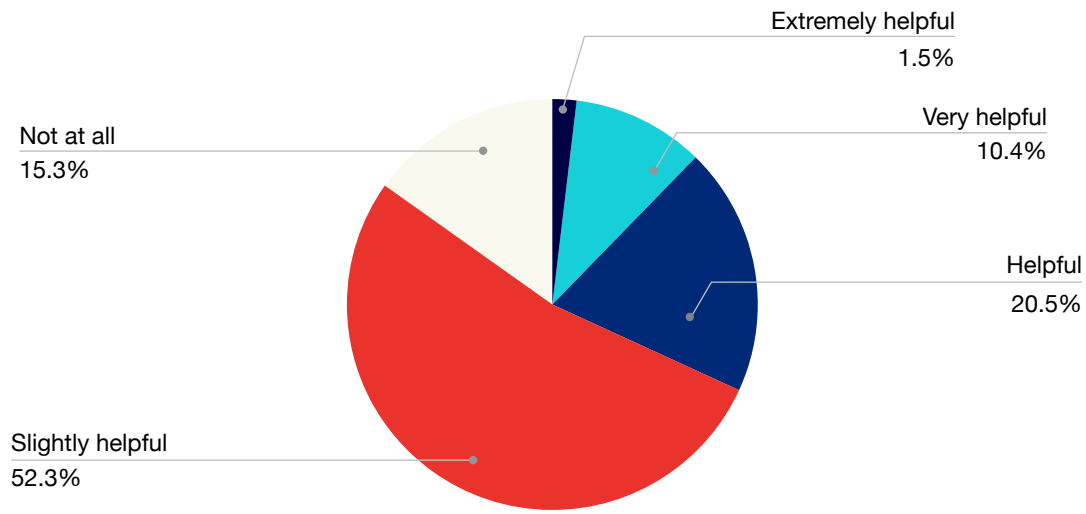


Table 4. Available/provided student support from HEIs

| Theme | Variable | Number | % |
|----------------------|---|--------|------|
| Technological | Providing recording of seminars | 133 | 40.7 |
| | Support for online learning equipment (e.g., laptop, tablet) | 34 | 10.4 |
| Academic | Extension for assignment submissions | 56 | 17.1 |
| | Online consultation hubs to discuss assignments | 46 | 14.1 |
| | Flexibility to do assignments individually or in a group | 43 | 13.1 |
| | More opportunities to submit drafts/plans and receive feedback | 37 | 11.3 |
| | Additionally purchasing/altering printed materials into e-books | 35 | 10.7 |
| | More time to complete the exams/quizzes | 34 | 10.4 |
| | Free online subscriptions to supplement learning (e.g., Coursera) | 29 | 8.9 |
| Financial | Allowed to pay tuition fee in installments | 19 | 5.8 |
| | Reduction in tuition fee | 17 | 5.2 |
| | Financial aid | 6 | 1.8 |
| Other | Webinars on career opportunities during and after the pandemic | 26 | 8.0 |
| | Counselling service | 18 | 5.5 |

As for the support outside HEIs, almost all students (94.5%) responded that they did not receive any support from other institutions such as governments, the private sector and non-governmental organizations (NGOs). In one rare case, a student in Mongolia reported being given access to free data service support from a private mobile phone operator company during COVID-19.

Support needed by students

The students expressed their needs for various types of support from their HEIs to engage better in online learning (Table 5). The most prominent was a reduction in tuition fees with 232 votes (70.9%),

followed by flexibility in assignment designs (43.4%). The third most demanded support was the additional purchase of e-books (39.1%). There were also high demands for academic support enhancing their learning and engagement with assignments. Additionally, the kinds of demanded support extended to non-academic matters, such as support for online learning equipment (18.7%) and free counselling services (30.4%). It is also noteworthy that the students considered free subscriptions of online learning courses to compensate for their learning (19.3%) and career webinars concerning the pandemic (15.9%) as an essential support to engage better in their online learning.

Table 5. Students' needs for support from HEIs

| Theme | Variable | Number | % |
|----------------------|---|--------|------|
| Financial | Reduction in tuition fees | 232 | 70.9 |
| Academic | Flexibility to do the assignments individually or in group | 142 | 43.4 |
| | Additional purchase/alteration of printed materials (e.g., e-books) | 128 | 39.1 |
| | More opportunities to submit drafts/plans and receive feedback | 120 | 36.7 |
| | Online consultation hubs to discuss assignments | 75 | 22.9 |
| | More dedicated time for consultation with teaching staff | 72 | 22.0 |
| | More time to complete exams | 69 | 19.3 |
| | Free online subscriptions to compensate learning (e.g., Coursera) | 63 | 19.3 |
| Technological | Recording of seminars | 109 | 33.3 |
| | Support for online learning equipment (e.g., laptop, tablet) | 61 | 18.7 |
| | More immediate upload of recorded lecturers | 31 | 9.5 |
| Other | Allocation of peer/student support group | 113 | 34.6 |
| | Free counselling service | 101 | 30.9 |
| | Webinars on career opportunities during and after the pandemic | 52 | 15.9 |

The students also reported their demands for support outside HEIs to enhance their online learning experiences (Table 6). 61.8% of students demanded the support of free access to internet services, followed by access to libraries (51.4%). The students revealed their needs for support around food such as vouchers for groceries and food banks (41.3%). Provision of online learning platforms outside their programmes at HEIs was also popular with 40.1%. One third of those surveyed (33.9%)

reported free COVID-19 tests as desired support. There were demands for support enhancing their community belonging: free membership for student or professional associations (24.8%), youth community hubs for non-academic purposes (23.8%), and professional network hubs (15.9%). Additionally, those surveyed expressed financial needs for accommodation (e.g. grant for housing and utilities) (19.6%) and travelling back home (e.g. flights and trains) (10.7%).

Table 6. Students' needs for support from outside the HEIs

| Theme | Variable | Number | % |
|----------------------|--|--------|------|
| Technological | Access to free internet service | 202 | 61.8 |
| | Free online learning platforms outside the university | 131 | 40.1 |
| Academic | Access to library | 168 | 51.4 |
| | Access to public working spaces | 33 | 10.7 |
| Financial | Support for food (e.g., vouchers for groceries, food banks) | 135 | 41.3 |
| | Financial aid for accommodation (e.g., grant for housing, utilities) | 64 | 19.6 |
| | Financial aid for travelling back home (e.g., flights, trains) | 35 | 10.7 |
| Other | Free membership for students or professional associations | 81 | 24.8 |
| | Youth community hubs for non-academic purposes | 78 | 19.6 |
| | Professional network hubs | 52 | 15.9 |

Analysis and discussion

This study aimed to understand how the rapid transition to online learning during the COVID-19 pandemic has affected students' learning processes in East Asia and Australia, as well as to identify the crucial support areas that need to be addressed to inform HEIs and relevant stakeholders about ways to devise future student support. The preliminary findings suggest that various factors, both academic and non-academic, affect students' learning processes and capture high demands for varying kinds of support. There are two key overarching findings: international students' vulnerability to challenges and students' neutral satisfaction with the ERT experience. First, although not conclusive with different sample sizes for both groups, the current findings show that international students are more vulnerable to challenges during ERT than their domestic counterparts. This finding is consistent with Day et al.'s (2021) results pointing to the possibility that a certain group, such as international students, may face certain challenges more profoundly. Second, despite the issues reported under ERT, students' satisfaction levels were neutral, with just one third feeling satisfied with their experiences. This may be attributed to students' acknowledgement that ERT was initiated with limited resources in a short time frame and that their HEIs and instructors were also under immense challenges to continue teaching during the pandemic (Hodges et al., 2020). Yet, despite students' understanding of the situation, the subsequent discussion should still highlight the importance of improving the quality of ERT, including student support availability.

Academic challenges and corresponding support needs

This study suggests that ERT has compromised online course designs and learning processes, leading to students' decreased motivation towards learning. Regarding curriculum design, over 80% of students experienced changes in learning hours once teaching shifted to an online format, capturing the fact that ERT has inevitably changed the way students learn. Compared to prior studies, assignment-related issues and support needs appear as prominent issues across the data. This may be because students had been completing coursework under ERT for a sustained period of time, where almost a full academic year had passed since its introduction. Intensified concerns for assignments may have also resulted from the absence of spontaneous interaction with teaching staff in on-campus learning, where students can easily 'drop in' at their offices or ask questions after class. Particularly, the data capture ERT's impacts on student engagement with assignments, reflected in concerns such as the heavy workload and limited assignment guidance. This is consistent with Adnan and Anwar (2020), who described that students faced difficulties in completing assignments during ERT. An important finding is that assignment-related support is not readily accessible to students in the countries in this study, in contrast to Mollenkopf and Gasskill's (2020) finding that instructors in the United States of America introduced flexibility with assignments as a form of student support. Consequently,

the demands for assignment-related support were high (Table 5). Furthermore, the issue of missing practicum and lab opportunities corroborates Nambiar's (2020) findings, unveiling students' difficulties in learning without practical engagements. These points collectively suggest that ERT has diminished the programme design compared to face-to-face delivery.

Joining those of earlier studies (Adnan and Anwar, 2020; Nambiar, 2020; Shim and Lee, 2020), these findings amplify students' struggles in learning with insufficient peer interaction under ERT, leading to a high demand for the creation of online peer support groups. Furthermore, ERT circumscribes students' access to libraries, which offer both a learning space and resources. Although many HEIs have purchased more e-books to enhance resource accessibility, the data show that such attempts have been insufficient. As Hodges et al. (2020) explain, successful learning is based on multifaceted infrastructures, such as libraries and social interaction, which are key for one's internalization of learning. Therefore, it can be argued that the shift to ERT has compromised students' learning process with the absence of such supporting mechanisms, which are inadequately attended to by the HEIs.

Consequent to the compromised quality in course design and learning process, the shift to ERT has impacted personal psychological attributes such as motivation and concentration. Similar to Aguilera-Hermida's (2020) findings, these results show that students found it difficult to sustain motivation during online learning and struggled with undermined concentration and intensified procrastination. Motivation forms the basis for cognitive engagement, which determines academic achievement (Blumenfeld et al., 2006). With aspects of motivation improved, students' engagement in learning is more likely to be sustained, and students are more likely to achieve positive learning outcomes despite a change in the

learning environment (Lin et al., 2017). Therefore, what appears as a root cause for distracted engagement with learning is fluctuating motivation under ERT conditions. In this context, HEIs and instructors need to explore determinants that can enhance student motivation.

Non-academic challenges and corresponding support needs

Transitioning to ERT has sparked concerns not just related to academic issues; students are voicing the need to reduce tuition fees. This may be attributed to the low accessibility of financial support received from all relevant stakeholders found in the data. This is consistent with Dembereldorj (2020) and Nambiar (2020), who reported issues of financial hardships raised by many students. The heavy demand may have derived from the global impact of the COVID-19 outbreak, which diminished many countries' economic activities, thus forcing affected individual households to reduce their allocation of budget for education (World Bank, 2020c). This has created an added financial burden on students, especially those with lower socio-economic status, as many struggle with financial losses from work and/or government, which in turn affect their living conditions (Tsurugano et al., 2020). Compared to previous studies, these findings show that students also raised issues of financial needs for basic living necessities such as food. Furthermore, with the overall quality of online classes decreased given the lack of access to libraries/resources, practicum opportunities and interaction with instructors and classmates, as well as a poorer quality of teaching, students may regard the HEIs' policy to claim the same level of fees as pre-COVID-19 to be unjust. This further illustrates that financial support has been the least accessible and also the most affected domain, reflecting the high demand for financial support (e.g. reduction in tuition fees, vouchers for groceries).

In respect of the study environment, the current findings contradict the previous ones. During the initial stage of the COVID-19 pandemic, many students showed contentment with the shift to ERT, as they could take classes wherever they chose to with online learning (Shim and Lee, 2020). However, as measures to flatten the spread of COVID-19 were extended to all scopes of society, students were gradually left to seek learning spaces at home (Nambiar, 2020). Although homes supposedly entail intimacy and comfort as their value, these findings uniquely show that students need more personalized spaces for learning. Previous studies have noted homes as a potential source of privacy and sometimes the cause of disruption in learning

when family support is absent. Requests for more personalized spaces to study, therefore, come naturally, as COVID-19 is prolonged and ERT has been extended. In addition, as ERT usually comes in the form of electronic devices with screens, it has caused physical strains on sensory organs, musculoskeletal systems and nervous systems, as reported by Nambiar (2020). Nonetheless, congruent with Adnan and Anwar (2020), internet instability remains a long-term challenge that has hindered students since the early stages of ERT. Therefore, ERT has disrupted students' personalized space for learning and created physical as well as technical issues.

Recommendations

Overall, the present findings evidently demonstrate that students need support from HEIs and other stakeholders outside of HEIs. This corroborates Kouzkurt et al. (2020), which calls for collaboration from all ends such as the government, policy-makers, private sector, as well as non-profit and non-governmental organizations to create student support communities. This is especially important during times of crisis, wherein student support is insufficient with only instructors and HEIs being the main players, and collaboration among all parties is necessary in order to effectively devise future student support and improve students' learning experience.

The following recommendations are suggested to address these problems.

Higher education institutions and relevant stakeholders:

1. To support students with added financial burdens, HEIs can increase baseline funding (tuition fees, scholarships, grants) to offer direct aid to students. In achieving this, support from funding bodies, such as governments and NGOs, is vital.
2. Network providers and governments can work together to introduce student-friendly internet contracts to ensure internet stability for students. Network providers can further collaborate with HEIs to donate broadband internet for students in need.
3. NGOs and food service industries can donate food vouchers for groceries and light meals so that students have access to food within a limited budget.

Higher education institutions and relevant stakeholders:

1. To provide support responding to students' most critical needs, HEIs can first conduct a needs assessment to identify the direct and indirect challenges that are affecting students' learning.
2. To resolve issues of disconnection from learning communities, HEIs can develop multimodal communication platforms such as online chat services that allow students to voice different kinds of needs as well as connect with peers.
3. To improve students' psychological well-being due to the lack of interaction, HEIs and student unions can create peer support programmes that connect students with peers and ensure students feel valued.
4. To respond to students' needs for accessing library resources and learning space, HEIs should launch a system where students can easily request a new purchase of digital books/materials and ease up access to libraries with social distancing precautions such as booking systems.
5. To supplement the missing practicum and lab opportunities during ERT, HEIs should prioritize such activities when gradually restarting on-campus activities.
6. As international students face more challenges, HEIs need to acknowledge this and provide support tailored to their specific needs.

Recommendations for instructors:

1. Instructors may provide students with formative feedback as well as assignment and exam consultations to address their intensified concerns in completing assignments online so that they can engage better with learning.
2. Instructors should devise more well-planned learning schedules for both classes and assignment dues to ease students' workload and minimize the changes in learning hours between face-to-face and ERT.

In summary, all of the proposed recommendations with specific actions can concurrently enhance students' motivation for learning, which has been a major issue in online learning engagement. These recommendations also illuminate that participation of all actors, instructors, HEIs and other key stakeholders is key to improving students' online learning experiences under ERT.

Conclusion

This study investigated students' experienced challenges, available support and further support needs during online learning under ERT conditions in East Asia and Australia. The majority of students reported facing issues during ERT. The preliminary findings suggest that the students' surrounding circumstances have affected their learning. Specifically, the most prominent issues reported were heavy workload, missing practicum and lab opportunities, lack of motivation as well as personal space to learn at home. Furthermore, internet accessibility, financial support for tuition fees as well as living expenses (e.g. food provision, accommodation support, etc.) are among the most sought-out types of support from HEIs and/or other organizations by students. To respond to students' multifaceted needs, specific recommendations and practices for future support to all relevant stakeholders are provided. This study also found that international students are facing more

challenges than local students, which requires further analysis and research into the comparison of challenges faced by international students and locals. Likewise, future research could also seek to understand the different issues that might affect different groups, such as gender and study level, as this would give a more detailed and rich insight as to how better each group can be supported. Most importantly, this study shows the value of listening to student voice is twofold: it can help HEIs navigate ways to improve ERT, and it can empower students to help construct the inclusive post-pandemic education system. Although there is a need for further research to extend the findings, it is hoped that the present study has uncovered realities of students' experiences and their most critical needs during ERT to inform relevant stakeholders to devise effective support, thereby improving students' overall online learning experience.

References

- Aguilera-Hermida, A. P. (2020). College students' use and acceptance of emergency online learning due to COVID-19. *International Journal of Educational Research Open*. 1. Retrieved from <https://doi.org/10.1016/j.ijedro.2020.100011>
- Adnan, M. and Anwar, K. (2020). Online learning amid the COVID-19 pandemic: Students' perspectives. *Journal of Pedagogical Sociology and Psychology*, 2(1), pp.45–51. Retrieved from <https://eric.ed.gov/?id=ED606496>
- Bhattacharjee, A. (2012). *Social Science Research: Principles, Methods and Practice*. (Online). 2nd ed. Florida: University of South Florida. Retrieved from https://digitalcommons.usf.edu/oa_textbooks/3
- Blumenfeld, P. C., Kempler, T. M., and Krajcik, J. S. (2006). Motivation and cognitive engagement in learning environments. In: Sawyer, R. K. ed. *The Cambridge Handbook of the Learning Sciences*. Cambridge: Cambridge University Press, pp.475–488.
- Bornstein, M. H., Jager, J., and Putnik, D. L. (2013). Sampling in Developmental Science: Situations, shortcomings, solutions, and standards. *Developmental Review*. 33, pp.357–370. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/25580049/>
- Bozkurt, A., Jung, I., Xiao, J., Vladimirschi, V., Schuwer, R., Egorov, G., Lambert, S. R., Al-Freih, M., Pete, J., Olcott, Jr., D. Rodes, V., Aranciaga, I., Bali, M., Alvarez, Jr., A. V., Roberts, J., Pazurek, A., Raffaghelli, J. E., Panagiotou, N., de Coëtlogon, P., Shahadu, S., Brown, M., Asino, T. I. Tumwesige, J., Ramírez Reyes, T., Barrios Ipenza, E., Ossiannilsson, E., Bond, M., Belhamel, K., Irvine, V., Sharma, R. C., Adam, T., Janssen, B., Sklyarova, T., Olcott, N. Ambrosino, A., Lazou, C., Mocquet, B., Mano, M., and Paskevicius, M. (2020). A global outlook to the interruption of education due to COVID-19 pandemic: Navigating in a time of uncertainty and crisis. *Asian Journal of Distance Education*. 15(1), pp.1–126. Retrieved from <https://discovery.ucl.ac.uk/id/eprint/10101679/>
- Bryman, A. (2012). *Social Research Methods*. 4th ed. Oxford: Oxford University Press.
- Butler-Henderson, K., Tan, S., Lalani, K., Mandapam, S. K., Kemp, T., Rudolph, J., and Crawford, J. (2021). Update of the COVID-19 Higher Education Literature Database (CHELD v2). *Journal of Applied Learning and Teaching*, 4(1), pp.1–4.
- Crawford, J., Butler-Henderson, K., Rudolph, J., Malkawi, B., Glowats, M., Burton, R., Magni, P. A., and Lam, S. (2020). COVID-19: 20 countries' higher education intra-period digital pedagogy responses. *Journal of Applied Learning and Teaching*, 3(1), pp.9–28. Retrieved from <https://doi.org/10.37074/jalt.2020.3.1.7>
- Day, T., Chang, I. C., Chung, C. K. L., Doolittle, W. E., Housel, J., and McDaniel, P. N. (2021). The Immediate Impact of COVID-19 on Postsecondary Teaching and Learning. *The Professional Geographer*, 73(1), pp.1-13. Retrieved from <https://www.tandfonline.com/doi/full/10.1080/00330124.2020.1823864>

- Dembereldorj, Z. (2021). Exploring Online Student Engagement During COVID-19 Pandemic in Mongolia. *International Journal of Higher Education*, 10(7), pp.10–17.
- Goertzen, M. J. (2017). Introduction to Quantitative Research and Data. *Library Technology Reports*, 53(4), pp.12–18.
- Hämäläinen, R., Kiili, C., and Smith, B.E. (2017). Orchestrating 21st century learning in higher education: A perspective on student voice. *British Journal of Educational Technology*. 48(5), pp, 1106–1118. Retrieved from <https://doi.org/10.1111/bjet.12533>
- Harasim, L. (2000). Shift happens: Online education as a new paradigm in learning. *The Internet and Higher Education*, 3, pp.41–61. Retrieved from <https://www.sciencedirect.com/science/article/abs/pii/S1096751600000324>
- Hodges, C., Moore, S., Lockee, B., Trust, T., and Bond, A. (2020). The difference between emergency remote teaching and online learning. *Educause Review*, 27(1), pp.1–9. Retrieved from <https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning>
- Lac, V. T. and Mansfield, K. C. (2018). What Do Students Have to Do With Educational Leadership? Making a Case for Centering Student Voice. *Journal of Research on Leadership Education*, 13(1), pp.38–58. Retrieved from <https://doi.org/10.1177/1942775117743748>
- Lin, M.H. and Chen, H.G. (2017). A study of the effects of digital learning on learning motivation and learning outcome. *Eurasia Journal of Mathematics, Science and Technology Education*, 13(7), pp.3553–3564. Retrieved from <https://www.ejmste.com/article/a-study-of-the-effects-of-digital-learning-on-learning-motivation-and-learning-outcome-4843>
- Nae, N. (2020). Online Learning During the Pandemic: Where does Japan Stand? *Euromentor Journal*. XI(2), pp.7–24.
- Nambiar, D. (2020). The impact of online learning during COVID-19: students' and teachers' perspective. *The International Journal of Indian Psychology*, 8(2), pp.783–793.
- Mollenkopf, D. and Gaskill, M. (2020). Technological Transience in a Time of Unprecedented Change: Student Support Strategies in College Courses for Those 'Suddenly Online'. *The Journal of Literacy and Technology*, Special Issue, pp.130–148.
- Shim, T. E., and Lee, S. Y. (2020). College students' experience of emergency remote teaching due to COVID-19. *Children and Youth Services Review*, 119, 105578. Retrieved from <https://www.sciencedirect.com/science/article/pii/S0190740920320016>
- Tertiary Education Quality and Standard Agency, Australian Government (TEQSA). (2020). Foundations for good practice: The student experience of online learning in Australian higher education during the COVID-19 pandemic. TEQSA. Retrieved from <https://www.teqsa.gov.au/guides-resources/resources/sector-updates-and-alerts/foundations-good-practice-student-experience-online-learning-australian-higher-education-during-COVID-19-pandemic>
- Toepoel, V. (2017). Online Survey Design. In: Fielding, N. G., Lee, R. M. and Blank, G. eds. *The SAGE Handbook of Online Research Methods*. London: SAGE, pp.184–202.
- Tsurugano, S., Nishikitani, M., Inoue, M., and Yano, E. (2021). Impact of the COVID-19 pandemic on working students: Results from the Labour Force Survey and the student lifestyle survey. *Journal of Occupational Health*, 63(1), 1–7. Retrieved from <https://onlinelibrary.wiley.com/doi/10.1002/1348-9585.12209>

World Bank. (2020a). East Asia and Pacific: Tertiary Education. World Bank. Retrieved from <https://thedocs.worldbank.org/en/doc/622191611934473195-0090022021/original/EAPTEandCOVIDupdated.pdf>

World Bank. (2020b). The COVID-19 Crisis Response: Supporting Tertiary Education for Continuity, Adaptation, and Innovation. Retrieved from <https://documents1.worldbank.org/curated/en/621991586463915490/The-COVID-19-Crisis-Response-Supporting-Tertiary-Education-for-Continuity-Adaptation-and-Innovation.pdf>

World Bank. (2020c). The Impact of COVID-19 Pandemic on Education Financing. World Bank. Retrieved from <https://openknowledge.worldbank.org/handle/10986/33739>



YOUTH ACCESS TO INFORMATION ABOUT COVID-19 AND ITS POTENTIAL INFLUENCES ON BEHAVIOUR AND WELL-BEING (EUROPE AND NORTH AMERICA)

————— Authored by —————

**Rashel Bajaj, Lilian Chiu, Udeerna Tippabhatla, Grace Gong,
Robin Huang, Kristle Teng and Sara Ebenezer**

Members of the regional youth-led research team for Europe and North America, exploring the impact of COVID-19 on youth well-being, in the context of the UNESCO Youth as Researchers (YAR) on COVID-19 initiative (2020–2022)

Acknowledgements

We would like to thank the Youth as Researchers (YAR) programme (United Nations Educational, Scientific and Cultural Organization-UNESCO, University of Galway, and the Pennsylvania State University) which made the conduct of this research work and the publication of this paper possible.

We would also like to thank all the people who participated in the study through answering the survey. We acknowledge their valuable contribution, which enabled the research team to collect data on this specific topic and issue a number of findings and recommendations.

As part of the YAR on COVID-19 initiative, seven young people worked collaboratively to write this research paper. We also thank the many people who invested their time and ideas to contribute to this effort.

Abstract

This paper sought to explore the ways in which young people accessed information about the COVID-19 pandemic, and the potential impact COVID-19 had on young people's behaviour and well-being.

To answer this research question, a literature review was undertaken, and a survey was developed and disseminated through social media channels and university campus chat spaces to youth between the ages of 18 and 29 across North America.

Based on the survey responses received and their subsequent analysis by the research team, a number of findings and conclusions emerged regarding the main sources of information accessed by youth during the pandemic and its influence on young people's behaviours and well-being. The study found that the highest-ranked source of information was social media, and that the pandemic notably impacted the well-being

and mental health of youth due to stress resulting from lockdowns and restrictions. To address these issues, the research team makes a number of recommendations aimed at ensuring access to quality information and improving youth well-being.

Keywords: access to information, well-being, COVID-19

List of figures*:

Figure 1. Age group distribution

Figure 2. Gender distribution

Figure 3. Ethnicity distribution

Figure 4. Distribution of main sources of information related to COVID-19

Figure 5. Distribution of source(s) of information perceived as trustworthy

Figure 6. Distribution of barriers to wellness during COVID-19

Figure 7. Distribution of ways to improve mental health

Figure 8. Distribution of precautions practised to stay safe from COVID-19

Figure 9. Distribution of sources of stress during COVID-19

Figure 10. Perceived risk of contracting COVID-19

Figure 11. Perceived impact of COVID-19 on mental health

Figure 12. Perceived impact of COVID-19 on daily activities

*Source of all figures: UNESCO Youth As Researchers on COVID-19 initiative (2020-2022)

Introduction

The United States Centers for Disease Control and Prevention's COVID-19 Data Tracker reported that out of a total of 8,317,421 cases reported (November 2020), the incidence of the COVID-19 infection was greatest in age group between 18 and 29 (23.8%, at 1,974,480 cases), followed by the second largest age group which is ages between 50–60 (20.4%, at 1,695,067 cases). In later stages of the pandemic, younger age groups overtook their older counterparts in cases reported. Given the context of rising caseloads among younger populations, it is crucial to better understand the information sources and consequent behaviours youth have adopted amid the COVID-19 pandemic. Studies have shown that most youth get their news not from traditional news sources like newspapers and television, but rather from social media. News sources, depending on their implicit biases, are effective in shaping opinions, and therefore allowing us to conclude that youth's news access points can significantly shift their decision-making towards abiding by COVID-related precautionary guidelines such as wearing masks and limiting contacts in closed spaces. Based on these findings, the youth-led research team aimed to study how youth are accessing information about COVID-19, and what impact it has on their behaviour and well-being.

This study's research question was: How are youth accessing information about COVID-19, and what potential influences does this have on their behaviour and well-being?

The youth-led research team studied youth with an age range between 18 and 29 years across North America. This included many genders, abilities, cultures, geographical locations, and orientations. This age group was chosen as it was the leading age group of the population testing positive in COVID-19 cases. The authors of this study are from the target age group and geographical region.

As future leaders, it is important for youth to have discussions of key topics that will bring to light key ideas that will also support their development in the future. By giving youth facts and allowing youth to participate in investigative research, they are also able to learn more about how to protect themselves and their loved ones during the pandemic while also being heard and developing coping strategies.

Research team members conducted a survey to be distributed among youth circles in which team members are involved, such as social media spaces. Data were collected by dispersing research forms through social media channels such as Facebook and university campus chat spaces. Due to the geographic and age spread of team members, it was hoped to gather data from a diverse range of sources across North America. The survey collected preliminary demographic data as well as information on youth perceptions of information sources and social behaviour during COVID-19. The youth-led research team grouped cohorts of the studied population by their risk perception (0, 1–3, 4–6, 7–10 were provided risk perception categories). From these groups, the youth-led research team studied the sources of information these groups are receiving from analysis which was mostly done from the statistics through Qualtrics.

It is important to note that during the time frame that the research question was posed (northern hemisphere, autumn of 2020), COVID-19 restrictions were enforced across North America and a vaccine had not been released. However, during the time frame that the data were analysed, and this report was written, a vaccine has been largely distributed (in the United States of America) and readily available for the age group studied (18–29). This did not alter the youth-led research team's anticipated recommendations of the study.

Literature review

There have been many studies evaluating the impacts of COVID-19 on the mental health of youth (Xiong et al., 2020). One study looked at 19 studies investigating the impact of the pandemic on mental health of the general population, appraised the quality of various factors – such as representativeness of the sample, sample size, non-respondents, ascertainment of exposure – based on design and analysis, assessment of outcome and statistical test. Various measurement tools were used and looked at the risk factors identified to be associated with symptoms of depression among the pandemic.

Risk factors that impacted mental health during the pandemic

Women were reported as generally more likely to develop depressive symptoms when compared to men (Lei et al., 2020). Participants from the younger age group (≤ 40 years) presented with more depressive symptoms (Ahmed et al., 2020). Student status was also a major risk factor for developing more depressive symptoms as compared to other occupational statuses, namely, employment or retirement (González-Sanguino et al., 2020). Four studies also identified lower education levels as an associated factor with greater depressive symptoms (Gao et al., 2020; Mazza et al., 2020; Olagoke et al., 2020; C. Wang et al., 2020). A single study reported that people with higher education and professional jobs exhibited more depressive symptoms in comparison to less educated individuals and those in service or enterprise industries (Y. Wang et al., 2021).

Other predictive factors for symptoms of depression included:

- Living in urban areas
- Poor self-rated health
- High loneliness
- Being divorced/widowed
- Being single
- Lower household income
- Quarantine status
- Worry about being infected
- Property damage
- Unemployment
- Not having a child
- Past history of mental stress or medical problems
- Having an acquaintance infected with COVID-19
- Perceived risks of unemployment
- Exposure to COVID-19-related news
- Higher perceived vulnerability
- Lower self-efficacy to protect oneself
- The presence of chronic diseases
- The presence of specific physical symptoms

In addition to associated risk factors, a few studies also identified factors that protect individuals against symptoms of psychological illnesses during the pandemic. Timely dissemination of updated and accurate COVID-19 related health information from authorities was found to be

associated with lower levels of anxiety, stress, and depressive symptoms in the general public. Additionally, actively carrying out preventive measures that lower the risk of infection, such as frequent handwashing, mask-wearing, and less contact with people also predicted lower psychological distress levels during the pandemic (C. Wang et al., 2020). Some personality traits were shown to correlate with positive psychological outcomes. Individuals with positive coping styles, secure and avoidant attachment styles usually presented fewer symptoms of anxiety and stress (H. Wang et al., 2020). Another study also found that participants with more social support and time to rest during the pandemic exhibited lower stress levels (Zhang and Ma, 2021).

Generally, there is a higher prevalence of symptoms of adverse psychiatric outcomes among the public when compared to the prevalence before the pandemic.

Several studies identified frequent exposure to social media/news relating to COVID-19 as a cause of anxiety and stress symptoms (Gao et al., 2020; Moghanibashi-Mansourieh, 2020). Frequent social media use would expose oneself to potential fake news/reports/disinformation and the possibility for amplified anxiety. With the unpredictable situation and a lot of unknowns about the novel coronavirus, misinformation, and fake news are being easily spread via social media platforms, creating unnecessary fears and anxiety (Erku et al., 2021). Sadness and anxious feelings could also arise when constantly seeing community members suffering from the pandemic via social media platforms or news reports (Li et al., 2020).

Reports also suggested that poor economic status, lower education level, and unemployment are significant risk factors for developing symptoms of mental disorders, especially depressive symptoms during the pandemic period (Gao et al., 2020; Lei et al., 2020; Mazza et al., 2020; Olagoke et al., 2020).

Methodology

Quantitative and qualitative data were collected through a survey created on Qualtrics. The survey consisted of 24 questions, divided into four sections. The demographic target of the research project was youth between the ages of 18 and 29 inclusive in the United States of America and Canada. All questions were optional to provide the respondents with privacy and flexibility to participate.

The first section consisted of eight questions to collect basic demographic information of respondents, including whether the respondent had contracted or knew someone who had contracted COVID-19. The second section included five questions to gauge respondents' use of media sources to access information on COVID-19. Respondents were prompted to choose from a diverse list of various information and journalistic sources, as well as to provide other sources which may have been excluded. In addition, respondents

were asked to identify the trustworthiness of the sources they utilized. The third section of the survey had four questions that asked respondents to describe their current lifestyles, as well as assess how the COVID-19 pandemic affected their behaviours, including following health precautions. The final section included seven questions regarding the mental health impact of COVID-19 guidelines. Respondents were also asked to identify activities in which they participated in order to improve their mental health.

The survey was distributed among the social networks of researchers, including university classmates, workplace colleagues, and peers in other activities. Respondents were solicited primarily through social media platforms, including Facebook, GroupMe, and WhatsApp. Given the general distribution and geographic spread of research team members, the sample of respondents was as random as possible.

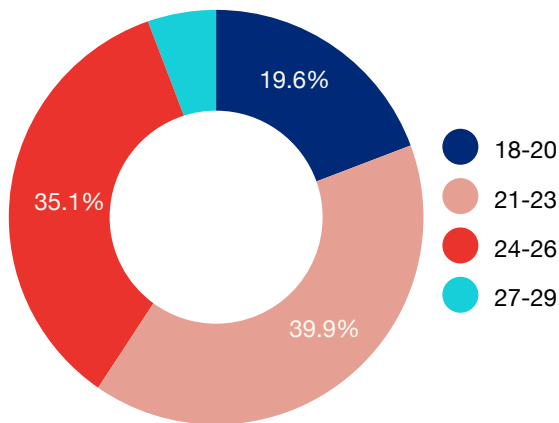
Results

Due to the nature of the survey, where the choice to answer questions was optional, there were varying numbers of answers. The total number that participated in the survey was between 140 and 155. The following presents the survey results as acquired from Qualtrics, the platform used for survey distribution, and extracted to a

comma-separated values (CSV) file for further data investigation. Pie charts and most histograms were created using Google Sheets. Statistical analysis of respondents' ratings on the perceived risk and impact of COVID-19 was conducted using Numpy, Pandas, and Matplotlib packages in Python 3.8.

Demographic

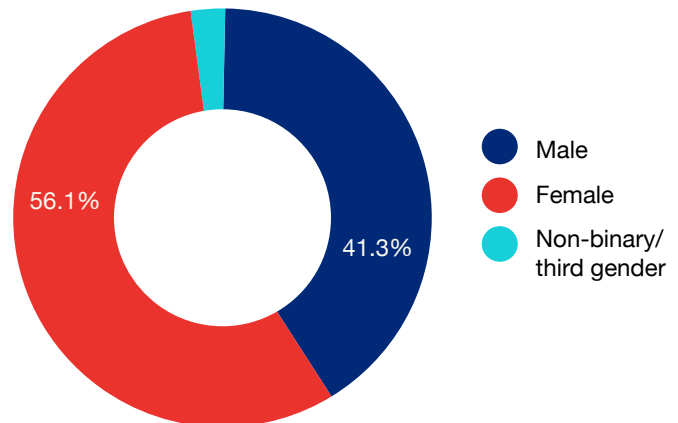
Figure 1. Age group distribution



Age

In the age group distribution, the number of answers totalled 148. Out of 148 participants, 19.6% were of ages 18–20, 39.9% were of ages 21–23, 35.1% were of ages 24–26 and 5.4% were of ages 27–29. Here, more than 70% of respondents are between 21 and 26 years of age (see Figure 1).

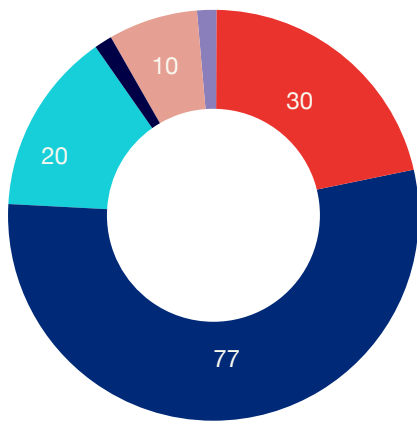
Figure 2. Gender distribution



Gender

Out of 155 respondents, 41.3% were men, 56.1% were women and 2.6% were non-binary or of a third gender (see Figure 2).

Figure 3. Ethnicity distribution



- Asian or Pacific Islander
- More than One Ethnicity
- Black
- Caucasian/white
- Other
- Indigenous or Native American

Ethnicity

Out of 143 respondents, 77 participants identified as White/Caucasian, 30 participants identified as Asian or Pacific Islander, 20 participants identified as more than one ethnicity, 10 as Black, 4 as Indigenous and 6 as other (see Figure 3).

Country, state, and province

In the country distribution, the sample size is of 148. Out of 148 participants, 78.9% were from the United States of America, 20.4% from Canada and 0.7% from Mexico. It was also possible to further break down the distribution of participants by the states (in the United States of America) and provinces (in Canada).

Political leaning

In the Political leaning distribution, a total of 140 responses were received. Out of 140 responses, 44.3% identified as centrist, 27.1% identified as left leaning, 25% as very left leaning, 2.9% as right leaning and 0.7% very right leaning.

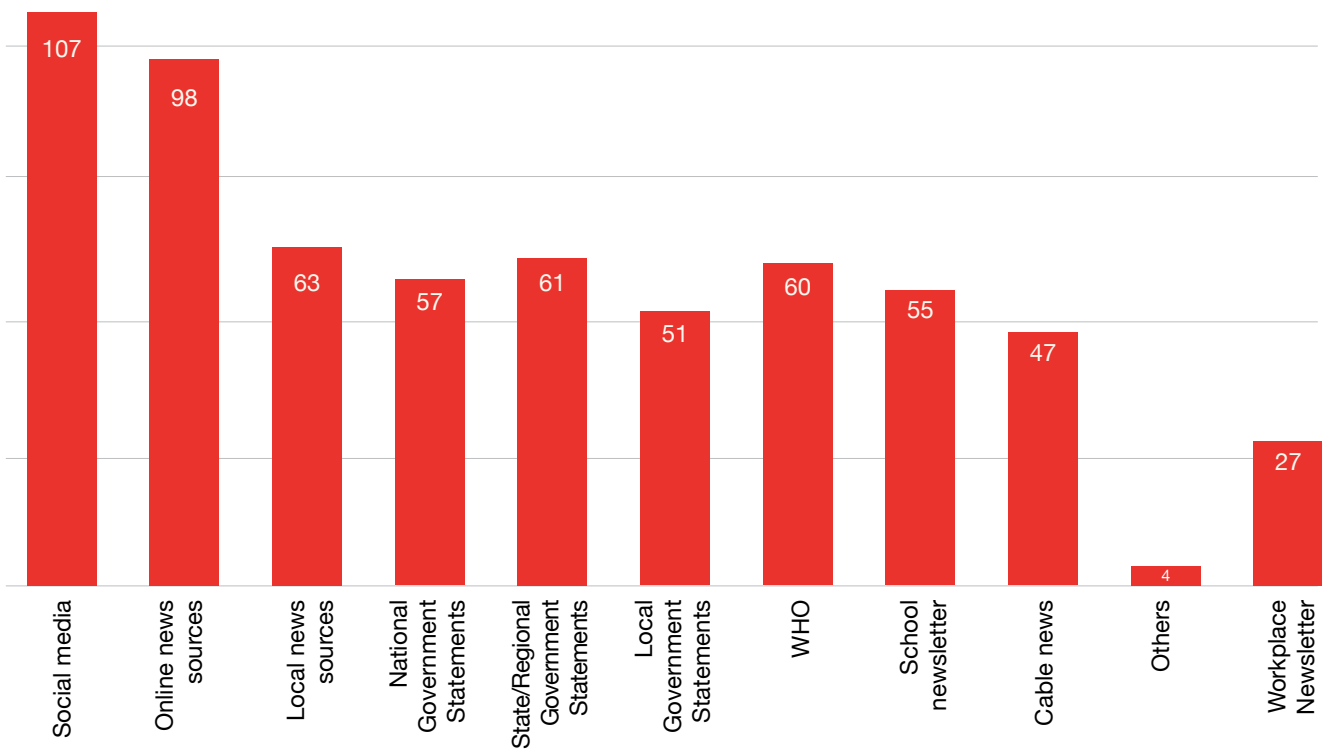
Sources of information

Main sources of information

Out of a sample size of 151, the highest-ranked source of information is social media, and the least-utilized sources of information are cable news

and workplace newsletters. Figure 4 indicates the distribution of main sources for COVID-19 information utilized by 151 respondents of the survey.

Figure 4. Distribution of main sources of information related to COVID-19

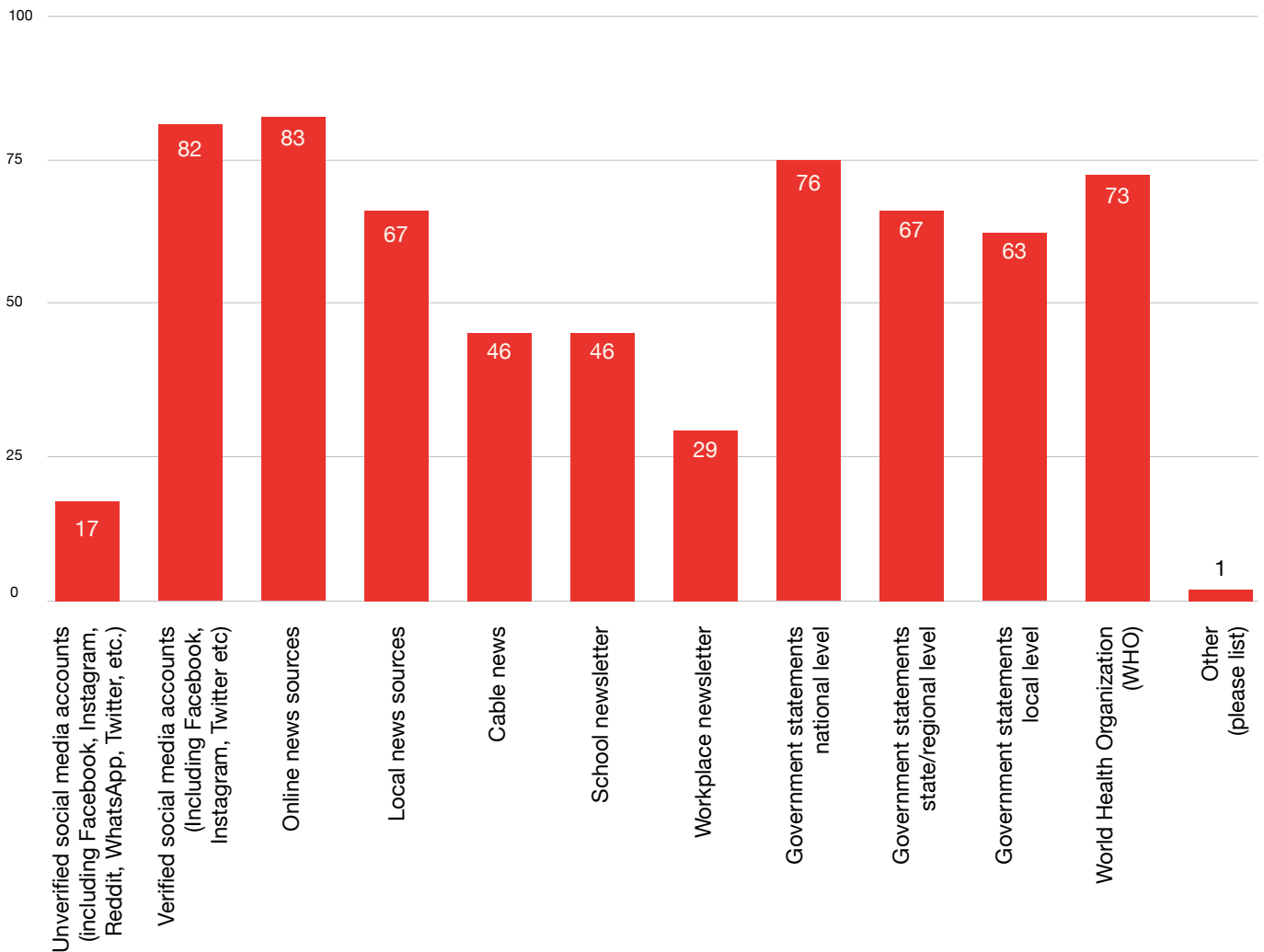


Most often used news media outlets and source(s) perceived as trustworthy

From the sample obtained, the youth-led research team provided a list of common news sources to pick from. Most of the study participants utilized ABC News as the most commonly used news source. Most participants found that the

online news sources and verified social media were the most trustworthy compared to the other information sources options provided (see Figure 5).

Figure 5. Distribution of source(s) of information perceived as trustworthy



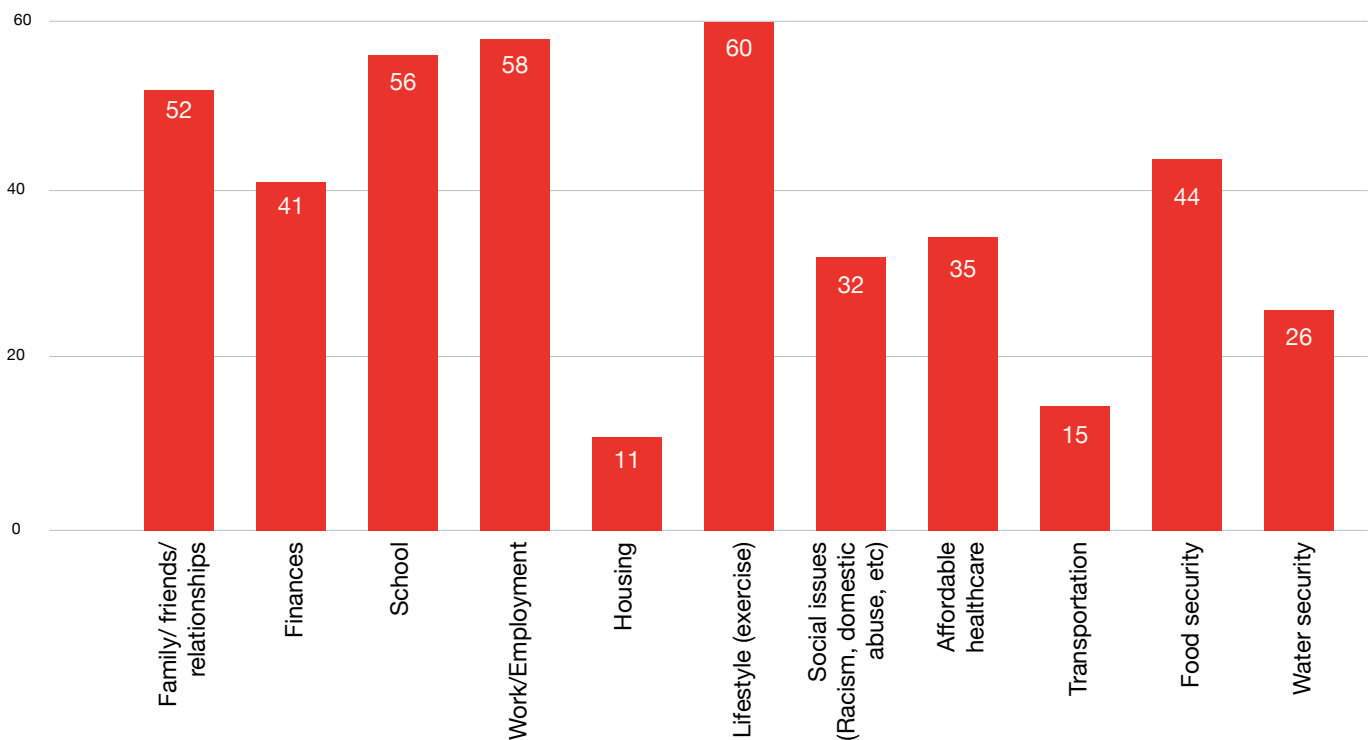
Mental health during COVID-19

Barriers to mental health

Out of the 145 respondents, at least 10 selected all 11 potential factors indicated on the survey. Notably, family/friends relationships, school, work/employment, and lifestyle were the four top-reported factors, each receiving a selection of over

50 responses. Lifestyle was the top choice with a selection of 60 responses, while housing was the least-selected choice with 11 responses (see Figure 6).

Figure 6. Distribution of barriers to wellness during COVID-19

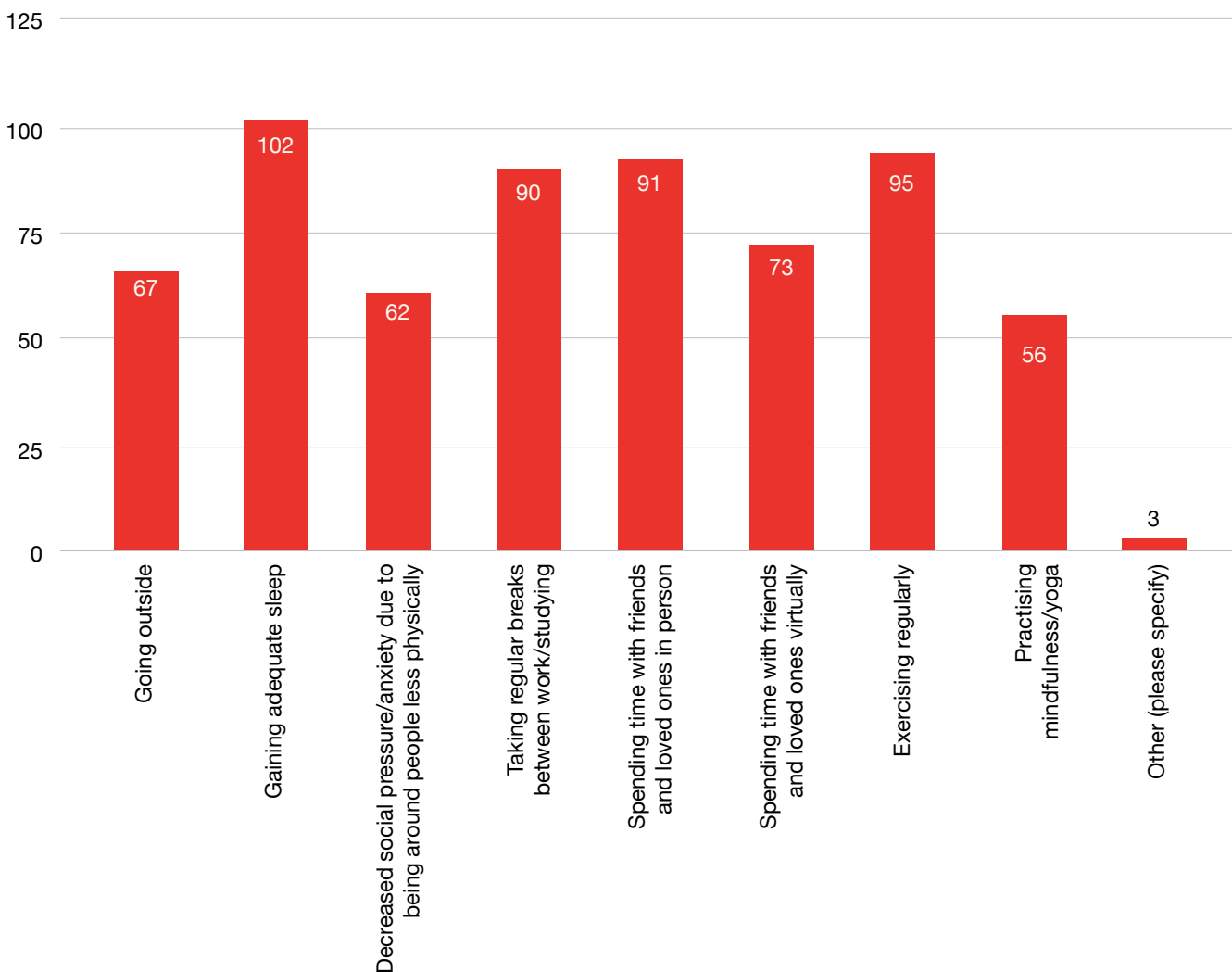


Ways to improve mental health

Out of 147 respondents, at least 50 selected all eight potential factors indicated on the survey, with three indicating others. Notably, gaining adequate sleep, taking regular breaks during work/study, spending time with friends and loved ones, and exercising regularly were the four top-

reported factors, each receiving a selection of over 90 responses. Gaining adequate sleep was the top choice with 102 responses, while practising mindfulness/yoga was the least-selected choice with 56 responses (see Figure 7).

Figure 7. Distribution of ways to improve mental health

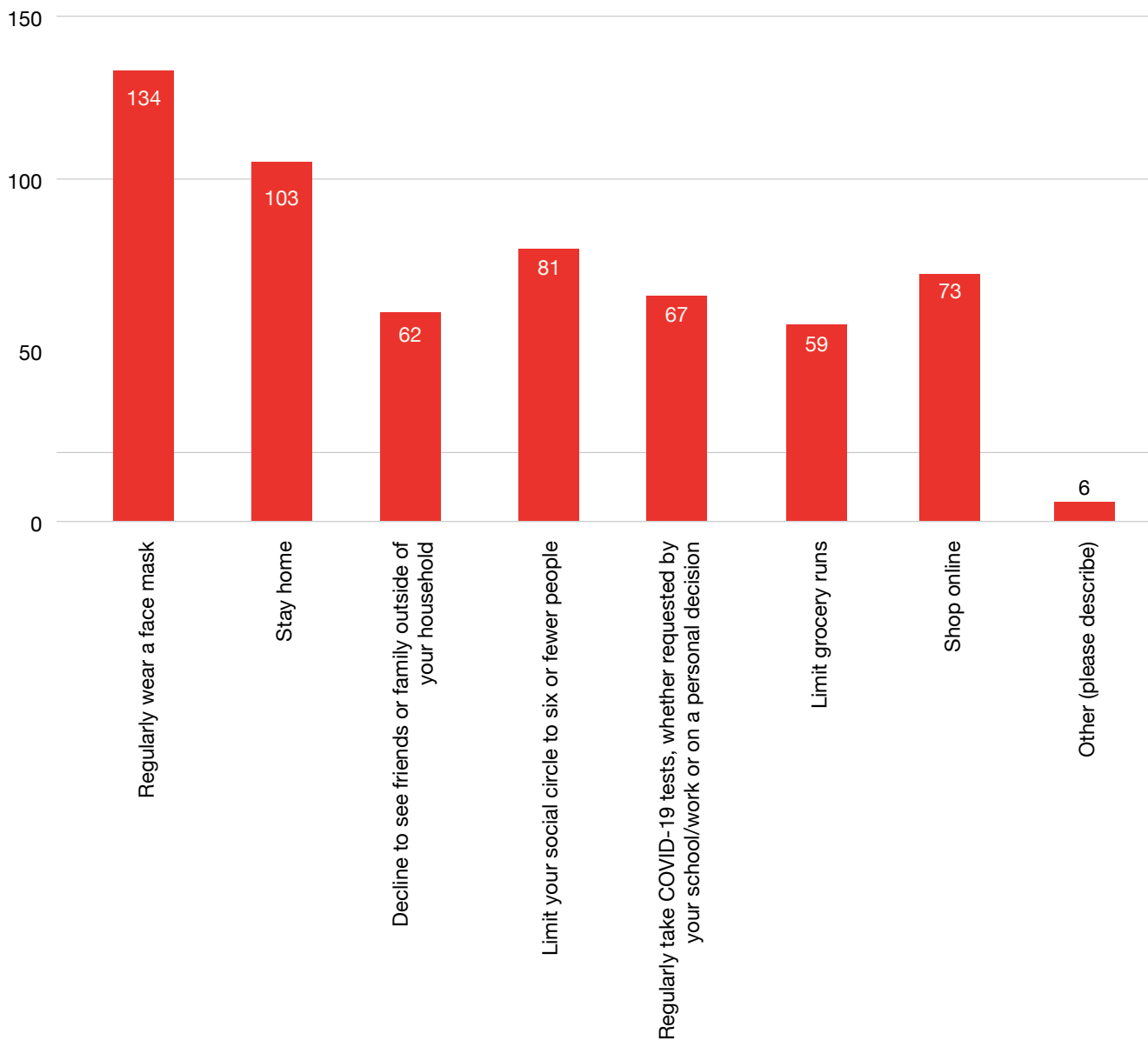


Precautions practised

Out of 150 respondents, at least 59 selected all seven potential factors indicated on the survey, with six indicating others. Notably, regularly wearing a face mask and staying at home were the two top-reported factors, each receiving

a selection of over 100 responses. Regularly wearing a face mask was the top choice with 134 responses while limiting grocery runs was the least-selected choice with 59 responses (see Figure 8).

Figure 8. Distribution of precautions practised to stay safe from COVID-19

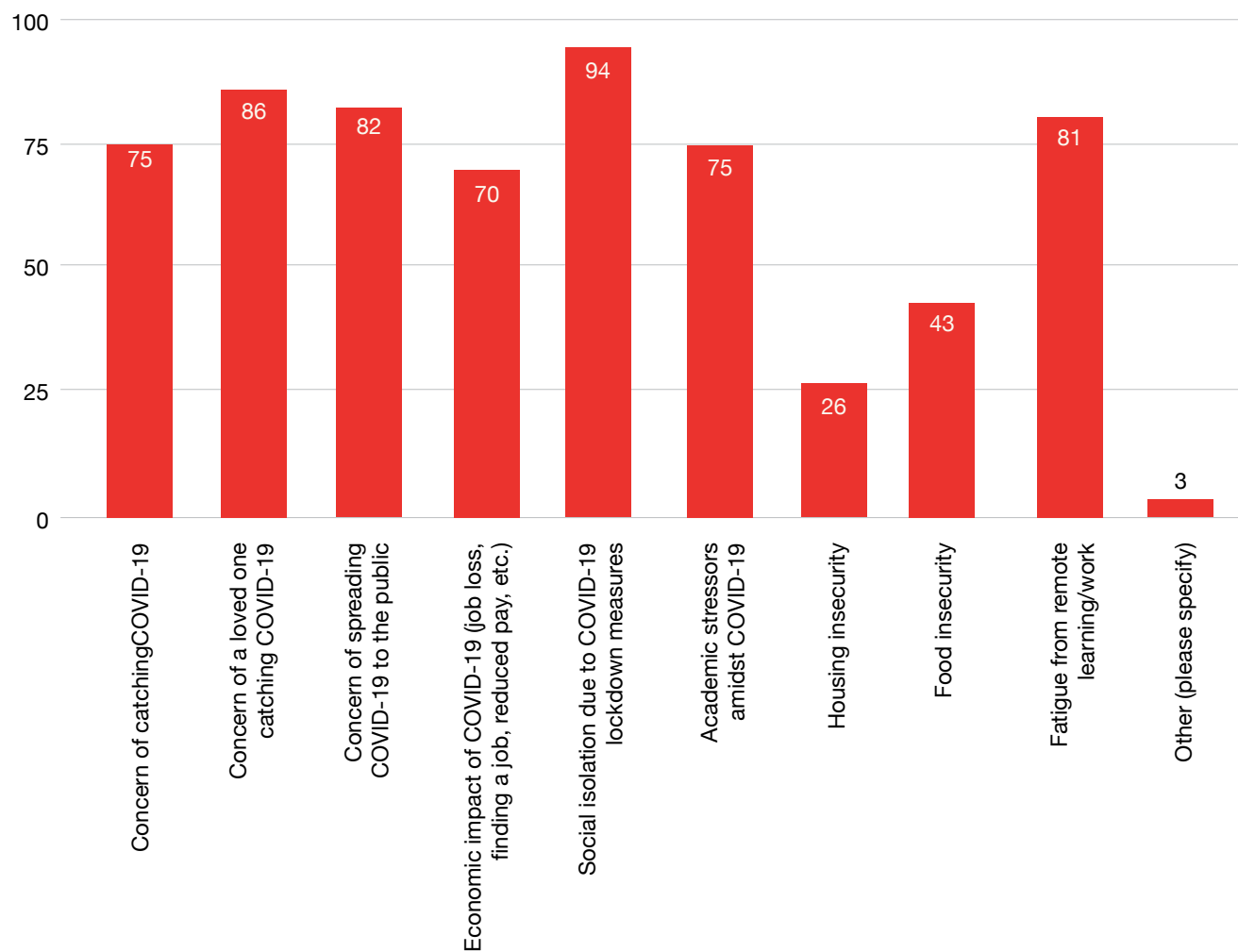


Sources of stress

Out of 147 respondents, at least 20 selected all nine potential factors indicated on the survey, with three indicating others. Notably, social isolation due to COVID-19 lockdown measures, concern about a loved one catching COVID-19, concern about spreading COVID-19 to the public, and fatigue from remote study/work were the four

top-reported factors, each receiving a selection of over 80 responses. Social isolation due to COVID-19 lockdown measures was the top choice with 94 responses while housing insecurity was the least-selected choice with 26 responses (see Figure 9).

Figure 9. Distribution of sources of stress during COVID-19



Ratings of perceived risk and impact of COVID-19

Statistical analysis of respondents' ratings on the perceived risk and impact of COVID-19 was conducted using Numpy, Pandas and Matplotlib packages in Python 3.8. From a total sample size of 141, 92.2% of the respondents reported that they knew at least one person who had contracted COVID-19.

Looking at the box plot of perceived risk of contraction, there is a skewed left distribution on the 10-point scale, where 1 represents low perceived risk and 10 represents high perceived risk. The median perceived risk reports a risk level of 7, relatively high. However, looking at the histogram (Figure 10), the perceived risk distribution is bimodal with one peak at 5 and one higher peak at 9.

Figure 10

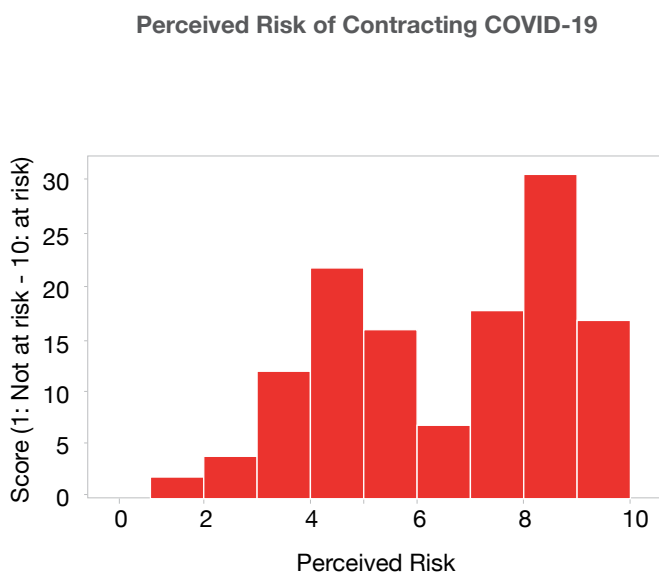
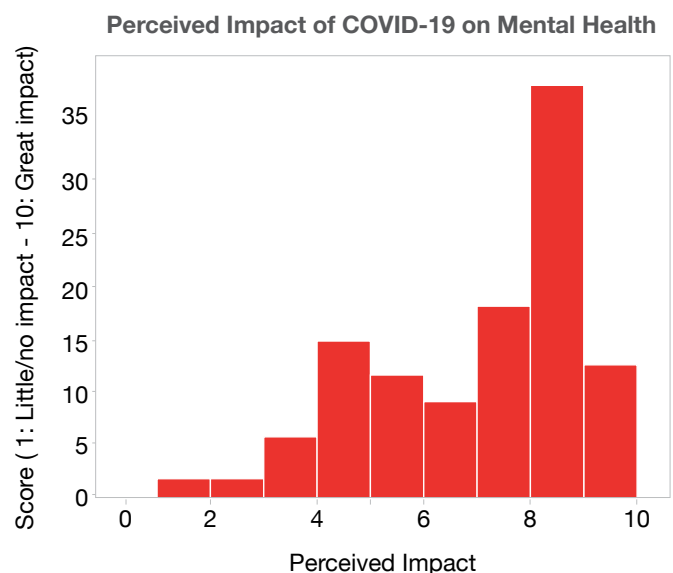


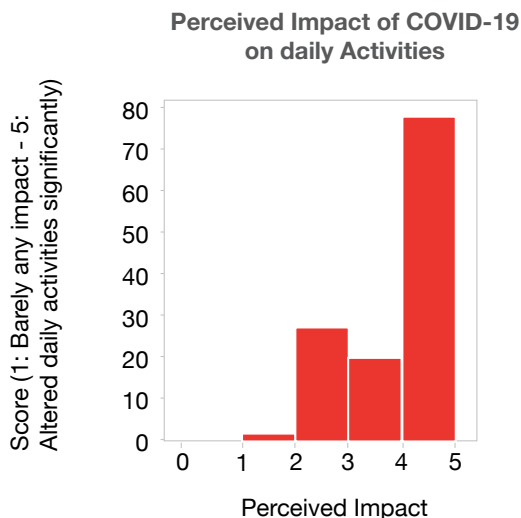
Figure 11



Turning to the boxplot on the impact of COVID-19 on daily activities, which is rated on a five-point scale where 1 represents low impact and 5 represents high impact, 25% of the responses report an impact rating of 4, relatively high impact, which is also the median of the responses. There is also one outlier reporting an impact level of 1. Looking at Figure 12, there is a consistent result reporting a peak between 4 and 5, indicating high impact.

Lastly, looking at the boxplot on the impact of COVID-19 on mental health (boxplot 1), there is another skewed left distribution on the 10-point scale, where 1 represents low impact and 10 represents high impact. The median is at 7, suggesting a relatively high impact. Turning to Figure 11, there is a consistent pattern that reports a skewed left distribution with two peaks, one at 5 and one at 9.

Figure 12



Conclusions and interpretations

One of the strengths of this study is the large sample size (over 100 responses, as opposed to the 15 minimum required). An area of limitation is the inability to control/limit confounding variables from participant responses (since there are a lot of potential confounding variables associated with identifying thoughts and interpretations of individuals, it may not be as simple as just the news outlet, but potentially caused by financial difficulty, environments, family issues, among others, which were too personal to ask participants to go into detail about.) The voluntary nature also meant that participants could decide not to answer some questions. However, the survey was standardized as all participants were given the same questions.

If the survey and study were to be replicated, the youth-led research team would try to share it with a greater audience to get more responses, and potentially combine different study formats, such as trying focus groups and doing in-person surveys where possible. In addition, the youth-led research team would try to get more responses from geographic locations that were not represented as much or at all on this survey round in order to garner more well-developed results in the future.

Please note that the time the study was initiated/started (September 2020) may not necessarily reflect the same thoughts or current conditions in the United States of America and Canada. From June 2021, government restrictions were gradually lifted, and statistics have shown that the majority of individuals followed guidelines got vaccinated.

Social media was the most prevalent news source for youth, possibly due to the fast and easy way to access and spread information. Moreover, verified social media accounts were perceived as the second most-trusted news source.

Though verification allows for some credibility, celebrities and even politicians do not always post facts, posing a concern about news information and sources. Government websites and the World Health Organization (WHO) were not major sources of information for youth but were perceived as trustworthy sources, showing youth's trust in governing bodies during the pandemic.

Another observation was that affordable health care and housing were not big issues for youth despite the nationwide rent crisis and health disparities that impacted great numbers of people. This could be due to youth living with their parents, college housing, and receiving college telemedicine services, or the survey population not being from communities drastically affected by these issues. Transportation was also not a barrier, potentially due to online work and e-learning. Some youth expressed an issue with food and water security, which is of high concern to the researchers.

In terms of the impact of the pandemic on daily activities, the mean score of 3.5/5 indicates an impact, with participants noting the inability to meet in-person and all activities being virtual being the main change. On a scale out of 10 (being a big impact), participants averaged 6.46, meaning the pandemic had an above-average impact on their mental health.

The largest sources of stress for youth (from order of most-impacting to least-impacting) were social isolation due to lockdown measures, concern about a loved one catching COVID-19, concern about spreading COVID-19 to the public, fatigue from remote work, concern about catching COVID-19, academic stressors, economic impacts, food insecurity, housing insecurity, and finally, other reasons.

The data collected on the effects of COVID-19 on the study's participants' mental health overwhelmingly reflected that the virus and its resulting lockdowns, restrictions, and worry about the health of loved ones and themselves all contributed to increased stress. With about 92.2% stating that they knew someone who had contracted COVID-19, respondents were placing emphasis on following adequate safety measures. With these data in mind, it is suggested that owing to the fact that social media is the main source of COVID-19 news, as vaccines continued to be tested and approved to <18 age groups, more content/campaigns be conducted encouraging teens and adolescents to still follow precautions. This could be in the form of UNESCO teaming up with successful content creators in the youth space and generating effective social media campaigns encouraging youth to still follow any mask mandates in their area (especially if they are not vaccinated). In addition, the survey results suggested that youth were having a hard time connecting with people due to heavy lockdown restrictions and following school simply in a virtual

format, thereby limiting their social interactions. An app called ClubHouse was released worldwide – a solely voice-based connecting platform where one could join or host a ClubHouse room on virtually any topic and invite others to participate or listen. This type of interaction truly sparked a lot of interesting conversations and a sense of not feeling truly alone while still giving people a chance to connect on common interests and forge partnerships. While this app does have age restrictions, UNESCO could either work with them or utilize a similar concept to encourage youth to interact with one another and get out of their comfort zone while talking to those anywhere in the world. UNESCO should also work towards providing mindfulness outlets for youth – whether partnering with already existing (even paid) mindfulness platforms for a subsidized price or bringing in licensed therapists and mindfulness specialists to speak to youth about how they can improve their mental health.

Proposed recommendations:

- Enhance content and launch targeted campaigns to reinforce COVID-19 precautionary measures among teenagers
- Create interactive online platforms and initiatives to facilitate engagement among youth
- Establish mindfulness resources and support channels to empower youth in improving their mental well-being

References

- Ahmed, M. Z., Ahmed, O., Aibao, Z., Hanbin, S., Siyu, L., and Ahmad, A. (2020). Epidemic of COVID-19 in China and associated Psychological Problems. *Asian Journal of Psychiatry*, 51, 102092. Retrieved from <https://doi.org/10.1016/j.ajp.2020.102092>
- Erku, D. A., Belachew, S. A., Abrha, S., Sinnollareddy, M., Thomas, J., Steadman, K. J., and Tesfaye, W. H. (2021). When fear and misinformation go viral: Pharmacists' role in deterring medication misinformation during the 'infodemic' surrounding COVID-19. *Research in social and administrative pharmacy : RSAP*, 17(1), pp.1954–1963. Retrieved from <https://doi.org/10.1016/j.sapharm.2020.04.032>
- Gao, J., Zheng, P., Jia, Y., Chen, H., Mao, Y., Chen, S., Wang, Y., Fu, H., and Dai, J. (2020). Mental health problems and social media exposure during COVID-19 outbreak. *PloS one*, 15(4), e0231924. Retrieved from <https://doi.org/10.1371/journal.pone.0231924>
- González-Sanguino, C., Ausín, B., Castellanos, M. Á., Saiz, J., López-Gómez, A., Ugidos, C., and Muñoz, M. (2020). Mental health consequences during the initial stage of the 2020 Coronavirus pandemic (COVID-19) in Spain. *Brain, Behavior, and Immunity*, 87, pp.172–176. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/32405150/>
- Huang, Y., and Zhao, N. (2020). Generalized anxiety disorder, depressive symptoms and sleep quality during COVID-19 outbreak in China: a web-based cross-sectional survey. *Psychiatry Research*, 288, 112954. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/32325383/>
- Lei, L., Huang, X., Zhang, S., Yang, J., Yang, L., and Xu, M. (2020). Comparison of Prevalence and Associated Factors of Anxiety and Depression Among People Affected by versus People Unaffected by Quarantine During the COVID-19 Epidemic in Southwestern China. *Medical Science Monitor: International Medical Journal of Experimental and Clinical Research*, 26, e924609. Retrieved from <https://doi.org/10.12659/MSM.924609>
- Li, Z., Ge, J., Yang, M., Feng, J., Qiao, M., Jiang, R., Bi, J., Zhan, G., Xu, X., Wang, L., Zhou, Q., Zhou, C., Pan, Y., Liu, S., Zhang, H., Yang, J., Zhu, B., Hu, Y., Hashimoto, K., Jia, Y., Wang, H., Wang, R., Liu, C., Yang, C. (2020). Vicarious traumatization in the general public, members, and non-members of medical teams aiding in COVID-19 control. *Brain, Behavior, and Immunity*, 88, pp.916–919. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/32169498/>
- Mazza, C., Ricci, E., Biondi, S., Colasanti, M., Ferracuti, S., Napoli, C., and Roma, P. (2020). A Nationwide Survey of Psychological Distress among Italian People during the COVID-19 Pandemic: Immediate Psychological Responses and Associated Factors. *International Journal of Environmental Research and Public Health*, 17(9), 3165. Retrieved from <https://doi.org/10.3390/ijerph17093165>
- Moccia, L., Janiri, D., Pepe, M., Dattoli, L., Molinaro, M., De Martin, V., Chieffo, D., Janiri, L., Fiorillo, A., Sani, G., and Di Nicola, M. (2020). Affective temperament, attachment style, and the psychological impact of the COVID-19 outbreak: an early report on the Italian general population. *Brain*,

Behavior, and Immunity, 87, pp.75–79. Retrieved from <https://doi.org/10.1016/j.bbi.2020.04.048>

Moghanibashi-Mansourieh A. (2020). Assessing the anxiety level of Iranian general population during COVID-19 outbreak. *Asian Journal of Psychiatry*, 51, 102076. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/32334409/>

Olagoke, A. A., Olagoke, O. O., and Hughes, A. M. (2020). Exposure to coronavirus news on mainstream media: The role of risk perceptions and depression. *British Journal of Health Psychology*, 25(4), pp.865–874. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/32415914/#:~:text=Mediation%20analysis%20showed%20that%20perceived,be%20associated%20with%20depressive%20symptoms.>

Ozamiz-Etxebarria, N., Dosil-Santamaria, M., Picaza-Gorrochategui, M., and Idoiaga-Mondragon, N. (2020). Niveles de estrés, ansiedad y depresión en la primera fase del brote del COVID-19 en una muestra recogida en el norte de España [Stress, anxiety, and depression levels in the initial stage of the COVID-19 outbreak in a population sample in the northern Spain]. *Cadernos de Saude Publica*, 36(4), e00054020. Retrieved from <https://doi.org/10.1590/0102-311X00054020>

Özdin, S., and Bayrak Özdin, Ş. (2020). Levels and predictors of anxiety, depression and health anxiety during COVID-19 pandemic in Turkish society: The importance of gender. *The International Journal of Social Psychiatry*, 66(5), pp.504–511. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/32380879/>

Sønderskov, K. M., Dinesen, P. T., Santini, Z. I., and Østergaard, S. D. (2020). The depressive state of Denmark during the COVID-19 pandemic. *Acta Neuropsychiatrica*, 32(4), pp.226–228. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/32319879/>

Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., Ho, C. S., and Ho, R. C. (2020). Immediate Psychological Responses and Associated Factors during the Initial Stage of the 2019 Coronavirus Disease (COVID-19) Epidemic among the General Population in China. *International Journal of Environmental Research and Public Health*, 17(5), p. 1729. Retrieved from <https://doi.org/10.3390/ijerph17051729>

Wang, H., Xia, Q., Xiong, Z., Li, Z., Xiang, W., Yuan, Y., Liu, Y., and Li, Z. (2020). The psychological distress and coping styles in the early stages of the 2019 coronavirus disease (COVID-19) epidemic in the general mainland Chinese population: A web-based survey. *PloS one*, 15(5), e0233410. Retrieved from <https://doi.org/10.1371/journal.pone.0233410>

Wang, Y., Di, Y., Ye, J., and Wei, W. (2021). Study on the public psychological states and its related factors during the outbreak of coronavirus disease 2019 (COVID-19) in some regions of China. *Psychology, Health and Medicine*, 26(1), pp.13–22. Retrieved from <https://www.tandfonline.com/doi/abs/10.1080/13548506.2020.1746817?journalCode=cphm20>

Xiong, J., Lipsitz, O., Nasri, F., Lui, L. M. W., Gill, H., Phan, L., Chen-Li, D., Iacobucci, M., Ho, R., Majeed, A., and McIntyre, R. S. (2020). Impact of COVID-19 pandemic on mental health in the general population: A systematic review. *Journal of Affective Disorders*, 277, pp.55–64. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/32799105/>

Zhang, Y., and Ma, Z. F. (2020). Impact of the COVID-19 Pandemic on Mental Health and Quality of Life among Local Residents in Liaoning Province, China: A Cross-Sectional Study. *International Journal of Environmental Research and Public Health*, 17(7), p. 2381. Retrieved from <https://www.mdpi.com/1660-4601/17/7/2381>



NIGERIA: ASSESSMENT OF LEARNING OPPORTUNITIES AMONG YOUTH IN NIGERIA DURING THE COVID-19 PANDEMIC

————— Authored by —————

Portia Ozioma Chigbu, Efetobor Stephanie Effevothu, Charles Falajiki, Babajide Charles Falemara (team lead), Muhammad Suleiman Murkthar, David Otujor Okpatuma, Iyanuoluwa Emmanuel Olalowo and Olanike Timipa-Uge

Members of the youth-led research team exploring the impact of COVID-19 on youth and learning in Nigeria, in the context of the UNESCO Youth as Researchers (YAR) on COVID-19 initiative (2020–2022)

Acknowledgements

The Nigeria Youth as Researchers (YAR) Team appreciates all those who have contributed immeasurably, and in different ways, towards the success and completion of this research project.

First and foremost, our unreserved gratitude goes to our unrelenting, inspiring and very supportive Coordinator, Kristina Balalovska (Youth Section, Social and Human Sciences Sector, United Nations Educational, Scientific and Cultural Organization -UNESCO), for her immense contributions, brilliant and reassuring criticisms, tireless and encouraging virtual meetings, in-depth reviews as well as invaluable assistance during the course of executing this research project. We are indeed indebted.

This study would not have gone a long way without the supportive assistance of the UNESCO YAR team (Laura Guay, Maria Kyriotou, Sue Vize), the UNESCO Office in Abuja (Nneka Ifeoma Okafor and Kevin Wolaka Wilima), and the various YAR Enumerators who assisted in circulating the survey link, especially when we encountered the serious challenge in reaching the proposed number of the sample. We are very grateful.

Finally, we appreciate those who have contributed directly or indirectly but are not mentioned. Thank you very much.

The preliminary project design, data analysis and report writing stages of the YAR Nigeria Team's research were collectively carried out by Babajide Falemara (team lead), Iyanuoluwa Olalowo, Portia Chigbu, Stephanie Efevottu, Olanike Timipa-Uge Charles Falajiki, and David Kpatuma, while Muhammad Murkthar contributed to the research project at the inception phase.

Abstract

Situations abound where, in a bid to develop one's intellect, unforeseeable circumstances arise, disrupting that bid. An instance is the COVID-19 pandemic, which represents one of the largest disruptions to education in modern times. In Nigeria, there was a nationwide closure of schools and other learning institutions that lasted for about 24 weeks (6 months). Although the rationale underlying such closure is unimpeachable, the possible effects on academic programmes and access to learning opportunities during the lockdown period should be considered.

This research, therefore, provides an assessment of learning opportunities among young Nigerian women and men during the COVID-19 pandemic. It explores the perceptions of Nigerian youth towards the effect of the lockdown on learning opportunities and x-rays the concrete barriers that young people in Nigeria faced in accessing online learning during the lockdown.

The research employs an empirical descriptive survey design that allows participants to explicitly identify various issues related to the research. A closed-ended 27-item questionnaire was made available to 180 youth participants (90 men and 90 women) through a Google Form template spread across the country's six geopolitical zones. Their responses allowed for a nationwide analysis. Gender-based analysis, as well as one based on other socio-economic parameters, is also provided.

The research revealed that 57% of young people from urban areas had sufficient access to online learning, compared to 45% of those from rural areas. 71% of respondents indicated that there were insufficient institutional provisions for online learning. Correspondingly, sources of funding to access online learning platforms were predominantly personal (47%), while only 4%

received support from the Nigerian Government. Despite access, the consistency in participating in online learning was low: the highest percentage (35%) never accessed it, whereas only 7% did so daily. This raises the question of practical barriers, the most important being unreliable electricity, limited internet connectivity, unaffordability of data, inaccessibility of digital devices, and lack of digital knowledge. Nevertheless, online learning is an avenue worth pursuing as the majority of Nigerian youth acknowledged it was cheaper than in-person forms, and its teaching approach was better than the traditional form.

One important lesson garnered from this study is that, indeed, there are no barriers to learning except the ones imposed by the socio-economic situations of humans. In general, online learning has proven to be a viable alternative, and there is an urgent need to develop the platform to ensure that no one is left behind.

Keywords: online learning, youth, COVID-19

List of tables and figures*:

Table 1. Access to online learning

Table 2. Type of provisions made available by respondents' institution

Table 3. Consistency of participating in online learning in the framework of formal education

Table 4. Average time of participating in online learning in the framework of formal education

Table 5. Respondents' participation in other online learning outside the formal curriculum

Table 6. Level of device usage by respondents

Table 7. Respondents' frequency of access to a quiet place for online learning

Table 8. Main barriers of online learning to follow the formal education curriculum during the physical lockdown

Table 9. Respondents' opinion about online learning overall in Nigeria during the physical lockdown

Table 10. Respondents' opinion on most educationally disadvantaged group of learners due to the physical lockdown in Nigeria

Figure 1. Level of education of the respondents and their parents

Figure 2. Respondents' age bracket

Figure 3. Respondents' location

Figure 4. Respondents' source of funding for access to online platforms

Figure 5. Respondents' means of learning and devices accessed during lockdown to follow their formal education curriculum

Figure 6. Accessible type of internet connectivity

*Source of all tables and figures: UNESCO Youth As Researchers on COVID-19 initiative (2020-2022)

Introduction

According to Albert Einstein, ‘all that is valuable in human society depends upon the opportunity for development accorded the individual’. Education and learning opportunities equip youth for higher educational institutions or prepare them for employment and economic futures using the skills and knowledge acquired overtime (Monyai, 2018). Therefore, when such learning opportunities are limited, one can legitimately ask the question of the consequences such limitations have on the development of the individual and, in consequence, of society as a whole.

Abrupt school closures resulted in significant disruptions to the education system worldwide.

The COVID-19 pandemic is reported to have affected 94% of learners globally as of April 2020. This represents 1.58 billion young learners across 200 countries (United Nations, 2020).

However, the pandemic has also created a transition towards digital learning opportunities (Dhawan, 2020). In reality, online learning has emerged to become a permanent and integral part of the education system.

Like every other country, Nigeria was affected by the COVID-19 pandemic, which led to the physical lockdown of several sectors, including the learning institutions in the country. Schools were closed for about six months, affecting 39,440,016 million learners in the country (UNESCO, 2021).

This study seeks to better comprehend how the abrupt transition to digital learning affected Nigerian youth’s learning opportunities and experiences during the physical lockdown. The disturbance of the current educational system as triggered by the pandemic may indeed last longer than anticipated due to the lingering uncertainty and emergence of revolving variants/strains of the virus, as well as the recurring upsurge in COVID-19 infections even with global vaccinations. In addition, if online learning is set to become a permanent integral part of the education system, the findings of this research can serve to inform policies or programmes designed to perennialize such learning methods.

This report is structured into six sections. Following this Introduction, empirical studies in relation to the study are explored in Literature review, while methods of data collection and analysis are covered under Research methodology. The findings are presented in the next section, subsequently discussed and critically analysed, and finally summarized with policy recommendations.

Literature review

Several studies have been conducted across disciplines following the COVID-19 outbreak to ascertain the ways through which online learning has transformed the education sector all over the world. Some of these centre on student and teacher perceptions of online learning, the benefits of online learning, and the related challenges and barriers (Firdoussi et al.,2020; Hasan,2020; Lasi, 2021; Owusu-Fordjour et al.,2020). Such studies have been carried out across different educational levels and contexts.

Transitions towards online learning during the COVID-19 lockdown and related perceptions

The rapid development of internet-enabled technologies in the last decades has made online learning a tool of education worldwide (Singh and Thurman, 2019). With the peculiar circumstances of the COVID-19 pandemic, online learning has emerged as a front-burner in education worldwide. Masrom (2007) defines e-learning as any education method facilitated by the internet and its technologies. It offers learners the opportunity to learn without necessarily being present in the institutions, thus overcoming barriers associated with the space or time of teachers or learners. With the lockdown of schools and other educational institutions during the pandemic, e-learning provided a platform for knowledge to be transferred to learners to study from home.

In the Nigerian context, the perception of the opportunities provided by online learning by Nigerian youth has been adjusted based on their accessibility to the necessary tools for the same. Transitioning to online learning platforms during the lockdown can be positive or negative depending on students' participation in different learning opportunities (Agung et al., 2019). However, despite being a solution during lockdowns, bridging the gap between school closures and continued access to learning, studies have also shown that online learning is not necessarily a panacea. Akuratiya and Meddage (2020) and Rahman (2020) found that IT students had a positive perception of online learning and were willing to accept the courses being taught through online methods. Nevertheless, this was just for IT students, who were conversant with the tools and methods involved in online learning and could comfortably navigate these platforms with ease. For other students, feedback for online learning did not meet positive responses. According to the findings of Rahman (2020), it was revealed that despite the perceived usefulness of online learning during the pandemic, students found it to be ineffective and less engaging in helping them understand their courses.

Despite the importance of these studies to the current research, they are limited in terms of scope and context, particularly as they do not cover the perception of Nigerian youth towards learning opportunities during the COVID-19 lockdown. This research study, therefore, intends to fill in this identified gap in knowledge.

Practical barriers to accessing online learning during the COVID-19 lockdown

Despite the enormous benefits of online learning, such as increased convenience, flexibility, and ease of accessibility, there are also barriers to its effective utilization, including accessibility challenges and insufficient digital knowledge among learners and trainers, among others (Baber,2021; Bączek et al.,2021; Dhawan,2020).

In developing countries, the shift to online learning has proved to be even more challenging due to factors including limited expertise, inadequate electricity, limited internet access, inequality in access to technology. For instance, Owusu-Fordjour et al. (2020) conducted a study to assess the impact of COVID-19 on learning in Ghana. Their findings revealed that socio-economic problems, especially among low-income families, often acted as a barrier to accessing online education during the pandemic. This study, therefore, is particularly mindful of the possible socio-economic barriers to online learning among Nigerian students.

Methodology

An empirical descriptive survey research design was adopted for this research study. This allowed participants to explicitly describe various issues associated with the research focus. An online closed-ended quantitative 27-item structured questionnaire, which also included a few open-ended questions, was designed and made available to participants through a Google form template.

Preliminary information about the research project was provided for the participants on the introductory page of the questionnaire. This was followed by a consent section for the respondents to agree to participate in the research study. The participants were assured that all information provided was anonymous and strictly confidential. At the same time, the data collected would be deleted from the Google document at the end of the research project. It was ensured that no personal details were collected, and participants were at liberty to opt out of the survey at any point in time or not respond to any question(s), if they felt any of the question(s) infringed on their rights and privileges.

The Google link generated online was made available to respondents through networking, social media platforms, connections of the research team members, linkages with the United Nations Educational, Scientific and Cultural Organization (UNESCO), youth networks in Nigeria and Youth as Researchers (YAR) enumerators. A total of 180 participants from the six geopolitical zones of Nigeria, including the Federal Capital Territory (FCT), were targeted as the sample population of the study. 90 young women and 90 young men from the six geopolitical zones responded, although respondents were not evenly distributed across the zones: South-West (21%), South-South (7%), South-East (40%), North-West (7%),

North-Central (13%), North-East (5%), plus the FCT (7%). This can be considered a limitation of the study. Another shortcoming is the fact that there were not enough high-income earners to have a basis for comparative analysis on economic grounds. Because of the pandemic and the safety of the research team members, as well as the need to respect the YAR project timeline, the Google Forms survey tool was used during a limited time-span, which the research team had no control over, to ensure an even distribution of respondents across the zones as well as equal representation across the board. Nevertheless, following the mobilization of YAR enumerators and of UNESCO networks, some responses from all zones could be obtained, which gave sufficient ground to draw nationwide conclusions.

The study targeted students between the ages of 18 and 35 who were enrolled in the formal education system at the time of the study, particularly in senior secondary schools and tertiary (undergraduate and postgraduate) institutions. Young people who were still minors were excluded due to issues related to consent. The great majority of the respondents (78%) were enrolled in undergraduate programmes, with the proportion of master's students following (11%). Therefore, this study's conclusions are most pertinent to formal education at the undergraduate level. Similarly, most of the respondents' parents held undergraduate degrees (34%), whereas respondents' parents with postgraduate degrees were 16% (Master's) and 12% (Doctorate). 4% of parents had no formal education (Figure 1). A high percentage of the respondents (41%) were aged 18 to 22 years, with only 5% aged 33 to 35 years (Figure 2).

Figure 1. Level of education of the respondents and their parents

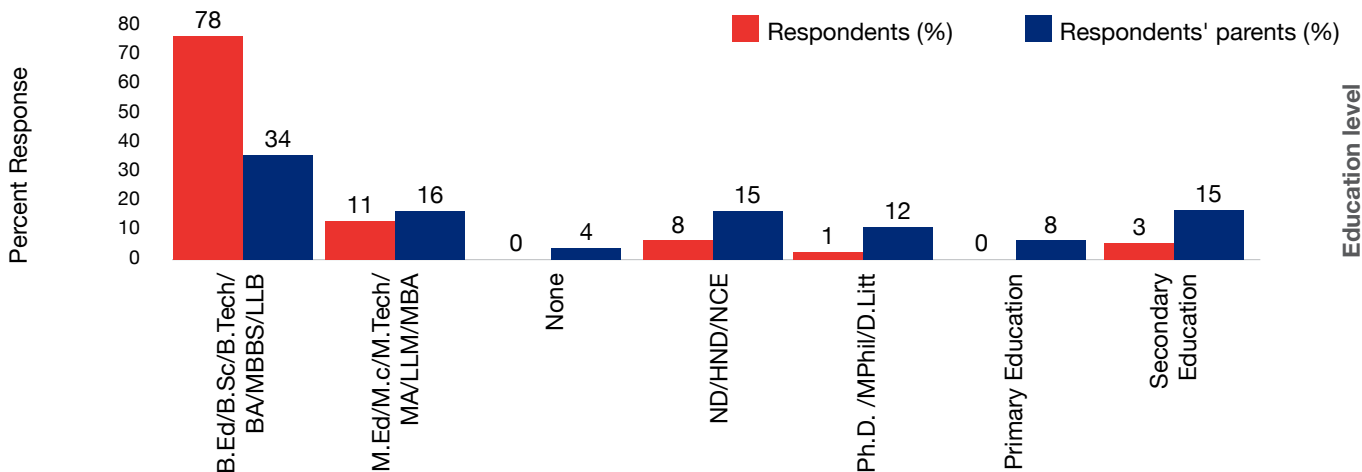
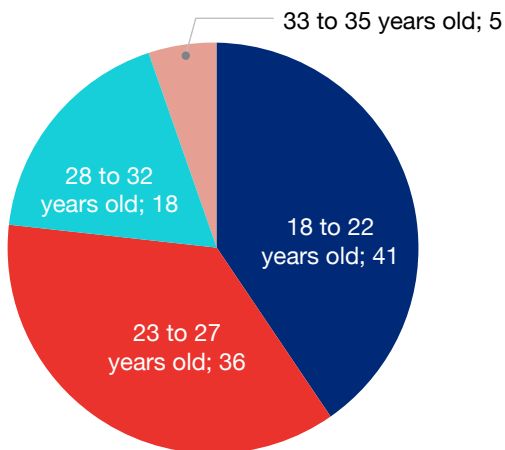
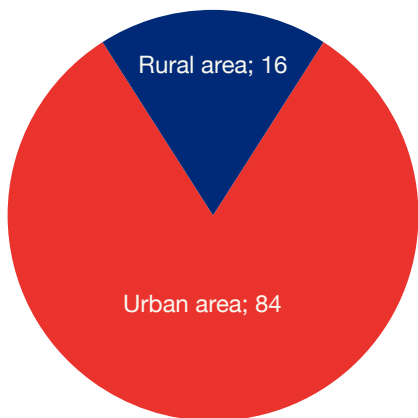


Figure 2. Respondents' age bracket



The overwhelming majority of respondents (84%) were from urban areas, with 16% residing in rural areas (Figure 3). While rural respondents were not too numerous, this still allowed conclusions to be drawn based on the rural/urban parameter. Almost all, namely 94% of respondents, earned as low as 1,000¹ to 100,000² naira as monthly income. In consequence, while the study can draw conclusions related to these low earners, numbers are insufficient to allow for comparative analysis with higher income earners.

Figure 3. Respondents' location



Data collected through the research survey were analysed by adopting a two-way analysis of variance and presentation of data. These included the default Google Forms response statistics, and Statistical Package for Social Sciences (SPSS v22) software analysis using descriptive statistics of frequency counts, percentages mean and standard deviation. All items of the questionnaire were analysed and presented using frequency counts and percentages except questions 10, 11, 20, 23, 24, 25, 26 and 27, which were subjected to qualitative analysis.

¹ 2.44 USD.

² 243.61 USD.

Findings

Accessing online learning opportunities

As indicated in Table 1, the majority of the respondents from the six geopolitical zones were in agreement (both ‘strongly agree’ and ‘agree’) with the statement that they had sufficient access to online learning (57%), as opposed to those who disagreed or strongly disagreed (30%). The results were similar for both genders, in which 58% of young men and 56% of young women were in agreement (‘agree’ or ‘strongly agree’), as opposed to 31% and 29% who disagreed or strongly disagreed. This distribution was also followed by those in the urban areas in which a larger percentage (59%) agreed or strongly agreed with the statement that they had sufficient access to online learning. However, the percentages evened out for rural youth: 49% of them attested to having sufficient access, while 49% disagreed. Moreover, the socio-economic status of the respondents revealed that young learners who earn high income all (100%) claimed to have sufficient access to online learning, followed by medium income earners (67%). Interestingly, it was also found that a lower percentage of the low-income earners (31%) felt they had insufficient access, while a higher percentage (55%) answered as having had sufficient access to online learning. The majority of the postgraduate young learners (81%), compared to fewer undergraduate young learners (53%), subscribed to having sufficient access to online learning, while much fewer, 32% and 14%, of undergraduate and postgraduate young learners respectively disagreed and strongly disagreed.

Contrary to the general agreement of having sufficient access to online learning, the overwhelming majority of participants (men and women, rural and urban dwellers, low- and high-income earners) disagreed and strongly disagreed with having sufficient institutional provisions for online learning (71%). 76% of female and 67% of male respondents indicated this, as well as 69% of the rural and 72% of the urban youth. In a similar vein, 72% and 67% of undergraduates and postgraduates respectively acknowledged that there was no sufficient institutional provision for access to online learning.

Those who enjoyed institutional online learning provisions (Table 2) have access to mostly partially funded (39), or guided (33) online learning platforms, and the lowest number have fully funded ones (10). The respondents also indicated the sources of funding (Figure 4) for access to online learning platforms to include mostly personal funding (47%), followed by private³ (13%), non-governmental organizations (9%) and government funding (4%).

³ Internal support from families and friends.

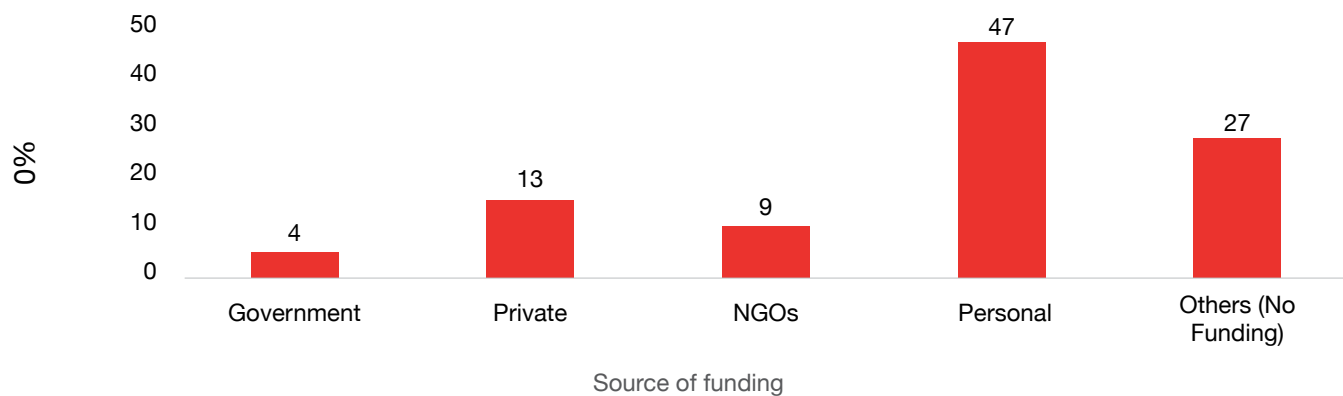
Table 1. Access to online learning

| | | | SA (%) | A (%) | NAND (%) | D (%) | SD (%) | Total (%) | SA+A (%) | D+SD (%) |
|---|-----------------------------------|-------------------|--------|-------|----------|-------|--------|-----------|----------|----------|
| Sufficient access to online learning | Gender | Men | 17 | 41 | 11 | 21 | 10 | 100 | 58 | 31 |
| | | Women | 13 | 42 | 16 | 20 | 9 | 100 | 56 | 29 |
| | | Total | 15 | 42 | 13 | 21 | 9 | 100 | 57 | 30 |
| | Location | Rural area | 10 | 34 | 10 | 24 | 21 | 100 | 45 | 45 |
| | | Urban area | 16 | 43 | 14 | 20 | 7 | 100 | 59 | 27 |
| | | Total | 15 | 42 | 13 | 21 | 9 | 100 | 57 | 30 |
| | Monthly allowance/ income (naira) | 1,000 - 100,000 | 15 | 41 | 14 | 21 | 10 | 100 | 55 | 31 |
| | | 100,000 – 200,000 | 17 | 50 | 0 | 33 | 0 | 100 | 67 | 33 |
| | | 200,000 – 300,000 | 25 | 75 | 0 | 0 | 0 | 100 | 100 | 0 |
| | | Total | 15 | 42 | 13 | 21 | 9 | 100 | 57 | 30 |
| | Level of education | Undergraduates | 14 | 40 | 14 | 23 | 9 | 100 | 53 | 32 |
| | | Postgraduates | 24 | 57 | 5 | 5 | 10 | 100 | 81 | 14 |
| Total | | 15 | 42 | 13 | 21 | 9 | 100 | 57 | 30 | |
| Sufficient institutional provisions for online learning | Gender | Men | 8 | 18 | 8 | 43 | 23 | 100 | 26 | 67 |
| | | Women | 1 | 11 | 12 | 44 | 31 | 100 | 12 | 76 |
| | | Total | 4 | 14 | 10 | 44 | 27 | 100 | 19 | 71 |
| | Location | Rural area | 10 | 14 | 7 | 41 | 28 | 100 | 24 | 69 |
| | | Urban area | 3 | 15 | 11 | 44 | 27 | 100 | 18 | 72 |
| | | Total | 4 | 14 | 10 | 44 | 27 | 100 | 19 | 71 |
| | Monthly allowance/ income (naira) | 1,000 - 100000 | 4 | 14 | 11 | 44 | 28 | 100 | 18 | 71 |
| | | 100,000 – 200,000 | 17 | 0 | 0 | 67 | 17 | 100 | 17 | 83 |
| | | 200,000 – 300,000 | 0 | 50 | 0 | 25 | 25 | 100 | 50 | 50 |
| | | Total | 4 | 14 | 10 | 44 | 27 | 100 | 19 | 71 |
| | Level of education | Undergraduates | 4 | 13 | 11 | 44 | 28 | 100 | 17 | 72 |
| | | Postgraduates | 10 | 24 | 0 | 43 | 24 | 100 | 33 | 67 |
| Total | | 4 | 14 | 10 | 44 | 27 | 100 | 19 | 71 | |

*SA-Strongly agree, A-Agree, NAND-Neither agree nor disagree, D-Disagree, SD-Strongly disagree

Table 2. Type of provisions made available by respondents' institution

| S/N | Type of provisions made available by institutions | Freq |
|-----|---|------|
| 1 | Fully funded online learning platform | 10 |
| 2 | Partially funded online learning platform | 39 |
| 3 | Guided learning platform | 33 |
| 4 | None | 108 |

Figure 4. Respondents' source of funding for access to online platforms

As shown in Table 3, the frequency/consistency of participating in online learning in the framework of formal education goes from never, for the highest percentage of respondents (34%), to monthly (28%), then weekly (20%), and daily, for the lowest proportion among them (7%). Comparatively, the majority of the female respondents, urban dwellers, and undergraduates, never participated in online learning in the framework of formal education.

Considering the average time of participating, when learners participated in online learning in the framework of formal education (Table 4), the majority attested to spending between one and two hours (41%) or even less than an hour per day (31%), while very few spent longer hours (four to five hours, 4% and three to four hours, 7%).

Nevertheless, the majority of the young people (74%) participated in online learning outside the formal curriculum (Table 5), either in non-formal (40%) or informal education (34%).

Table 3. Consistency of participating in online learning in the framework of formal education

| | | Never (%) | Daily (%) | Weekly (%) | Monthly (%) | Others: occasionally, randomly (%) | Total (%) |
|--------------------|----------------|-----------|-----------|------------|-------------|------------------------------------|-----------|
| Gender | Male | 26 | 11 | 24 | 28 | 11 | 100 |
| | Female | 43 | 3 | 16 | 28 | 10 | 100 |
| | Total | 34 | 7 | 20 | 28 | 11 | 100 |
| Location | Rural area | 19 | 19 | 19 | 38 | 6 | 100 |
| | Urban area | 38 | 5 | 20 | 26 | 11 | 100 |
| | Total | 35 | 7 | 20 | 28 | 10 | 100 |
| Level of education | Undergraduates | 38 | 8 | 19 | 26 | 9 | 100 |
| | Postgraduates | 17 | 0 | 25 | 50 | 8 | 100 |
| | Total | 35 | 7 | 20 | 29 | 9 | 100 |

Table 4. Average time of participating in online learning in the framework of formal education

| | | Less than 1 hr (%) | 1 – 2 hrs (%) | 2 – 3 hrs (%) | 3 – 4 hrs (%) | 4 – 5 hrs (%) | More than 5 hrs (%) | Total (%) |
|--------------------|----------------|--------------------|---------------|---------------|---------------|---------------|---------------------|-----------|
| Gender | Male | 28 | 32 | 22 | 10 | 4 | 4 | 100 |
| | Female | 34 | 48 | 10 | 4 | 4 | 0 | 100 |
| | Total | 31 | 40 | 16 | 7 | 4 | 2 | 100 |
| Location | Rural area | 19 | 38 | 25 | 6 | 6 | 6 | 100 |
| | Urban area | 33 | 40 | 14 | 7 | 4 | 1 | 100 |
| | Total | 31 | 40 | 16 | 7 | 4 | 2 | 100 |
| Level of education | Undergraduates | 31 | 42 | 13 | 7 | 4 | 2 | 100 |
| | Postgraduates | 27 | 27 | 36 | 9 | 0 | 0 | 100 |
| | Total | 31 | 40 | 16 | 7 | 4 | 2 | 100 |

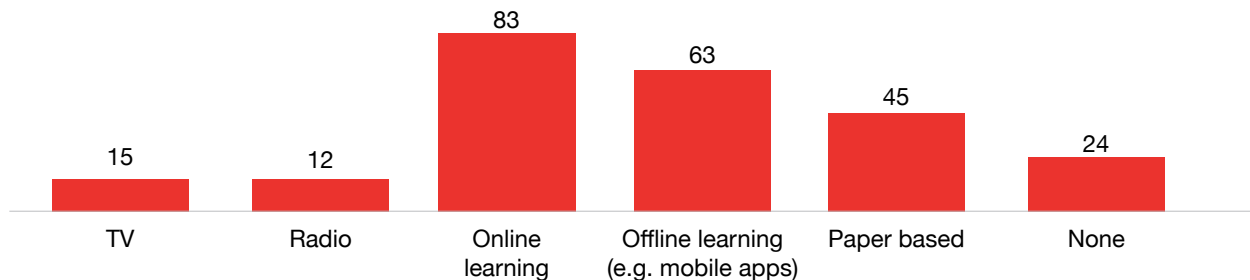
Table 5. Respondents’ participation in other online learning outside the formal curriculum

| S/N | Participating in other online learning outside formal curriculum | Freq. | Per cent |
|-----|--|------------|------------|
| 1 | No | 46 | 26 |
| 2 | Yes, in informal education (student discussions, learning outside the classroom, use of media having educational lectures, etc.) | 62 | 34 |
| 3 | Yes, in non-formal education (short online courses, non-credit educational programmes, programmes planned by community associations, etc.) | 72 | 40 |
| | Total | 180 | 100 |

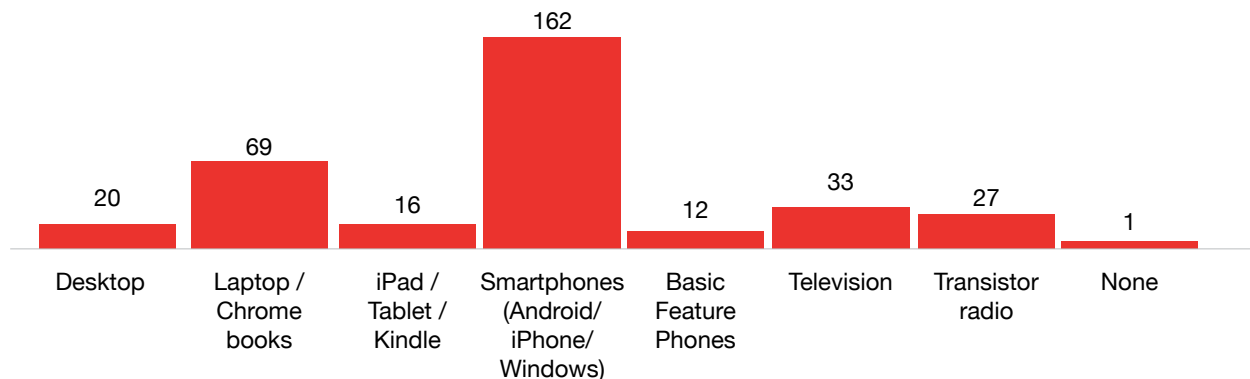
Identified means of learning to follow formal education (Figure 5) during the lockdown was mostly through online learning (83 indications), followed by offline learning (e.g. through mobile apps) (63) and paper-based (45). Others included TV (15) and radio (12). Devices used for accessing

online learning during the lockdown (Table 5) were mostly smartphones (162 indications) and laptops (69 indications), which the majority attested to be privately used and mostly connected through personal cellular internet connectivity (Figure 6).

Figure 5. Respondents’ means of learning and devices accessed during lockdown to follow their formal education curriculum



Means used for learning during lockdown to follow formal education curriculum



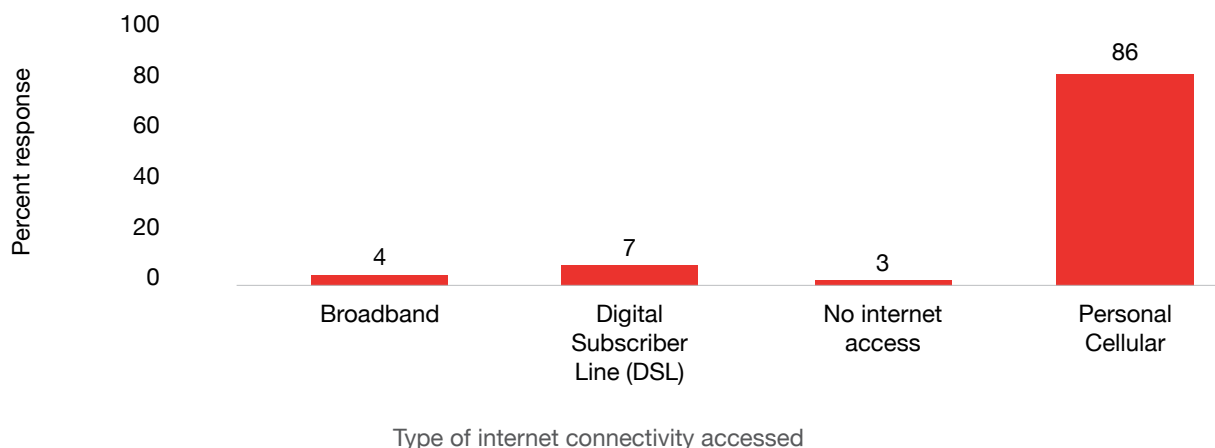
Devices accessed during lockdown to follow formal education curriculum

Table 6. Level of device usage by respondents

| S/N | Devices | CB | PU | SWF | SWP |
|-----|--------------------------------------|----|-----|-----|-----|
| 1 | Desktop | 9 | 62 | 84 | 25 |
| 2 | Laptop / Chrome books | 5 | 105 | 60 | 10 |
| 3 | iPad / Tablet / Kindle | 7 | 83 | 69 | 21 |
| 4 | Smartphones (Android/iPhone/Windows) | 5 | 153 | 18 | 4 |
| 5 | Basic feature phones | 9 | 121 | 41 | 9 |
| 6 | Television | 7 | 43 | 122 | 8 |
| 7 | Transistor radio | 11 | 50 | 108 | 11 |
| 8 | Other (Please specify) | 10 | 102 | 54 | 14 |
| 9 | None | 10 | 102 | 54 | 14 |

* CB - Community based; PU: Private use; SWF: Shared with family; SWP; Shared with the public

Figure 6. Accessible type of internet connectivity



The majority, or 34% and 27%, respectively, sometimes or occasionally had access to a quiet place for learning or studying. Only 18% always had access, whereas 6% never had access. In terms of gender distribution, the majority of male respondents, 27% and 36%, respectively, always or sometimes had access to

a quiet place for learning or studying, compared to lower percentages, 10% and 33%, of female respondents who always or sometimes had such access. In addition, more young learners in the rural areas always (21%) and sometimes (38%) had access to a quiet place for online learning than those in the urban areas (Table 6).

Participant perceptions towards online learning in Nigeria

The results of the survey also revealed that the majority of the youth generally acknowledged (agreed and strongly agreed) that lack of/unreliable electricity (95%), data unaffordability (92%), lack of/limited internet connectivity (87%), unaffordability of digital devices (81%), no access to free digital devices (74%), lack of digital knowledge (66%), no access to private tutoring (65%) as well as personal engagements (61%), had been major barriers to unhindered access to online learning during the physical lockdown in Nigeria (Table 7).

Some of the reasons for these barriers, and as indicated by the respondents, can be attributed to prevalent economic challenges in the country: inflexible and conventional teaching methods, low social status of young learners, inadequate provision of digital learning facilities by the government, non-conducive environments (especially public spaces) for learning as well as inaccessibility to online learning by rural communities.

Most of the sampled opinions (Table 8) showed that the physical lockdown experienced during the pandemic was thought to have largely disrupted the academic calendar (89% strongly agreed or agreed), led to reduced social interaction during teaching/learning (64% strongly agreed or agreed) as well as resulting in an increased rate of student dropout (62% strongly agreed or agreed) and disruption of online learning in form of distractions (62% strongly agreed or agreed).

However, while 36% of the respondents stated (agreed and strongly agreed) that online learning is cheaper than in-person forms of learning, still 31% believed online learning to be more expensive. In addition, 42% of the respondents felt that the teaching approach of online learning was better than traditional forms of teaching, whereas 25% of the participants were opposed.

Table 7. Respondents' frequency of access to a quiet place for online learning

| | | Always (%) | Sometimes (%) | Occasionally (%) | Rarely (%) | Never (%) | Total (%) |
|----------|------------|------------|---------------|------------------|------------|-----------|-----------|
| Gender | Men | 27 | 36 | 21 | 13 | 3 | 100 |
| | Women | 10 | 33 | 32 | 16 | 9 | 100 |
| | Total | 18 | 34 | 27 | 14 | 6 | 100 |
| Location | Rural area | 21 | 38 | 21 | 14 | 7 | 100 |
| | Urban area | 18 | 34 | 28 | 15 | 6 | 100 |
| | Total | 18 | 34 | 27 | 14 | 6 | 100 |

Table 8. Main barriers of online learning to follow the formal education curriculum during the physical lockdown

| S/N | Items | SA (%) | A (%) | NAND (%) | D (%) | SD (%) | Total (%) | SA+A (%) | D+SD (%) |
|-----|---|--------|-------|----------|-------|--------|-----------|----------|----------|
| 1 | Lack of/unreliable electricity | 75 | 20 | 4 | 1 | 1 | 100 | 95 | 1 |
| 2 | Lack of/limited internet connectivity | 59 | 28 | 7 | 4 | 2 | 100 | 87 | 6 |
| 3 | Health discomforts | 17 | 30 | 32 | 16 | 5 | 100 | 47 | 21 |
| 4 | Personal engagements | 21 | 40 | 28 | 9 | 2 | 100 | 61 | 12 |
| 5 | No access to private tutoring | 31 | 34 | 16 | 14 | 5 | 100 | 65 | 19 |
| 6 | Data unaffordability | 66 | 26 | 6 | 2 | 0 | 100 | 92 | 2 |
| 7 | Access to free digital devices | 48 | 27 | 13 | 8 | 4 | 100 | 74 | 12 |
| 8 | Unaffordability of digital devices | 51 | 30 | 12 | 5 | 2 | 100 | 81 | 7 |
| 9 | Lack of digital knowledge | 36 | 31 | 16 | 12 | 6 | 100 | 66 | 18 |
| 10 | Cultural barriers to usage of digital devices | 18 | 24 | 31 | 16 | 11 | 100 | 42 | 27 |

* SA-Strongly agree, A-Agree, NAND-Neither agree nor disagree, D-Disagree, SD-Strongly disagree,

Table 9. Respondents' opinion about online learning overall in Nigeria during the physical lockdown

| S/N | Items | SA (%) | A (%) | NAND (%) | D (%) | SD (%) | Total (%) | SA+A (%) | D+SD (%) |
|-----|---|--------|-------|----------|-------|--------|-----------|----------|----------|
| 1 | Physical lockdown has disrupted academic calendar | 71 | 19 | 8 | 2 | 1 | 100 | 89 | 2 |
| 2 | Physical lockdown has increased the rate of student dropout | 38 | 23 | 26 | 10 | 2 | 100 | 62 | 12 |
| 3 | Online learning has reduced social interaction during teaching/learning | 33 | 32 | 22 | 9 | 4 | 100 | 64 | 13 |
| 4 | The physical learning environment easily disrupts online learning (distractions) | 28 | 34 | 19 | 13 | 6 | 100 | 62 | 19 |
| 5 | Online learning is cheaper than in-person forms of learning | 18 | 18 | 33 | 18 | 13 | 100 | 36 | 31 |
| 6 | The teaching approach of online learning is better than traditional forms of teaching | 23 | 19 | 33 | 16 | 9 | 100 | 42 | 25 |

* SA-Strongly agree, A-Agree, NAND-Neither agree nor disagree, D-Disagree, SD-Strongly disagree

Finally, respondents perceived that learners whose parents were low-income earners (134), learners with large families/multigenerational families (61) and learners with disabilities/special needs (50) are the most educationally disadvantaged groups of

learners due to the physical lockdown in Nigeria (Table 9). There were no perceived distinctions between male and female learners in terms of (dis)advantages.

Table 10. Respondents' opinion on the most educationally disadvantaged group of learners due to the physical lockdown in Nigeria

| S/N | Items | Freq. |
|-----|---|-------|
| 1 | Learners whose parents are low-income earners | 134 |
| 2 | Learners with large families/multigenerational families | 61 |
| 3 | Learners with disabilities/special needs | 50 |
| 4 | Learners from the rural community | 25 |
| 5 | Learners in urban areas | 5 |
| 6 | Female learners | 2 |
| 7 | Male learners | 1 |
| 8 | None in particular (all will be equally affected) | 26 |

Analysis and discussion

The sudden onset of the pandemic and the abrupt closure of educational institutions presented various challenges for Nigeria's fragile educational system (Obiakor and Adeniran, 2020), arising from the sudden transition from traditional presence learning to online learning platforms. The learning opportunities among youth in Nigeria during the COVID-19 pandemic were assessed in this study as a contribution to understanding and putting into place the needed conditions to ensure the success of such transition and continued access to unhindered educational delivery.

Despite having sufficient access to online learning, as acknowledged, young learners rarely participated in online learning in the framework of formal education. Correspondingly, many of the young learners who had access personally funded this learning opportunity with very little support from the Government, as similarly reported by TEP Centre (2020). Unfortunately, this can be a contributory factor to why the majority never accessed the online learning opportunity, with very few participating on a daily basis.

The findings revealed that young postgraduate learners have more access to online learning, while undergraduates have less sufficient access. This can be due to the fact that undergraduates have less institutional provision for access to online learning than postgraduate learners (Table 1), just as the source of funding to access online learning, according to all the participants, comes from

personal funding (Figure 4). According to previous studies, (Tang et al. 2021 and Dangol and Shrestha, 2019), postgraduate students tend to be more successful in online classes than undergraduate students, as readiness for learning was one of the key factors for educational achievement. In addition, identified means of learning to follow formal education during the lockdown was mostly through online learning (Figure 5). This implies that despite insufficient or no institutional provisions, young people still prefer this approach to learning.

However, a considerable number of young learners are of the opinion that the teaching approach is better than the traditional teaching forms. Also, most young learners believe that online learning is cheaper compared to in-person learning.

This indicates a potential receptive and accepting experience for the online learning opportunity, as, similarly to what is reported by Almusharraf and Khahro (2020) and Abuhassna et al. (2020), respondents were highly satisfied with online teaching. This raises the question of practical barriers to accessing online learning during the physical lockdown, the most important being unreliable electricity, limited internet connectivity, unaffordability of data, inaccessibility to digital devices, and lack of digital knowledge. These identified challenges are consistent with the findings of EdTech Hub (2020), Dube (2020), TEP Center (2020), Olayemi et al. (2021), and Azubuike

et al. (2021). The accessibility and affordability of connectivity are as significant as the availability of electricity, although connectivity is very difficult without a reliable electricity supply. Having sufficient access to online learning is fundamentally hinged on putting the right conditions in place, especially in terms of institutional and infrastructural provisions. It critically requires addressing three-pointer solutions, including infrastructure (reliable electricity and internet), funding (expensive data and devices), and knowledge (lack of digital knowledge).

Interestingly, it was further revealed in the study that there is no gender disparity, as both male and female young learners had equal access to online learning. This is similar to the findings of Korlat (2021), who found no differences between boys and girls in attitudes towards digital learning.

However, it was interesting to learn that, even with sufficient access, more women than men never or less frequently participated in online learning in the framework of formal education. It was further revealed that young female learners have less access to quiet places. This can be ascribed to probably the conditions women face at home in terms of personal engagement compared to their male counterparts.

This is corroborated by the findings of Mishra et al. (2020), which affirmed that female students did not have a conducive learning environment at home due to assigned household chores during the lockdown period. As posited by Emmanuel (2015), girls are usually more engaged in household

activities than boys based on predefined gender roles. It was further reported that they usually spend about four to five hours more per day on house chores than the number of hours dedicated to studying.

In terms of location, the study revealed that young learners from rural areas have less access to online learning compared to those from urban areas. Moreover, learners from rural communities who even had access never or less frequently participated in online learning in the framework of formal education. This corroborates the assertion of the World Bank (2020) that most students, particularly those in rural areas, will have challenges accessing online learning. Ogunode (2020), Olalowo, and Salami (2021) also reiterate that the Nigeria situation is critical, as most children in rural communities do not have access to important learning resources, including the internet, and that unreliable power situation makes it difficult for most students from poor homes and rural dwellers in engaging in unrestricted access to online learning and technological infrastructures.

Young learners who have access to online learning opportunities in formal education do so through the use of smartphone devices in collaboration with the findings of Armstrong-Mensah (2020) and EdTech Hub (2020). They reported that most of the students used smartphones, smart feature phones, laptops, and so on. However, they opined that affordability might continue to be a significant impediment for the foreseeable future to digital access.

Conclusion and recommendations

The study assessed learning opportunities among Nigerian youth during the COVID-19 pandemic by specifically examining the perception of Nigerian youth towards the overall effect of the COVID-19 lockdown on learning opportunities and the barriers young people in Nigeria faced in accessing online learning during the lockdown.

The findings of the research study showed that both male and female young learners had equal access to online learning, while most of the female learners never or less frequently participated in online learning, coupled with less access to a quiet place. The research revealed that more young people in urban areas had sufficient access to online learning compared to fewer learners from rural areas. The majority of the learners also indicated insufficient institutional provisions for online learning, with funding sources predominantly coming from personal sources and little or no support from the government. However, despite the consistency in participating in online learning, the majority never accessed it due to various identified barriers in the form of unreliable electricity, limited internet connectivity, unaffordability of data, inaccessibility to digital devices, and lack of digital knowledge. In general, online learning is, however, an avenue worth pursuing, as a majority also acknowledged it was cheaper than in-person, and its teaching approach was better than traditional forms.

Consequently, the findings from this study have implications for policy-makers and stakeholders in the education sector as more efforts need to be harnessed in bridging existing gaps in Nigeria's

education sector. One important lesson garnered from this study is that, indeed, there are no barriers to learning except the ones imposed by the socio-economic situations of humans. In all these, one thing is clear: online learning has proven to be a viable alternative in the face of health, economic and security crises. There is an urgent need to develop the platforms to ensure that no one is left behind.

In view of the above-mentioned, the following recommendations are proffered based on the findings of this study:

1. The Nigerian Government should elaborate targeted policies and earmark funding aimed at institutionalizing accessible and inclusive online learning, with attention to equal access for female students.
2. The international development community should assist the Nigerian Government by effectively investing in building infrastructures to facilitate online learning, with emphasis on providing affordable and reliable electricity as well as wide coverage and accessible and affordable internet services.
3. The Federal Government of Nigeria and educational institutions introducing online learning should provide support programmes, with emphasis on rural youth, particularly to provide free and affordable internet services and equipment, notably laptops and smartphones.
4. UNESCO should reinforce capacity development among Nigerian youth on digital literacy.

References

- Abuhassna, H., Al-Rahmi, W. M., Yahya, N., Zakaria, M. A. Z. M., Kosnin, A. B., and Darwish, M. (2020). Development of a new model on utilizing online learning platforms to improve students' academic achievements and satisfaction. *International Journal of Educational Technology in Higher Education*, 17(1), pp.1–23. Retrieved from <https://doi.org/10.1186/s41239-020-00216-z>
- Agung, A. S., Surtikanti, M. W., and Quinones, C. A. (2019). Students' Perception of Online Learning during COVID-19 Pandemic: A Case Study on the English Students of STKIP Pamane Talino. *Journal of Social Sciences and Humanities*, 10(2), pp.225–235. Retrieved from <http://dx.doi.org/10.31940/soshum.v10i2.1316>
- Akuratiya, D. A. and Meddage, D. N. (2020). Students' perception of online learning during COVID-19 pandemic: A survey study of IT students. *International Journal of Research and Innovation in Social Science*, 4(9), pp.755–758.
- Almusharraf, N. M. and Khahro, S. H. (2020). Students' satisfaction with online learning experiences during the COVID-19 pandemic. *International Journal of Emerging Technologies in Learning*, 15(21), pp.246–267. Retrieved from <https://doi.org/10.3991/ijet.v15i21.15647>
- Armstrong-Mensah, E., Ramsey-White, K., Yankey, B., and Self-Brown, S. (2020). COVID-19 and Distance Learning: Effects on Georgia State University School of Public Health Students, *Front. Public Health*, 8, 576227. Retrieved from <https://doi.org/10.3389/fpubh.2020.576227>
- Azubuike, O.B., Adegboye, O., and Quadri, H. (2021). Who gets to learn in a pandemic? Exploring the digital divide in remote learning during the COVID-19 pandemic in Nigeria, *International Journal of Educational Research Open*, 2, 100022, Retrieved from <https://www.sciencedirect.com/science/article/pii/S2666374020300224?via%3Dihub>
- Baber, H. (2021). Social interaction and effectiveness of the online learning—A moderating role of maintaining social distance during the pandemic COVID-19. *Asian Education and Development Studies*, 1-16. Retrieved from <https://www.emerald.com/insight/content/doi/10.1108/AEDS-09-2020-0209/full/html>
- Bączek, M., Zagańczyk-Bączek, M., Szpringer, M., Jaroszyński, A., and Woźakowska-Kapłon, B. (2021). Students' perception of online learning: A survey study of Polish medical students. *Medicine*, 100(7), e24821. Retrieved from <https://doi.org/10.21203/rs.3.rs-41178/v1>
- Dangol, R. and Shrestha, M. (2019). Learning readiness and educational achievement among school students. *The International Journal of Indian Psychology*, 7, pp.467–476. Retrieved from <https://ijip.in/pdf-viewer/?id=14956>
- Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems*, 49(1), pp.5–22.

Dube, B. (2020). Rural online learning in the context of COVID-19 in South Africa: Evoking an inclusive education approach. *Multidisciplinary Journal of Educational Research*, 10(2), pp.135–157. Retrieved from <https://hipatiapress.com/hpjournals/index.php/remie/article/view/5607>

EdTech Hub (2020). The Effect of COVID-19 on Education in Africa and its Implications for the Use of Technology A Survey of the Experience and Opinions of Educators and Technology Specialists. *eLearning Africa*, Retrieved from https://www.elearning-africa.com/reports/surveys_COVID19.php

Emmanuel, L. (2015). The Influence of Household Chores on Girls' Academic Performance in Secondary Schools in Morogoro Rural District. Master's thesis. The Open University of Tanzania, Arusha, Tanzania. Retrieved from <http://repository.out.ac.tz/1408/>

Firdoussi, S. E., Lachgar, M., Kabaili, H., Rochdi, A., Goujdami, D. and Firdoussi, L. E. (2020). Assessing Distance Learning in Higher Education during the COVID-19 Pandemic. *Education Research International*. 8890633, 13. Retrieved from <https://doi.org/10.1155/2020/8890633>

Hasan, N. (2020). Online teaching-learning during COVID-19 pandemic: students' perspective. *The Online Journal of Distance Education and e-Learning*, 8(4), pp.202–213.

Korlat, S., Kollmayer, M., Holzer, J., Lüftenegger, M., Pelikan, E. R., Schober, B., and Spiel, C. (2021). Gender Differences in Digital Learning During COVID-19: Competence Beliefs, Intrinsic Value, Learning Engagement, and Perceived Teacher Support. *Frontiers in Psychology*, 12, 637776. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/33868109/>

Lasi, M. (2021). Online distance learning perception and readiness during COVID-19 outbreak: A research review. *International Journal of Academic Research in Progressive Education and Development*, 10(1), pp.63–73. Retrieved from <https://doi.org/10.6007/IJARPED/v10-i1/8593>

Masrom, M. (2007). Technology acceptance model and e-learning. In: 12th International Conference on Education. Sultan Hassanul Bolkuah Institute of Education, Universiti Brunei Darussalam, 21–24 May.

Mishra, L., Gupta, T., and Shree, A. (2020). Online teaching-learning in higher education during lockdown period of COVID-19 pandemic. *International Journal of Educational Research Open*, 1, 100012. Retrieved from www.sciencedirect.com/science/article/pii/S2666374020300121

Monyai, R. B. (2018). The Significance Attached to Education and Youth Development in Rural South Africa, *Culture and Identity*. Wilfred Isak April, IntechOpen, Retrieved from <https://www.intechopen.com/chapters/59068>

Obiakor, T. and Adeniran, A. (2020). COVID-19: Risk-Control Measures Threaten to Deepen Nigeria's Education Crisis. Centre for the Study of Economies of Africa (CSEA), Retrieved from <https://cseaafrica.org/wp-content/uploads/2020/04/COVID19-Impending-Situation-Threatens-to-Deepen-Nigeria%E2%80%99s-Education-Crisis-2.pdf>

Ogunode, N. J. (2020). Effect of COVID-19 Schools Close Down on Academic Programme of Senior Secondary Schools in Abaji Area Council of Federal Capital Territory, Abuja, Nigeria. *Electronic Research Journal of Social Sciences and Humanities*, 2(11), pp.84–94. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3576048

- Olalowo, I. E., and Salami, I.A. (2021). Combating the danger of a single story: empirical comparison of resource availability among Ibadan rural and urban pre-school centres, Nigeria. *International Journal of Social Learning (IJSL)*, 1(2), pp.205–217.
- Olayemi, O. M., Adamu, H., and Olayemi, K. J. (2021). Perception and Readiness of Students' Towards Online Learning in Nigeria During COVID-19 Pandemic. *Library Philosophy and Practice (e-journal)*. 5051. Retrieved from <https://digitalcommons.unl.edu/libphilprac/5051>
- Owusu-Fordjour, C., Koomson, C. K., and Hanson, D. (2020). The impact of COVID-19 on learning: The perspective of the Ghanaian student. *European Journal of Education Studies*, 7(13), pp.88–101.
- Rahman, K. (2020). Learning amid crisis: EFL students' perception on online learning during COVID-19 outbreak. *English, Teaching, Learning, and Research Journal*, 6(2), pp.179–194.
- Singh, V. and Thurman, A. (2019). How many ways can we define online learning? A systematic literature review of definitions of online learning (1998–2018). *American Journal of Distance Education*, 33(4), pp.289–306.
- Tang, Y. M., Chen, P. C., Law, K. M., Wu, C. H., Lau, Y. Y., Guan, J., Dan, He., and Ho, G. T. S. (2021). Comparative analysis of student's live online learning readiness during the coronavirus (COVID-19) pandemic in the higher education sector. *Computer Education*, 168, pp.1–17. Retrieved from <https://doi.org/10.1016/j.compedu.2021.104211>
- TEP Center (2020). Learning in a pandemic: Nigeria's response to teaching and learning during the COVID-19 pandemic. The Education Partnership Centre (Nigeria); Nigerian Economic Summit Group, 45. Retrieved from <https://learningportal.iiep.unesco.org/en/library/learning-in-a-pandemic-nigerias-response-to-teaching-and-learning-during-the-COVID-19>
- United Nations. (2020). Policy Brief: The Impact of COVID-19 on children. United Nations. Retrieved from <https://unsdg.un.org/resources/policy-brief-impact-COVID-19-children>
- United Nations Educational, Scientific and Cultural Organization (UNESCO). (2021). Education: From disruption to recovery. UNESCO map on school closures. UNESCO. Retrieved from <https://www.unesco.org/en/COVID-19/education-response>
- World Bank. (2020). Remote learning and COVID-19 the use of educational technologies at scale across an education system as a result of massive school closings in response to the COVID-19 pandemic to enable distance education and online learning. World Bank. Retrieved from <https://www.unapcict.org/resources/ictd-infobank/remote-learning-and-COVID-19-use-educational-technologies-scale-across-education-system-result-massive-school-closings>



SOCIAL MEDIA USE AND PSYCHOSOCIAL WELL-BEING OF YOUNG HAITIANS IN THE ERA OF COVID-19

————— Authored by —————

**Peterson Antenor, Ernst Dimitry Cadet,
Marline Bilgai Grand Jean, Nem Jean-Baptiste,
Nephtalie Pierre, Nishina Prévilon and Ludwika Telusmon**

Members of the national youth-led research team exploring the impact of the coronavirus disease (COVID-19) on young Haitians, as part of the global initiative Youth as Researchers (YAR) on COVID-19

Acknowledgements

We would like to thank the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the UNESCO Chairs at the University of Galway and the Pennsylvania State University for putting in place the Youth as Researchers (YAR) on COVID-19 initiative.

We would also like to thank the global YAR coordination team for their mentorship and all the people who contributed to the research efforts. We acknowledge their valuable contribution, which enabled the research team to collect data on young Haitians' social media use and psychosocial well-being during the COVID-19 pandemic, and issue relevant findings and recommendations.

Abstract

This paper* sought to explore the social media use by young Haitians and their psychosocial well-being during the COVID-19 pandemic.

The research team undertook a literature review on this topic and implemented a survey disseminated to young Haitians between the ages of 18 and 30. In addition, the team conducted five individual interviews.

Following the analysis of the survey and interview responses, the research team found that Haitian youth used social media more frequently during the pandemic than they did prior to COVID-19. In terms of the impact on their psychosocial well-being, the study found that, for the majority of surveyed youth, the pandemic had little impact on their social activities but that the restrictions imposed on account of the pandemic had a major impact on their mental health.

In the final parts of this paper, the research team makes a number of recommendations to remedy issues that emerged in the study.

Research Team Coordinator: Nephtaly Andoney Pierre-Louis

Key words: psychosocial well-being, mental health, social media

List of tables and figures**:

Table 1. The effects of the pandemic on participants' social activities

Figure 1. The COVID-19 pandemic and mental health

* This paper is translated here from its original version in French

**Source of tables and figures: UNESCO Youth As Researchers on COVID-19 initiative (2020-2022)

Summary

Context of the study

With Haiti already profoundly shaken by the *peyi lok* ('nationwide lockdown' in Creole)¹ episodes that began in the summer of 2018, the COVID-19 pandemic exacerbated already existing disparities and problems. Social media became the preferred platforms for young people seeking new perspectives. It is therefore useful to understand to what extent the use of these networks did or did not mitigate the psychosocial consequences of the COVID-19 pandemic on young Haitians.

About the study

This study concerns young Haitians between the ages of 18 and 30 years. A bilingual (French-Creole) questionnaire-based survey published on social media was used to collect data. Some 173 responses were obtained, and five individual interviews were conducted.

The data collected reveal that the frequency of use of social media among the young people interviewed for this study increased significantly during the pandemic. Before the pandemic, 28% of these young people spent between three and five hours per day on social media, while, during the pandemic, this increased to 47%, and a further 27% exceeded five hours per day.

The use of social media enabled young people to endure the pandemic better, whether through learning or through recreational and social activities. Some 32.95% of those interviewed said that social media had helped them a great deal, while 23.29% of them considered that their contribution to enduring the constraints imposed during the pandemic was enormous.

Recommendations

1. Young people should make better use of their time on the internet by developing and optimizing discussion and learning platforms on social media
2. Haitian universities should conduct specific scientific research aimed at better understanding the diverse impact of the COVID-19 pandemic on young Haitians
3. As the use of social media intensifies in times of crisis, government agencies should implement online information and education programmes
4. Youth-related policy actors should organize online support and counselling programmes for distressed young people, as well as recreational activities

¹The term *peyi lok* refers to periods when, following major demonstrations, most schools were closed for at least one week, and up to four months. Business opening hours were reduced and all activities were suspended.

Introduction

The *peyi lok* episodes initiated by the summer riots of 2018² accentuated social disparities and exposed the failure of Haiti's public institutions. When the first cases of coronavirus disease (COVID-19) were officially announced in March 2020, there was little dispute about the possibility of this crisis persisting. To curb the spread of the virus, the Haitian Government introduced restrictive measures, including the immediate closure of schools, universities, churches, businesses and recreational areas. The measures disrupted the daily lives of the Haitian population in general and of young Haitians in particular, whose lives were already marked by anxiety, vulnerability and insecurity.

In this context, social media became spaces where young people, in all categories, sought to redefine their daily lives. However, there did not seem to be

any real statistics about the frequency of use of digital networks by young people and their impact on young Haitians. This study seeks to address that information gap by exploring how the use of social media did or did not mitigate the psychosocial consequences of the pandemic on young people in Haiti. These elements will also contribute to understanding the psychosocial impact of the COVID-19 crisis.

The second section of the study proposes a non-exhaustive review of the literature related to the use of social media in times of crisis and the possible psychosocial consequences of the pandemic. The third section describes the methodological approach, and the fourth presents the results. The fifth section discusses the main results of the study and finally, the sixth section presents the conclusions and recommendations of the study.

² On 6 and 7 July 2018, a riot broke out in the streets of Port-au-Prince following the Haitian Government's decision to increase petrol prices. The scenes of looting and the barricades erected in the streets forced the population of Port-au-Prince and most of the large provincial cities to confine themselves to their homes, hence the term *peyi lok*. These events were similar to the lockdown periods of the COVID-19 pandemic.

Literature review

Several works published by the World Health Organization (WHO), United Nations, agencies and other structures have inspired this research focus on the use of social media and their role in mitigating or aggravating the psychological and social consequences of the pandemic, particularly among young people. WHO (1948) proposes a definition of health that is not limited to the absence of disease or infirmity but constitutes a state of complete physical, mental and social well-being. In March 2020, WHO classified the COVID-19 outbreak as a pandemic, while acknowledging that the crisis was generating stress throughout the population (WHO, 2020).

For the United Nations, mental health problems are often accompanied by feelings of isolation and loneliness, which may have been reinforced by the quarantine measures imposed during the COVID-19 pandemic (United Nations,2020). In Haiti, a report published in 2020 by the organization *Volontariat pour le Développement d’Haïti* (VDH) showed how young schoolchildren are exposed to chronic stress or depression owing to the level of vulnerability and insecurity of their situation (VDH,2020). In recent years, several research studies (Sanders et al.2000; Lee-Won et al.2015; Hanna et al.2017) show that excessive use of social media is associated with depression or social anxiety.

Thus, recognizing the relevance of such a problem, WHO recommended, for example, minimizing watching, reading or listening to news about COVID-19 that causes anxiety or distress (WHO,2020). Moreover, according to WHO, one of

the risks posed by the use of social media is that a sudden and constant stream of news reports can cause anxiety or distress (WHO,2020). Proper usage, however, allows people to find the real facts. Knowledge of the facts can help reduce fear and serve to spread positive stories and positive images of people affected by the virus.

In recent years, it has been observed that social media are widely used in contexts of social and political crisis that affect societies. For some researchers (Fenniche, 2014; Théodat, 2020), social media have been at the very heart of some of the social demands that have emerged since the Arab Spring in Tunisia. The Yellow Vests in France, #PetroCaribeChallenge in Haiti and Black Lives Matter in the United States of America, are movements that hatched on social media.

The Digital 2020:July Global Statshot report reveals that more than half of the world now uses social media, and that many digital habits acquired during the pandemic persist despite the relaxing of restrictions (Kemp,2020). The number of users of social media reportedly increased by more than 10%, raising the global number of users to 3.96 billion in early July 2020. This growth seems to have accelerated owing to the lockdowns imposed during the COVID-19 crisis. This study aims to determine whether the increase in the use of social media during the pandemic was beneficial to young Haitians, contributing to their psychosocial well-being and offering alternatives in terms of entertainment, training, communication and work.

Methodology

This study employs a mixed methods approach to data collection. A questionnaire-based survey with some 20 questions was developed and disseminated online on the main social media platforms (Facebook, Twitter, WhatsApp, LinkedIn) for a period of one month. It aimed to obtain participants' views on whether social media helped to mitigate the constraints imposed by the COVID-19 pandemic. The questionnaire was open to young Haitians, between the ages of 18 and 30 years, living in and outside of Haiti's national territory.

Data source

Some 173 responses were collected, of which 50.9% were in French and 49.1% in Creole. The questionnaire was created using Google Forms. It also included a summary of the purpose, as well as detailed information about the research, and a consent form. The consent form provided details about the purpose and context of the research, information about the degree of voluntary participation of young respondents, and the way in which the confidentiality of their data would be managed. It was extremely important that all participants had a clear enough understanding of the study to be able to participate voluntarily and give their consent.

Through the survey form, participants were also asked to give consent for their potential participation in an interview, based on the results of the questionnaire. Online interviews were conducted with five of them. Semi-structured interviews were conducted on the Zoom online platform, using Jean-Claude Kaufmann's comprehensive interview approach.¹⁰ A subcommittee of three members of the research team was responsible for conducting the interviews. For the verbatim transcription of the interviews, we called upon four young people who had expressed their willingness to contribute to the Youth as Researchers (YAR) initiative.

Data analysis methods

For quantitative data analysis, Excel software was used to gain statistical insight into the use of social media by young people. Emphasis was placed on data concerning usage before and during the pandemic. The idea was to see whether the pandemic context influenced the frequency of use of social media by young people. For the semi-structured interview data, the research team used qualitative data analysis methods. After transcribing the data, participants' responses were categorized into broad themes and the frequency with which they were repeated was noted. The most popular social media were identified, followed by the ones that were considered by the participants as the most helpful to young people. Then, a set of feelings related to well-being and 'ill-being' was proposed using a scale of responses ranging from never to rarely, sometimes, frequently and always.

¹⁰ The comprehensive interview is conducted along the same lines as the sociological interview developed by Max Weber. In this type of interview, the researcher has a dual approach of involvement with and distancing from the research subject.

Ethical principles on data safeguarding

To protect the data provided by the participants, the research team decided to destroy the video recordings six months after the end of the research. Participants' opinions and responses were used anonymously in the presentation and analysis of the results.

Limitations of the study

The research team was eager to reach a greater number of young Haitians, but the reluctance of young people to participate in online studies was a serious obstacle. The same applied to the online interviews, where the research team wished

to interview 10 young people, one from each department in Haiti. Although the team managed to identify 10 young people, not all of them responded to the invitation. Difficulties in access to electricity and a good internet connection also prevented the research team from reaching the number they had hoped for. Only 5 of these 10 young people could be interviewed. In addition, there were limitations on the dissemination of the questionnaire via the social media platforms. The research team primarily used social media to share links to the questionnaire, thus limiting the access of young people without the means to connect to these platforms, especially young people from disadvantaged backgrounds.

Results

General data

Among the 173 participants who answered our questionnaire, men were in the majority, accounting for 62.5%, whereas women accounted for 36.4%. In addition, 1.1% of the participants did not wish to specify their gender. The majority (64.8%) of the participants live in Ouest department. Some of the participants who responded to our survey live outside Haiti, namely, in Canada (one person), France (three people) and the United States of America (two people).

44.7% of the participants were students, 17.3% students, 20.7% professionals, 1.7% students, 3.4% unemployed persons, 6.3% business owners, and the remaining 5.9% fell into unidentified categories. It is also worth noting that the participants' preferred social media were Facebook and WhatsApp, followed by Instagram and TikTok. YouTube and Twitter were also used. The participants' least preferred social media was LinkedIn.

Frequency of young people's social media use before and during the pandemic

Before the pandemic, out of 173 respondents, 17% spent between one and two hours on social media and 33% between two and three hours. In addition, 29% spent between three and five hours, while 6% spent less than one hour. 15% spent more than five hours on social media. However, during the pandemic, 8% of these 173 participants spent between one and two hours, 16.7% between

two and three hours, 47.7% between three and five hours, and 27.6% spent more than five hours on social media.

A comparison of the time spent on social media before and during the pandemic reveals the following:

- All (100%) of the participants who used to spend less than an hour on social media saw their frequency of use increase.
- Of the 17% of participants who used to spend one to two hours on social media, 86% came to spend more time on social media during the pandemic, while 14% spent the same amount of time as they had spent before the pandemic (between one and two hours).
- Of those who spent between two and three hours on social media before the pandemic, 80.7% spent more time on social media during the pandemic, 17.5% spent the same amount of time on social media as before, and 1.8% spent less time.
- Of those who spent between three and five hours on social media before the pandemic, 44% spent more time on them during the pandemic, 40% continued to spend between three and five hours, and 16% spent less time.
- Of those who fell in the 'Other' category, 69.2% continued to spend the same amount of time on social media, while 30.8% spent less time. The 'Other' category contains the participants who spent more or less time than those in the previous categories (between one and two hours, two to three hours, three to five hours, more than five hours).

Effect of the pandemic on the participants' social activities

Of the people surveyed, 42% felt that the constraints imposed by the pandemic had had little impact on their social activities. Approximately 11.4% felt that these had had no impact, while 30.7% of the respondents admitted that the measures imposed had had a significant impact. Of the people surveyed, 15.9% described as 'enormous' the impact of the measures imposed as a result of the pandemic.

The participants described different effects on social activities. These effects were felt in their personal lives, social lives and professional and economic lives. Table 1 shows the main findings regarding the effects of the pandemic on the participants' social activities. This presentation is neither hierarchical nor based on order of importance.

Table 1. The effects of the pandemic on participants' social activities

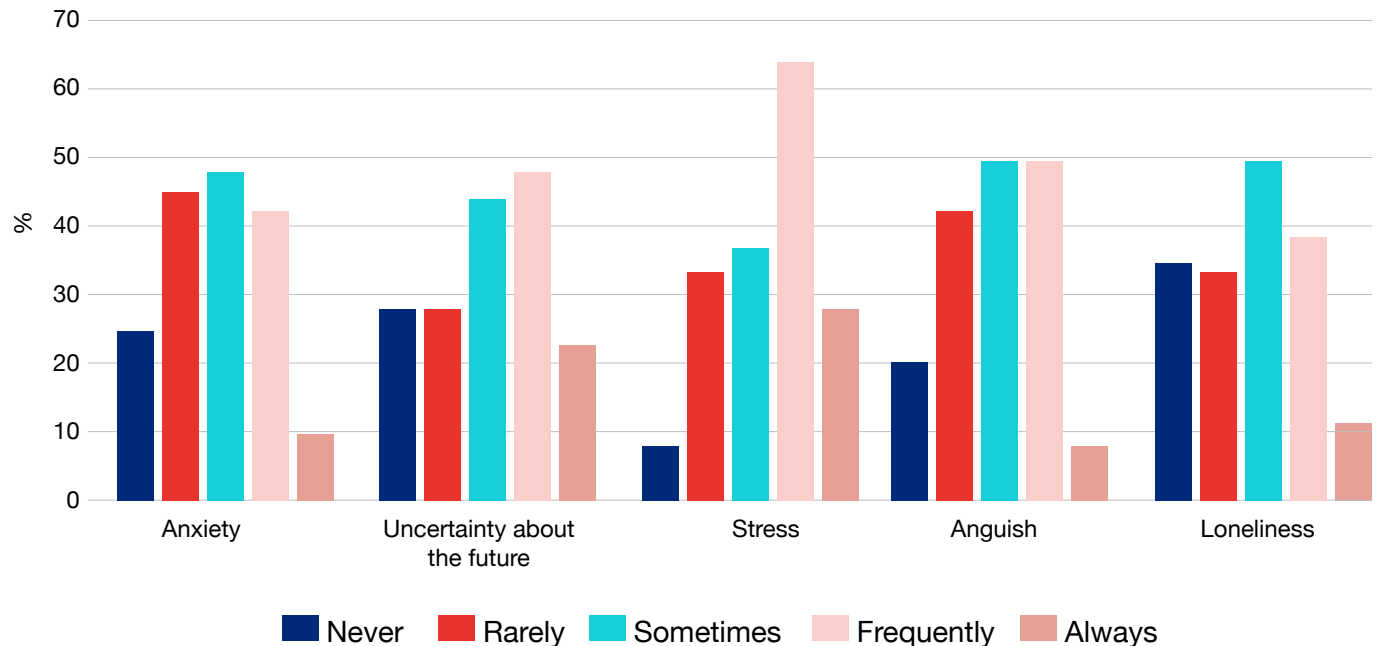
| Participants' perceptions | | | |
|---|--|---|--|
| Personal life | | | |
| Limitation of physical contact such as hugging and kissing | Inability to meet with friends and family members | Deterioration of conjugal relationships | Feeling of isolation and loneliness |
| Social life | | | |
| Restrictions on face-to-face meetings, travel, tourism and religious activities | Obligation to stay at home (limited internet access made this difficult) | Reduced involvement in some organizations | Obligation to continue/conduct most of their activities online |
| School/university/professional life | | | |
| Closure of libraries and therefore a slowdown in research projects | Slow-down in research projects | Stopping of courses at university | |
| Economic life | | | |
| Loss of jobs or other professional activities | Suspension of revenue-generating activities and scarcity of customers | | |

Effect of the pandemic on participants' mental health

Of the participants in the survey, 19.37% confirmed that the restrictions imposed on account of the pandemic had had a major impact on their mental health. However, 59.21% said that the impact had been less significant.

The loss of professional activities, the obligation to stay at home, and the closure of schools and universities had affected the participants' mental health, causing feelings of anxiety, uncertainty about the future, stress, anguish, loneliness, loss of control, and an obsessive fear of COVID-19.

Figure 1. The COVID-19 pandemic and mental health



The participants also revealed that the pandemic had affected aspects of their lives such as their economic and financial circumstances; their romantic and sexual relationships; stigmatization when afflicted with a cold or the flu; stressful moments associated with the personal health problems of loved ones infected with the virus and loved ones who died during this time; and weight gain or loss.

One of the interview participants said, 'Mentally, I was fear-stricken and stressed. I was afraid and I was discouraged because I would not be able to go ahead with my plans. When I heard about the damage caused by COVID-19 in other countries, I was very upset, especially with regard to the health situation in the country.'⁸ (Creole originally translated into French, by members of the YAR Haiti team.)

⁸ Comments were made in Creole, later translated into French by members of YAR, then translated from French to English for the present report.

Benefits derived from social media with regard to the constraints imposed

According to 36.8% of the participants, social media had helped them a great deal with enduring the constraints imposed by the pandemic. According to 32.8% of the participants, social media had not helped them very much with coping with the restrictions imposed by the pandemic. Social media helped 23.5% of the participants a great deal, while they did not help 6.9% of the participants at all.

According to one of the participants, ‘... it had a positive impact because I had a way of communicating with my loved ones to catch up with them. It also helped me to take online courses’. Another participant said, ‘... I found quite a few funny videos that helped me get through the stress, and I took time to share credible information in order to help people take better preventive measures.’ (Creole originally translated into French by members of the YAR Haiti team.)

The participants’ responses showed that social media had helped them with regard to a variety of areas: health, education and entertainment. First, the participants had been able to raise awareness and help people protect themselves. They had also been able to have fun, manage their stress and escape through jokes, movies available online,

and staying in touch with their friends and family members. In addition, they had been able to share with others their passions and that feeling of escape through social media, which had kept suicidal thoughts at bay.

Participants also affirmed that they had been able to obtain information, learn new things, complete their year of study and take online courses, and even follow new career paths. In addition, some participants revealed that having access to digital libraries or the opportunity to create an online business, increase their client-base, hold meetings remotely and broaden their networks, had helped them.

However, the effect of social media use on the participants’ mental health was not exclusively positive:

‘I can, in one sense, say no, because people keep putting out false information, which increases my worries and fears, and that creates a kind of panic in terms of my mental balance’, said one participant.

Analysis and discussion

This study set out to learn about the effects which the use of social media during the COVID-19 pandemic had on the psychosocial well-being of youth in Haiti.

The main results show a majority of respondents affirming that the pandemic has overall mildly impacted their social activities and mental health. At the same time, however, respondents also recognize and explain the multiple ways in which the pandemic has affected these areas, in many aspects of their daily lives. Young people experienced isolation as they were prevented from participating in their regular in-person activities. They also experienced frustration as a result of the impairment of their studies and their professional plans, of the deterioration of family life, the loss of employment and the bankruptcy of small businesses. These results are consistent with the warning issued by WHO, according to which COVID-19 could cause individuals stress (WHO, 2020).

While describing the discomfort caused by the pandemic, participants also indicated that they had been experiencing such discomfort prior to COVID-19 because of circumstances which were already difficult and uncertain. In this regard, COVID-19 seems to have contributed to the

stress and frustration already experienced by young Haitians. 'The climate was already one of despair caused by the precariousness of the socio-economic situation, which is increasing day by day – and with this pandemic raging, it was complicated', admitted one participant.

In terms of the use of social media, the initial assumption of the study was confirmed by the responses received: with increased use of social media, young Haitians were able to find alternatives to the constraints imposed. At the same time, the study findings also reveal that social media increased stress among young Haitians, because of the disinformation circulated regarding the virus, how the virus is spread and how to protect oneself from catching it. Social media also increased stress among young people because of the news circulated regarding the devastation caused by COVID-19. All these concur with WHO's suggestion to reduce the time spent on social media, because of potential harmful effects (WHO, 2020).

Conclusion and recommendations

This study sought to explore the relationship between the use of social media and the psychosocial well-being of Haitian young people during the COVID-19 pandemic. In concrete terms, the aim was to show how social media served to mitigate or aggravate the psychosocial consequences of the COVID-19 pandemic.

A mixed methods approach was employed for data collection. It involved the development of a questionnaire-based online survey which consisted of about 20 open and closed questions and was circulated through the most popular social media platforms in Haiti (namely Facebook, Twitter, WhatsApp and LinkedIn), for a period of one month. Several virtual interviews were conducted to complement the data received from the survey and to record the participants' views on the positive or negative impact of social media on their psychosocial well-being during the pandemic. The participants were either from Haiti's 10 geographical departments or living in foreign countries, and they were aged between 18 and 30 years.

Upon completion of the research, a rather interesting overall observation emerged: despite the social crisis caused and the multiple ways in which it affected their daily lives, the COVID-19 pandemic impacted overall mildly the mental health and social activities of young participants.

This is attributed primarily to the fact that young Haitians' used social media to mitigate the psychosocial consequences of the pandemic. We thus consider it appropriate to make the following recommendations:

Research:

To better explain why the mental health of young Haitians was mildly affected by the pandemic despite the increased social vulnerabilities, Haitian universities should consider conducting an in-depth study, since the sample used here was limited.

Public policy:

As the use of social media intensifies in times of crisis, some state agencies should implement innovative information and education programmes which fully harness the power of social media.

Practices:

There are opportunities for young people to adjust their internet use by developing and optimizing discussion and learning platforms on social media.

Haitian civil society organizations which help young people should organize both online psychosocial support and counselling programmes for young people in distress and recreational activities for them.

References

Fenniche, R. (2014). Les réseaux sociaux à l'épreuve du mouvement populaire tunisien : quel rôle dans la reconfiguration du champ social ? *Sciences de la société*, No. 91, pp.150–161.

Retrieved from <https://journals.openedition.org/sds/1385>

Hanna, E., Ward, L. M., Seabrook, R. C., Jerald, M., Reed, L., Giaccardi, S. and Lippman, J. R. (2017). Contributions of social comparison and self-objectification in mediating associations between Facebook use and emergent adults' psychological well-being. *Cyberpsychology, Behavior, and Social Networking*.

Kaufmann, J.-C. (2011). *L'entretien compréhensif*. Paris, Armand Colin.

Kemp, S. (2020). Digital 2020: July Global Statshot. Datareportal.com with We Are Social and HootSuite. Retrieved from: <https://datareportal.com/reports/digital-2020-july-global-statshot>

Lee-Won, R. J., Herzog, L. and Park, S. G. (2015). Hooked on Facebook: The role of social anxiety and need for social assurance in problematic use of Facebook. *Cyberpsychology, Behavior, and Social Networking*.

Sanders, C. E, Field, T. M, Diego, M. and Kaplan, M. (2000). The relationship of Internet use to depression and social isolation among adolescents. *Adolescence*, Vol. 35, No. 138, pp.237–242.

Théodat, J.-M. (2020). Haïti : la fin du citoyen et l'avènement de l'individu 2.0. *EchoGéo*, Sur le Vif. Retrieved from <http://journals.openedition.org/echogeo/18352>

United Nations. (2020). COVID-19 and Mental Health and Wellbeing. Retrieved from <https://www.un.org/en/coronavirus/mental-health-and-wellbeing>

Volontariat pour le Développement d'Haïti (VDH). (2020). *Projet TAPER 8113 : Projet Hotline, Rapport d'évaluation de la phase pilote*.

World Health Organization. (1948). Constitution of the World Health Organization. Retrieved from <https://www.who.int/about/governance/constitution>

World Health Organization. (2020). Mental Health and Psychosocial Considerations during the COVID-19 Outbreak. Retrieved from <https://www.who.int/docs/default-source/coronaviruse/mental-health-considerations.pdf>



Content
Mandau City, C
GPH Warehouse & Importer
ESSENTIAL FOODS CORP.
Imported & Distributed by:
E-mail: consumer@mygpr.co.id
Produced by:
PT TORABIKA EKA SEMESTA
PO Box 6136, Jakarta 11061, Indonesia

KOPRIKO
Blanca
HANGER



YOUTH LEADERS' RESPONSE TO COVID-19 — THE CASE OF THE SANGGUNIANG KABATAAN IN THE PHILIPPINES

————— Authored by —————

**Nicanor D. Germono Jr., Pauline Jane G. Mandrilla, Danilo
V. Rogayan Jr., and Gillian Mary B. Sagadal**

Members of the youth-led research team exploring the impact of COVID-19 on youth-led action in the Philippines, in the context of the UNESCO Youth as Researchers (YAR) on COVID-19 initiative (2020–2022)

Acknowledgements

This study is the result of the collective wisdom of its collaborators, whose support and participation made it possible. In light of this, the Youth as Researchers (YAR) Philippines Team would like to express heartfelt gratitude to the 23 Sangguniang Kabataan (SK) Federation Presidents from the Philippines' three major island regions who have generously shared their time and narratives for this research.

We would also like to thank the United Nations Development Programme (UNDP) for their invaluable assistance from the project's commencement to its completion.

Special thanks to Johanna Ella May Erroba, UNDP Youth Engagement Analyst, who deserves recognition for her leadership and unwavering dedication to the YAR Ph team. We also extend our appreciation to the UN Online Volunteers who assisted the team with data transcription and collation.

We also want to thank the Philippine National Youth Commission (NYC) for their help in disseminating the project's research instruments.

Finally, to Jinky Rose Alba and Catherine Faith Hoggang, who have contributed from the project's inception to the conceptualization of its framework, your efforts are greatly appreciated.

Abstract

This paper aims to document the responses of the Sangguniang Kabataan (SK) to the COVID-19 pandemic. Particularly, the study aims to document the Programmes, Projects, and Activities (PPAs) conceptualized and implemented by the SKs to address the challenges and problems brought by the pandemic.

The study also seeks to identify the challenges encountered by the youth leaders in the implementation of their PPAs as well as their respective recommendations to improve their ongoing and future pandemic response. Through online surveys, interviews, and examination of documentary evidence, the research found that the SKs responded to the pandemic by implementing PPAs anchored on public health, food security, and education. During the implementation of their PPAs, the SKs mostly encountered challenges relative to the lack or insufficiency of financial resources and support from Local Government Units (LGUs), non-participation of constituents, and limited physical mobility due to quarantine restrictions and protocols. In conclusion, the SKs, as the duly elected representatives of youth in the Philippine Government, have actively engaged in the pandemic response activities of their respective localities. The research further magnifies the crucial role of youth and youth leaders in the conceptualization and eventual implementation of pandemic responses and local disaster risk reduction and management in general.

Keywords: : youth-led action, volunteerism, COVID-19

List of tables and figures*:

Table 1. Geographical distribution of SK municipalities of research collaborators

Figure 1. Structure of the Sangguniang Kabataan in the Government

Figure 2. Geographical distribution of SK municipalities of research collaborators

Figure 3. How the SK Federations responded to the COVID-19 pandemic

Figure 4. Number of PPAs the SK Presidents submitted

Figure 5. Focus of the PPAs featured by the collaborators

Figure 6. Regional distribution of the PPAs featured by the collaborators

Figure 7. Geographical distribution, by major island, of the PPAs featured by the collaborators

Figure 8. Regional distribution of the focus of the PPAs featured by the collaborators

Figure 9. Geographical distribution of the focus of the PPAs featured by the collaborators

Figure 10. Target population of the PPAs featured by the collaborators

Figure 11. Frequency of the quarantine restrictions in the SK Federation's respective municipalities when their featured PPAs were implemented

Figure 12. Timeline of the implementation of the PPAs featured by the collaborators according to the focus of their PPAs

Figure 13. Timeline of the implementation of the PPAs featured by the collaborators according to their PPAs, grouped by quarantine restrictions in their respective municipalities

Figure 14. Frequency of the SK Federations that collaborated with private organizations upon the implementation of their featured PPAs

Figure 15. Distribution of SK Federations that collaborated with private organizations according to the quarantine restrictions upon the implementation of their featured PPAs

Figure 16. Frequency of the SK Federations that reached the target number of participants for their featured PPAs

Figure 17. Distribution of the SK Federations on whether they reached their target number of participants in relation to their collaboration with private organizations, grouped by the quarantine restrictions upon the implementation of their featured PPAs

Figure 18. Frequency of SK Federations that reached their PPA's objectives

Figure 19. Distribution of the challenges the SK Federations encountered throughout the implementation of their PPAs

Figure 20. Distribution of the challenges the SK Federations encountered throughout the implementation of their PPAs per island group

Figure 21. Distribution of the recommendations of the SK Federations relative to their COVID-19 response

Figure 22. Distribution of the recommendations of the SK Federations relative to their COVID-19 response per island group, gathered via interviews

Figure 23. Focus of the next projects the SK Presidents are about to launch based on the interviews made with nine SK Presidents

Figure 24. How the PPAs are monitored based on the interviews made with nine SK Presidents

*Source of table and all figures: UNESCO Youth As Researchers on COVID-19 initiative (2020-2022)

Background of the study

The unprecedented crisis brought about by the COVID-19 pandemic has placed youth in a more vulnerable position. Since the onset of the pandemic, Filipino youth have been negatively affected in terms of employment opportunities, education, and mental health (Halabisaz and Ramos 2020). Despite these adversities, youth across the Philippines continued to be active through volunteer organizations and government-mandated youth councils. According to a policy review by Alhambra (2021), the Sangguniang Kabataan (colloquially abbreviated as SK), an institutionalized federation of elected youth leaders in the Philippines, has been notably participating in the response to COVID-19.

The purpose of this study is to investigate the measures taken by the SK to address the effects of the pandemic in their respective municipalities and the difficulties encountered in their implementation. The output would help benchmark effective practices in pandemic response as a basis for policy development and resilience programmes. It can also establish the significance of youth involvement, specifically the SK, in nation-building.

This research employs a mixed-methods approach that includes a thorough assessment of literature and news, key informant interviews, and empirical analyses of the survey findings and relevant documentation of the federation's Programmes, Projects and Activities (PPAs). Following this segment, the second section discusses the background and history of the SK. The data collection and research strategy are covered in the third section. The fourth section presents the key informants' narratives and examines the points obtained from the interviews and surveys. The concluding section summarizes the study's findings, the PPAs implemented by the sampled SK associations or SK Federations, and how their response adapted to their communities' changing demands as a result of the pandemic. Following that are the references and supplementary materials necessary for the completion of this research.

Literature review

With the ongoing pandemic, youth have been involved in helping combat COVID-19 and turned such a crisis into an ‘opportunity for collective action’ through giving and volunteer work (ILO, 2020). The survey of the International Labour Organization (ILO) showed that among the means by which the youth were involved were by fighting misinformation about COVID-19 as well as by initiating and joining online campaigns. There are also those who would serve in organizations such as in Red Cross as well as by being digital volunteers who would work in translating information material in all languages around the country (Capoluongo, 2020; Boutebal and Azzeddine, 2020).

Various youth-led organizations have also collaborated with national governments with different initiatives such as those that provide advice for other youth on coping with working and studying from home as well as creating online courses using digital tools to encourage the youth in learning new skills during confinement (OECD, 2020).

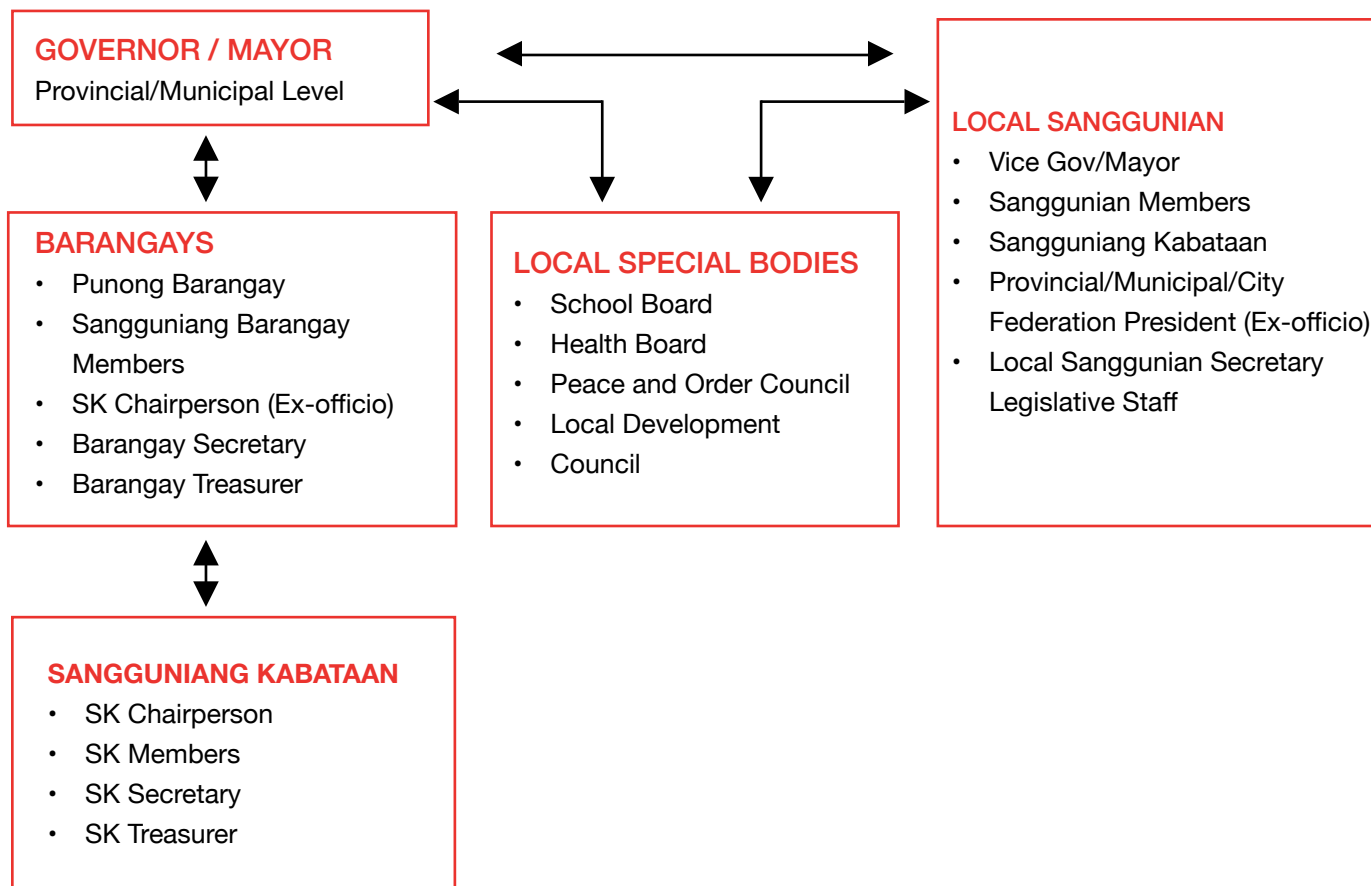
These civic activities of the youth can be classified, according to Checkoway and Aldana (2013) into four forms of youth civic engagement for diverse democracy: grass-roots organizing, citizen participation, inter-group dialogue, and sociopolitical development (Checkoway and Aldana, 2013). According to their classification,

youth councils are categorized under citizen participation wherein participation is through established political and governmental institutions (ibid.).

The rationale behind the participation of the youth in governance was stated by Zeldin, Camino, and Calver (2003) as ensuring social justice and youth representation, promoting youth development, and building civil society (Zeldin, 2004). It was further explained that social justice is ensured as youth have a ‘fundamental right to be represented in decisions that affect them’; that, as youth develop it, is important to ‘stress the importance of participation in promoting civic competence, identity, and social responsibility among youth’; and that representation of all perspectives including that of youth will lead to better work in organizations.

In the Philippines, there have been various mechanisms in pursuit of the State’s role in ensuring youth participation in nation-building. One of these was the establishment of the Kabataang Barangay during the 1970s, created by Presidential Decree 684. Kabataang Barangay was eventually abolished and was replaced by the SK, by virtue of Republic Act No. 7160, or the Local Government Code of 1991.

Figure 1. Structure of the Sangguniang Kabataan in the Government



However, numerous issues surfaced surrounding the SK, as many saw this platform as a ‘breeding ground’ for corruption, traditional politics, and political dynasties (Tubeza,2013). Further, a study by published by the United Nations Children’s Fund (UNICEF) (Balanon et al.,2007) concludes that the SK’s performance has not been maximised, with projects and activities limited to few areas of work such as sports leagues, environmental protection, and infrastructure development. However, the study also highlights the importance of the SK as a venue for promoting youth engagement in the community, as well as its potential in creating a new generation of leaders.

After a brief period of suspending the elections of the SK, in 2016, the Republic Act No. 10742 or the ‘SK Reform Act of 2015’ was passed. The SK Reform Act of 2015 introduced significant reforms in the operations of the SK, which includes financial independence over their PPAs, and the requirement to undergo Mandatory and Continuing Training throughout their incumbency. Further, the same law also highlights the priority PPAs that the SK shall implement, which are anchored on the nine centres of youth participation in the Philippine Youth Development Plan (PYDP).

Other notable laws also highlight the role of the SKs in nation-building. Republic Act No. 10121, or the Philippine Disaster Risk Reduction and Management Act of 2010 includes the role of the SK in promoting and mainstreaming disaster risk reduction (DRR) among the youth. The SK Federation in Makati adopted a resolution requiring each SK to allot 5% of its annual budget to the SK's DRR programme. The majority of the youth council's DRR activities are a series of training on how to provide emergency first aid and how to become volunteers in their barangay. A few SKs also conduct seminars for the youth on disaster preparedness, evacuation, and vulnerability analysis, as well as distribute emergency first aid kits. Youth in the Philippines account for one fifth (20%) of the population and represent significant potentials to contribute to DRR efforts simply by virtue of their sheer numbers, though we must be cautious of unrealistic expectations given the historical level of participation. This review

of Philippine national policies on youth council participation in DRR reveals disparities between ideal scenarios and actual youth participation in DRR in practice (Fernandez and Shaw, 2013).

With the foregoing discussion, seeing as the SK is a unique and important mechanism in enabling genuine youth development and participation, and with the current global health crisis, this study investigated the programmes launched by select SKs in response to COVID-19, as well as their challenges in the implementation of such programmes, in pursuit of providing evidence-based research for national policy and programme development on pandemic response and youth participation. In addition, this study will also add to the growing literature on youth participation and pandemic responses, since as of the date of this research, no study has investigated the response of youth leaders against COVID-19 in the Philippines.

Methodology

Research design

The study employed descriptive survey research using both quantitative and qualitative approaches. It described the activities conducted by the SK during the COVID-19 pandemic and described the successes and challenges in implementing these projects and programmes.

Respondents

A total of 34 SK Presidents sampled from the different administrative regions in the Philippines served as collaborators of the study. Two collaborators were purposely selected from each of the 17 administrative regions in the country. The Federation President is elected from among the members of the SK Federation, composed of SK Chairpersons of the barangays (smallest political unit in the Philippines) in each LGU. The President of the SK Federation is the head of the Local Youth Development Council (LYDC), and also serves as an ex officio member of their local Sanggunian.

The selection criteria are as follows: (1) must be an SK President in a city or municipality; (2) has conducted at least two PPAs during the COVID-19 pandemic; (3) speaks English and Filipino; and (4) is willing to participate in the study.

Research instrument

The study utilized two instruments, the online survey questionnaire via Google Form and the interview protocol for the virtual one-on-one interview via Zoom. The survey tool was designed based on the SK framework of participation and review of the literature. The interview guide was crafted based on the main purpose of the study. The tools were content validated.

Data collection

Prior to data collection, ethical clearance was secured from the United Nations Educational, Scientific and Cultural Organization (UNESCO). An endorsement from the Philippine NYC and UNDP in the Philippines was also secured for wider dissemination of the call for collaborators. The researchers also conducted an initial mapping of the collaborators that have implemented PPAs on COVID-19 response. From the initial mapping, the researchers selected participants with a maximum of two conducted PPAs on COVID-19 response.

The researchers then sent official communication letters, together with the participant information sheet and consent forms to the selected collaborators. An online survey link was sent to the collaborators via email. The collaborators were given two weeks to respond to the online questionnaire. After which, the researchers identified the collaborators for the online interview. A separate letter was sent to the collaborators regarding the schedule of the interview.

The virtual interviews were scheduled based on the availability of the collaborators. The virtual interviews ran from 30 minutes to an hour. The researchers asked permission to record the interviews and downloaded the online form data for the survey and transcribed the virtual interviews for analysis.

Data analysis

The study employed descriptive statistics such as frequency counts and per cent using Microsoft Excel. The qualitative data culled from the interview were thematically analysed. The data were presented using charts, graphs, and narratives.

Ethical considerations

A consent form, embedded in the online survey tool, that includes an explanation of the project as well as the involvement and information required was sent to potential collaborators. The participants then indicated whether they were willing to accomplish an online questionnaire, an online interview, and send a copy of the documentary evidence of their projects if available. They were also asked if they were willing to have photos of their projects be used in the research paper.

The online questionnaire ensured the anonymity of the collaborators and the data provided were aggregated to ensure that there would be no identifier of a particular collaborator. The recordings at the end of the study would be kept safe by the researchers for a year in the event of a need to refer to them if a question or verification arises regarding the research paper. After this time, the recordings would be permanently deleted from the computer or storage device.

Each of the researchers was assigned to interview the collaborators and as such, all the researchers would be responsible for the destruction of the recordings of their particular interviews. The data from the online questionnaire as well as the documents were sent to and stored by a certain member who would be responsible for the deletion.

The respondents were informed that they could withdraw if they chose to, and the researchers reassured them that existing data will not be used if they so wished. The safety and well-being of the collaborators were ensured throughout the data collection process.

Findings

Research collaborators

The SK Federation Presidents are the target collaborators for the research. Details regarding the PPAs that their respective SK Federations implemented in response to the COVID-19 pandemic were obtained from them through surveys and interviews. Prospect research collaborators were scouted remotely through Convenience Sampling and Referral Sampling.

The Philippine archipelago is divided into three main island groups and 17 administrative regions: (1) Luzon, with eight regions, (2) the Visayas, with three regions, and (3) Mindanao, with six regions. The researchers collaborated with at least one SK President from all regions in the Visayas and Mindanao and at least one SK President in 50% of the regions in Luzon, the Philippines' largest island group. There are a total of 23 collaborators for this research, 9 of whom were interviewed for further analysis on how they responded to the pandemic.

Table 1. Geographical distribution of SK Municipalities of research collaborators

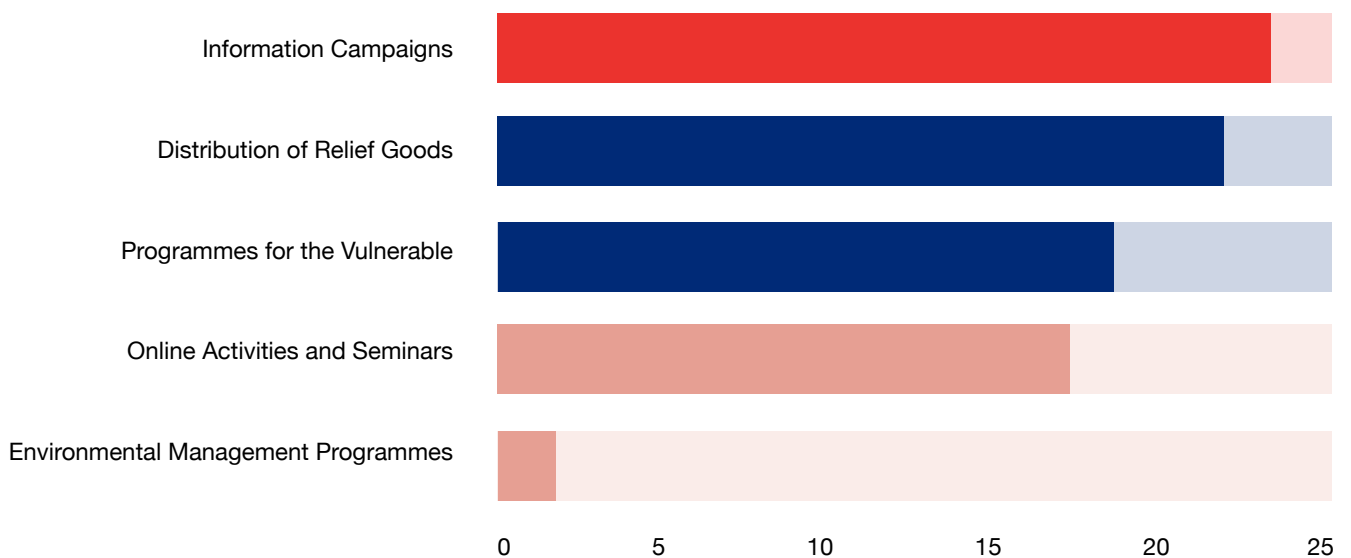
| Island group | Region | Number of collaborators |
|--------------------|---|-------------------------|
| Luzon | Region 1 | 1 |
| | Region 4-A (CALABARZON) | 2 |
| | Region 4-B (MIMAROPA) | 2 |
| | Region 5 | 2 |
| Subtotal | | 7 |
| Visayas | Region 6 | 2 |
| | Region 7 | 2 |
| | Region 8 | 2 |
| Subtotal | | 6 |
| Mindanao | Region 9 | 1 |
| | Region 10 | 3 |
| | Region 11 | 1 |
| | Region 12 | 3 |
| | Region 13 | 1 |
| | BARMM (Bangsamoro Autonomous Region in Muslim Mindanao) | 1 |
| Subtotal | | 10 |
| Grand total | | 23 |

Figure 2. Geographical distribution of SK Municipalities of research collaborators



Initiatives or programmes, projects, and activities (PPAs) implemented by SK Federations in response to COVID-19

Figure 3. How the SK Federations responded to the COVID-19 pandemic



Most SK Federations responded through information campaigns, which supported Alhambra’s claim that youth leaders used technology to continue their advocacies and engagements during the pandemic – followed by Distribution of Relief Goods and Programmes for the Vulnerable, which both catered to the residents and frontliners of their municipalities.

Information Campaigns include spreading awareness on COVID-19, vaccine campaigns, announcements on quarantine restrictions and the number of cases in their respective municipalities. Distribution of Relief Goods includes the distribution of food and hygiene kits. Programmes for the vulnerable include special projects for the marginalized, unemployed, frontliners, and the transportation sector. Online Activities and Seminars include workshops, dialogues, and online

concerts and contests; most projects are TikTok challenges and online concerts to encourage youth participation while staying at home. Mental health seminars and pieces of training for career and educational advancement are also included in this category. Environmental Management Programmes include projects that focus on sustainability and the environment.

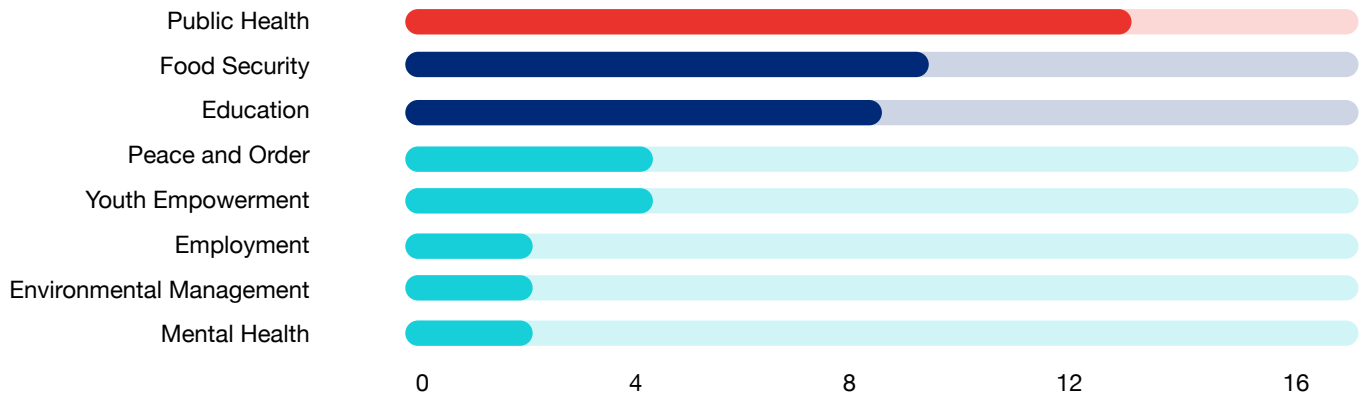
Projects, programmes, and activities featured by the SK Presidents

The researchers limited the number of PPAs that the SK Presidents could feature in the survey to two. Out of the 23 collaborators, 21 elaborated on two projects. The data presented following this statement are from the 44 projects that the SK Presidents featured.

Figure 4. Number of PPAs the SK Presidents submitted



Figure 5. Focus of the PPAs featured by the collaborators



Most of the PPAs featured by the SK Presidents focused on Public Health, followed by Food Security, then Education.

Public Health includes projects that focus on protecting and improving their respective constituents' health during the pandemic, including distributing face masks, face shields, hygiene kits, and launching information campaigns to keep the public informed. Food Security includes projects like distributing relief goods and workshops for food security such as home gardening seminars. Education includes establishing free wi-fi zones, free printing of modules, distribution of modules, tutorials, and training of teachers and parents.

Peace and Order include free transportation for frontliners who are affected by the quarantine restrictions, helping the authorities maintain order during the quarantine restrictions by providing volunteers who are assigned to run errands for the residents, and online activities that aim to keep youth engaged while encouraging them to stay at home. Youth empowerment includes projects that aim to network youth and train youth leaders.

Employment includes training and workshops for career advancement. Lastly, Mental Health refers to the online seminars launched by the SK Federations for mental wellness.

Geographical analysis of projects, programmes, and activities featured by the SK Presidents

Figure 6. Regional distribution of the PPAs featured by the collaborators

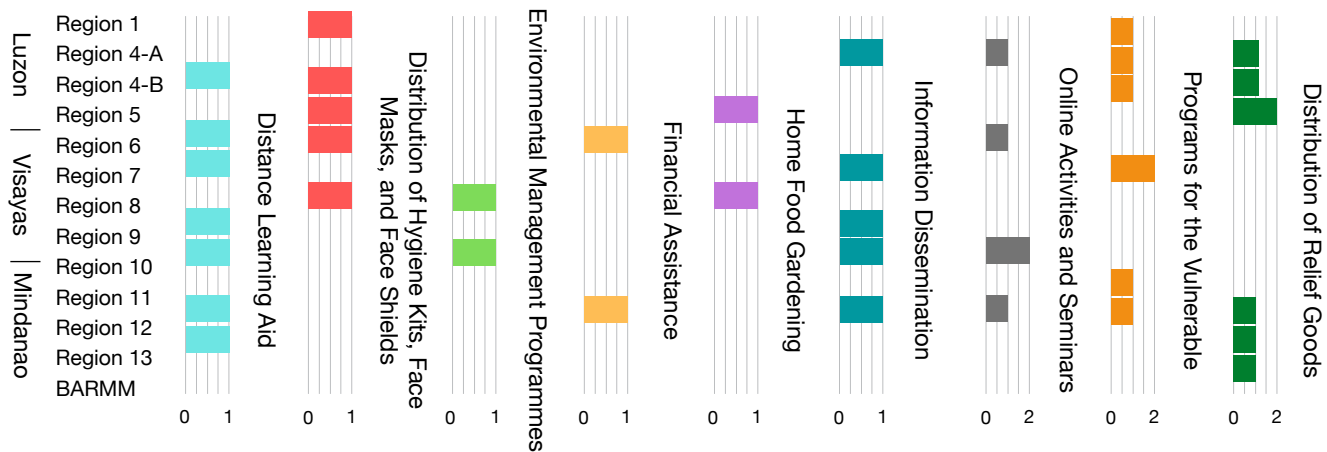
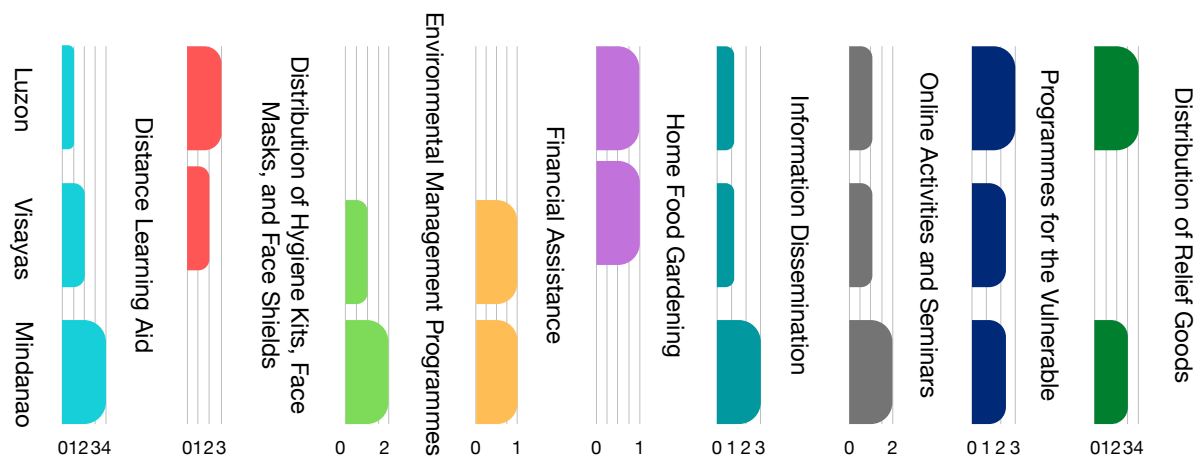


Figure 7. Geographical distribution, by major island, of the PPAs featured by the collaborators



The Distribution of Hygiene Kit, Face Masks, and Face Shields was separated into another category from the unified category for hygiene kits and food distribution. The large volume of projects explicitly associated with it accumulated five out of the 12 projects under the original Distribution of Relief Goods category, concentrated in Luzon and the Visayas.

Most of the projects from Mindanao also focused on Distance Learning Aid which primarily features the distribution of printed modules and tutoring programmes, followed by Relief Distribution and Information Dissemination, which features projects meant to educate residents about the health protocols and the COVID-19 Vaccine.

Distribution of Relief Goods and Hygiene Kits and Programmes for the Vulnerable are most of the projects featured by the collaborators from Luzon. All of the programmes for the vulnerable in Luzon are implemented to cater to frontliners – these include free transportation, hygiene kits, and vitamins supply and assistance during the vaccination programmes where they provided youth volunteers. In addition to this, Programmes for the Vulnerable are present in all island groups. The projects include distributing business permits to support the small businesses in their municipality and online shopping service to help their residents buy groceries without going out during the quarantine restrictions.

The geographical distribution shows the priorities of the SK Federations per region. Information obtained from interviews and secondary data from documentations and news revealed that SK Federations launched projects based on the needs of their community.

Figure 8. Regional distribution of the focus of the PPAs featured by the collaborators

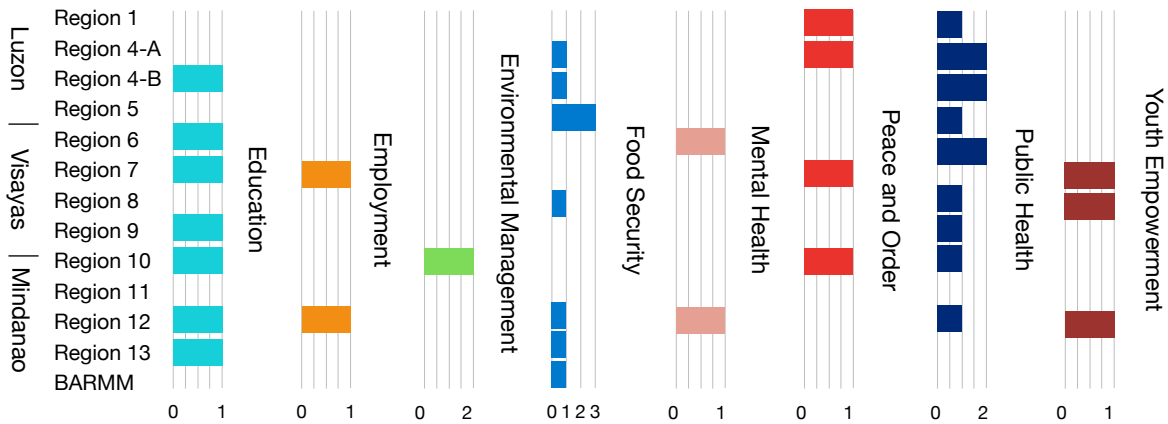
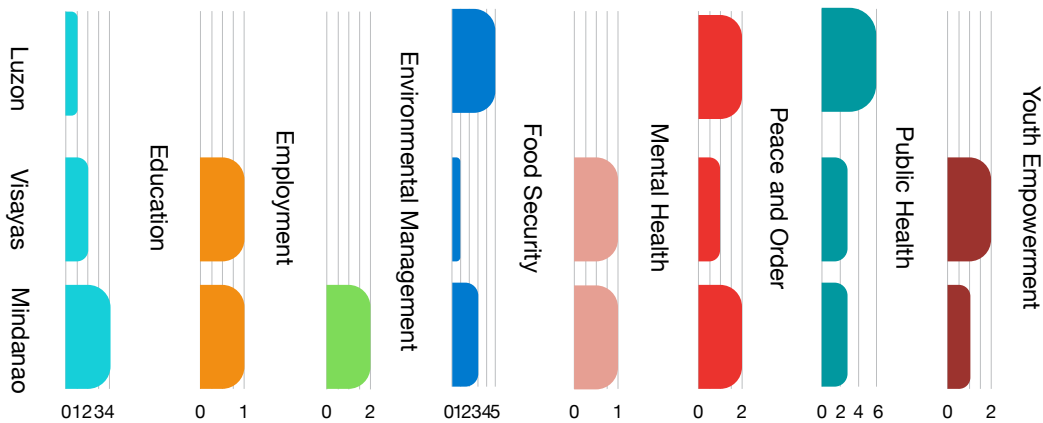


Figure 9. Geographical distribution of the focus of the PPAs featured by the collaborators

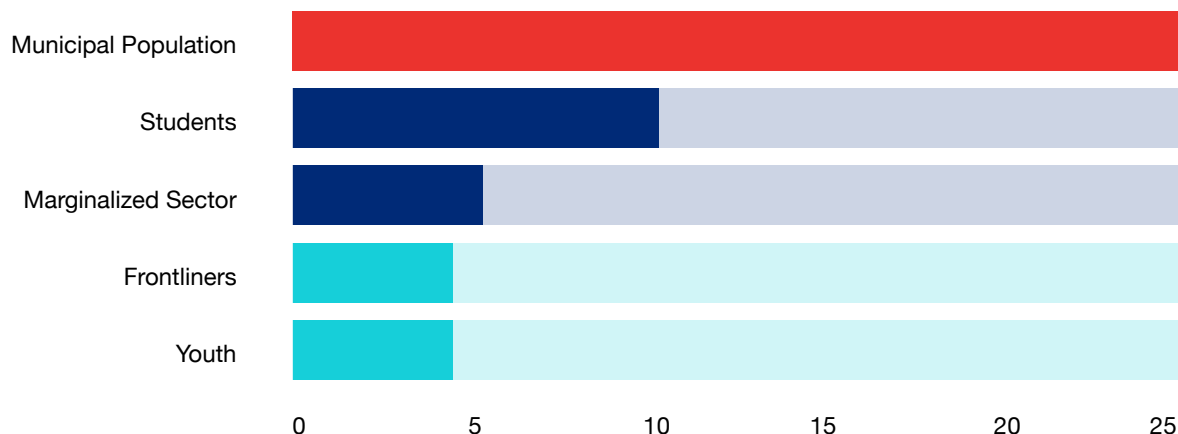


Public Health projects that are primarily done by distributing hygiene kits, face masks, face shields, and by disseminating information, dominated all island groups. In Luzon, it is also evident that

they prioritized Food Security, mainly through the Distribution of Relief Goods. Meanwhile, Education emerged as a priority in Mindanao.

Target population of the projects, programmes, and activities featured by the SK Presidents

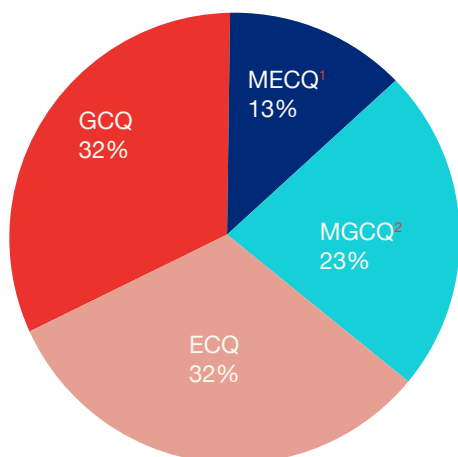
Figure 10. Target population of the PPAs featured by the collaborators



Most of the projects featured by the SK Presidents are for the residents of their municipalities; this mainly consists of distributing relief goods, masks, and face shields. It is followed by projects for students, which primarily includes module distribution, free printing services, free Wi-Fi zones, and programmes intended to promote literacy. Projects for the marginalized sectors include

employment and career advancement workshops, financial assistance, and fundraising activities. Following this, projects are specifically for frontliners which include personal protective equipment (PPE), hygiene kits, and free transportation. Lastly, projects are for the youth which mainly include online contests and leadership workshops.

Figure 11. Frequency of the quarantine restrictions in the SK Federation’s respective municipalities when their featured PPAs were implemented



The majority of the projects were implemented during the Enhanced Community Quarantine (ECQ) and the General Community Quarantine (GCQ) in their respective municipalities; the former having stricter quarantine regulations.

¹Modified Enhanced Community Quarantine (MECQ)

²Modified General Community Quarantine (MECQ)

Timeline of the implementation of the PPAs featured by the SK Presidents

Figure 12. Timeline of the implementation of the PPAs featured by the collaborators according to the focus of their PPAs

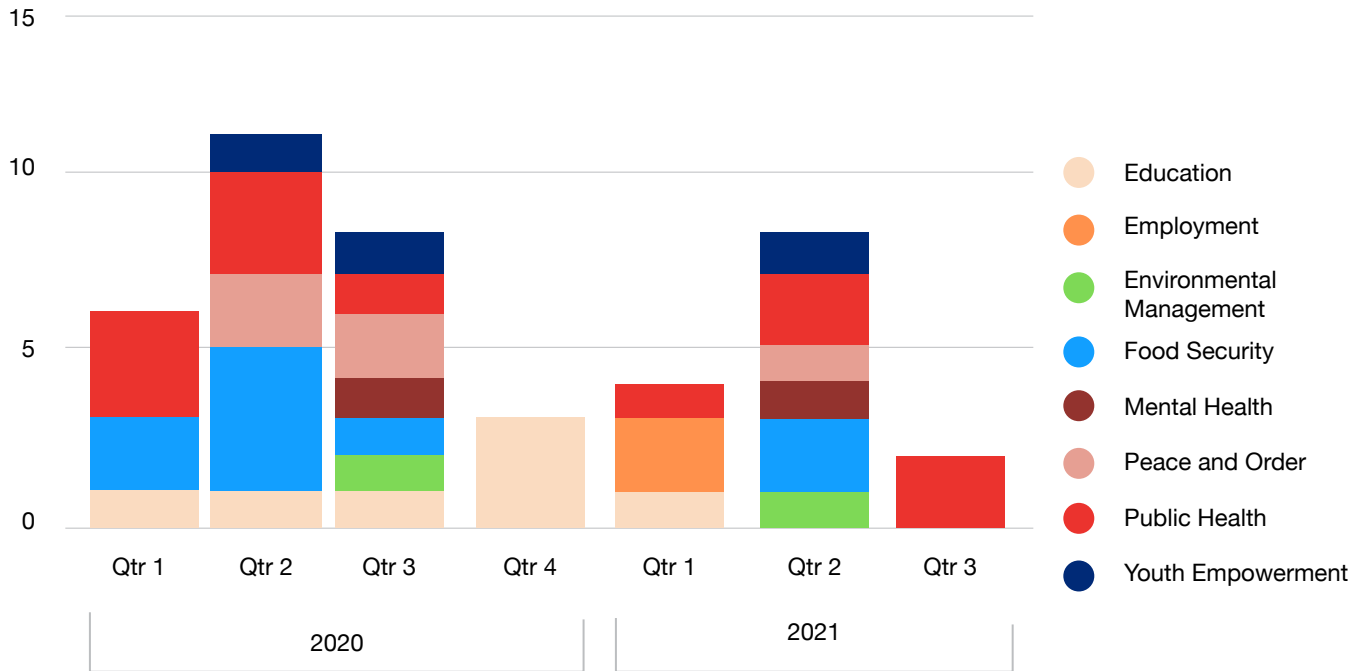
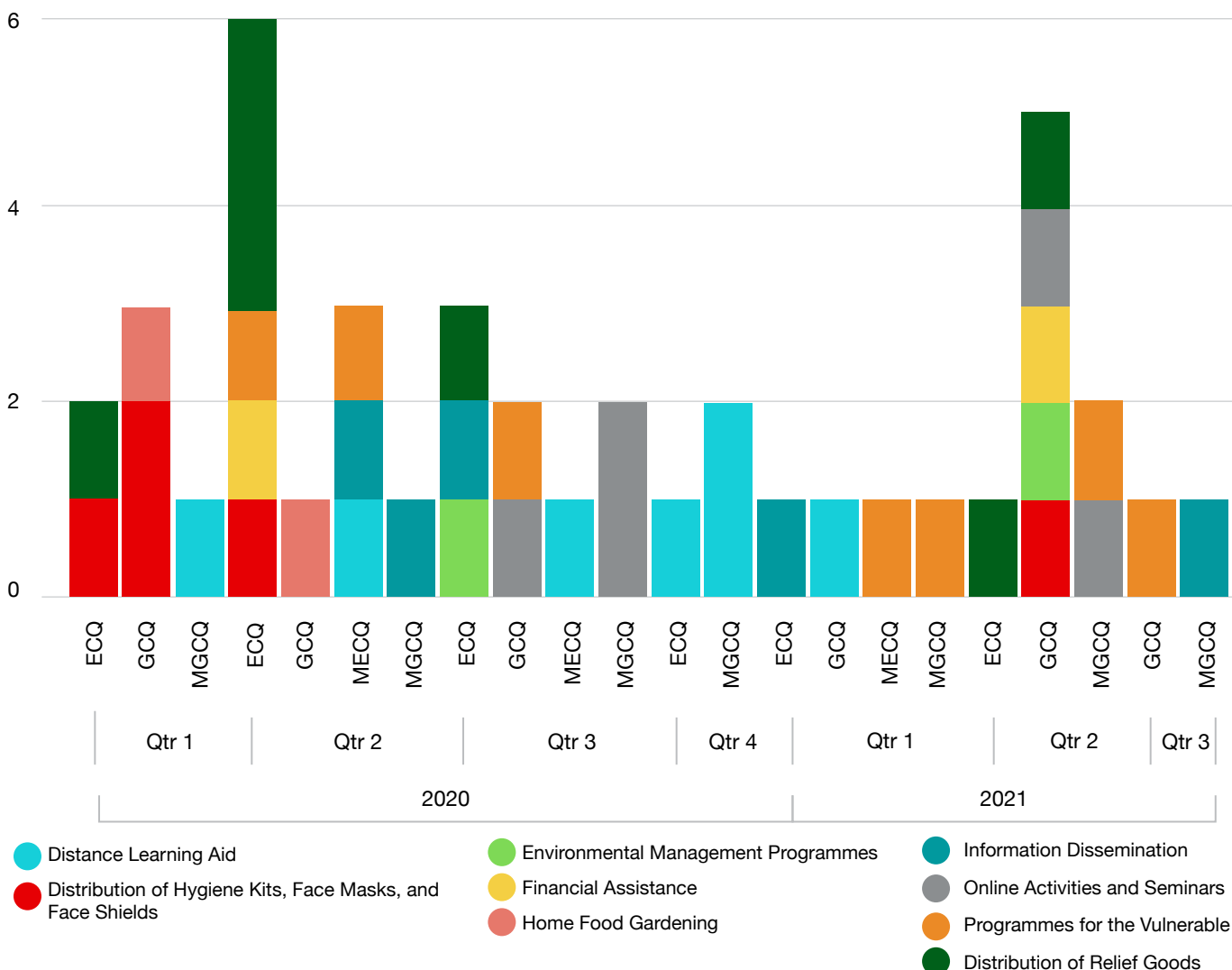


Figure 13. Timeline of the implementation of the PPAs featured by the collaborators according to their PPAs, grouped by quarantine restrictions in their respective municipalities



At the onset of the pandemic in March 2020, the majority of the projects were for public health, such as distribution of face masks and face shields – followed by projects for food security, which featured projects like relief goods distribution and backyard food gardening.

Youth empowerment such as online activities and seminars started in the second quarter of 2020. In the same quarter, the priority on food security increased.

Mental health became a focus in the third quarter of the same year. In an interview with an SK Federation in Visayas, their City Health Office recorded an increase in suicidal youth cases during the community lockdown, which has been

implemented in the country since March 2020. In the same quarter, the Kapatagan SK Federation launched a project that featured the promotion of eco-bricks. They encouraged their municipality to participate by exchanging a kilogram of eco-bricks for a kilogram of rice.

Employment became a focus at the start of 2021. Tagbilaran SK Federation started a programme helping establish small businesses by distributing business permits. General Santos City SK Federation also started the TUPAD Programme, providing emergency employment to about 200 displaced youth workers. Throughout the timeline, projects for education and public health were the most consistent.

Collaboration of SK Federations with private organizations for the implementation of their featured projects, programmes, and activities

Figure 14. Frequency of the SK Federations that collaborated with private organizations upon the implementation of their featured PPAs

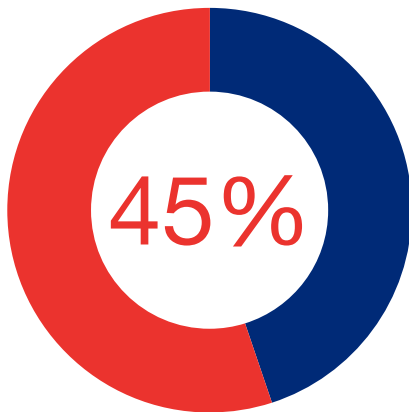
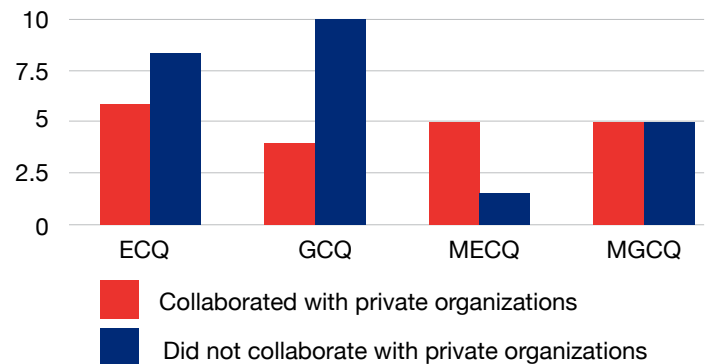


Figure 15. Distribution of SK Federations that collaborated with private organizations according to the quarantine restrictions upon the implementation of their featured PPAs



Target number of participants and objectives of the SK Presidents' featured projects, programmes, and activities

Figure 16. Frequency of the SK Federations that reached the target number of participants for their featured PPAs

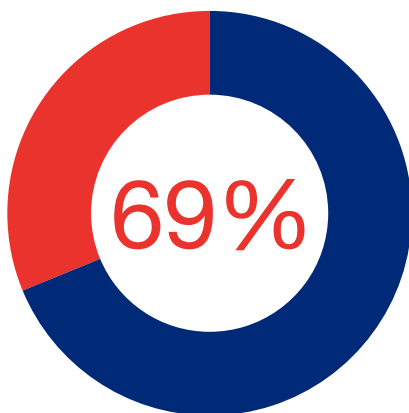
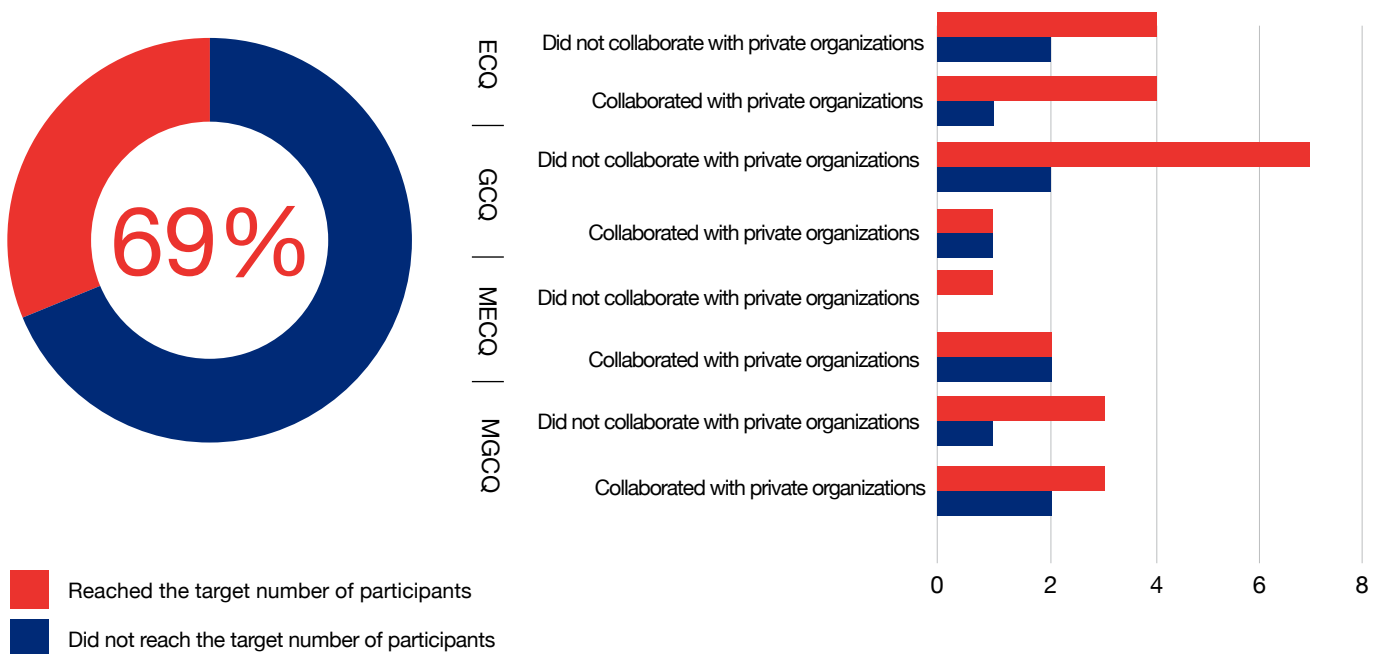


Figure 17. Distribution of the SK Federations on whether they reached their target number of participants in relation to their collaboration with private organizations, grouped by the quarantine restrictions upon the implementation of their featured PPAs



Majority of the PPAs featured by the SK Presidents reached their target number of participants. As shown in Figure 17, the highest number of PPAs that reached their target number of participants were the ones launched during GCQ and did not collaborate with any private organizations.

In totality, most of the projects that were able to reach their target number of participants are those launched without collaboration with private organizations. All of the SK Federations were able to reach their featured PPA's objectives.

Figure 18. Frequency of SK Federations that reached their PPA's objectives



Challenges encountered by the SKs throughout the implementation of their PPAs

Figure 19. Distribution of the challenges the SK Federations encountered throughout the implementation of their PPAs

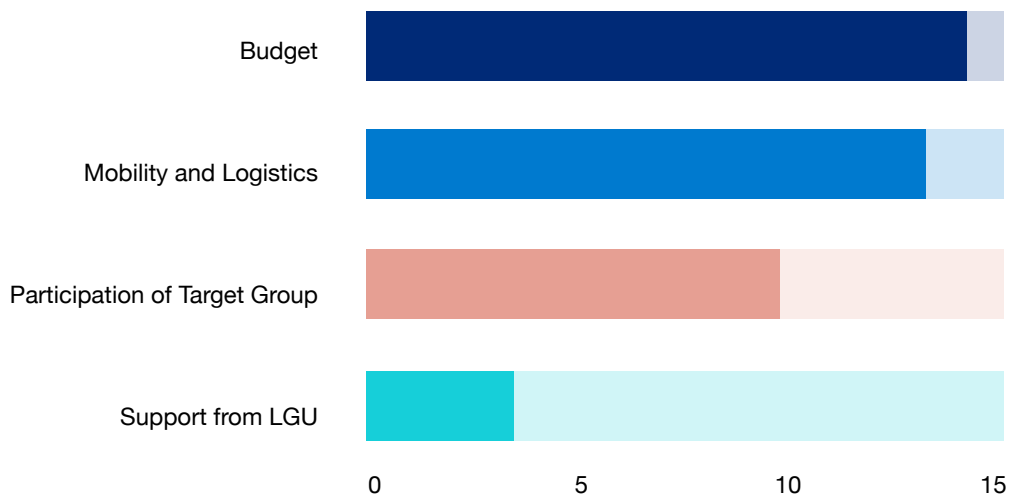
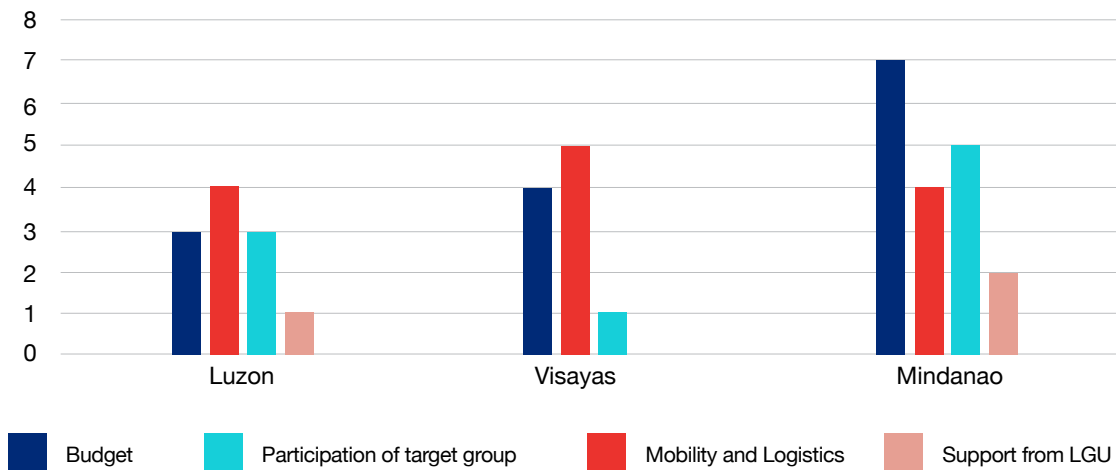


Figure 20. Distribution of the challenges the SK Federations encountered throughout the implementation of their PPAs per island group



Most of the SK Presidents cited budget as the most pressing challenge they faced upon implementing their PPAs. Although it is evident throughout the main islands, only Mindanao has it as its leading issue. Mobility and Logistics are the most pressing issue of SKs in Luzon and the Visayas, which is the second foremost challenge overall.

In SK Federations like Jordan, Ormoc, Occidental Mindoro, and Midsayap, the volunteers initially funded their projects from their own pockets due to their organization's lack of funds. Their initiatives immediately rippled through their communities which encouraged residents, private organizations, and prominent individuals to support their projects through donations and endowment. In an interview with SK Occidental Mindoro, aside from using their own money to start the project, they initially stayed in their municipality's state university for more than a month without leaving the institution due to the quarantine restrictions. Food and donations such as materials for their fabric face masks were delivered to them. Initially, they planned to create 2,000 masks for their community, but due to the growing demand for face masks in their community and the continuous support of the organizations and private individuals they collaborated with, they were able

to distribute about 10,000 fabric face masks and 160 PPE suits. SK Ormoc's do-it-yourself (DIY) face shield initiative became self-sufficient due to the funds it received from donations and from the private companies its federation collaborated with. They were able to distribute about 200 face shields to their municipality's tricycle drivers and supply face shields to the four biggest hospitals in Ormoc and the neighbouring cities outside their municipality.

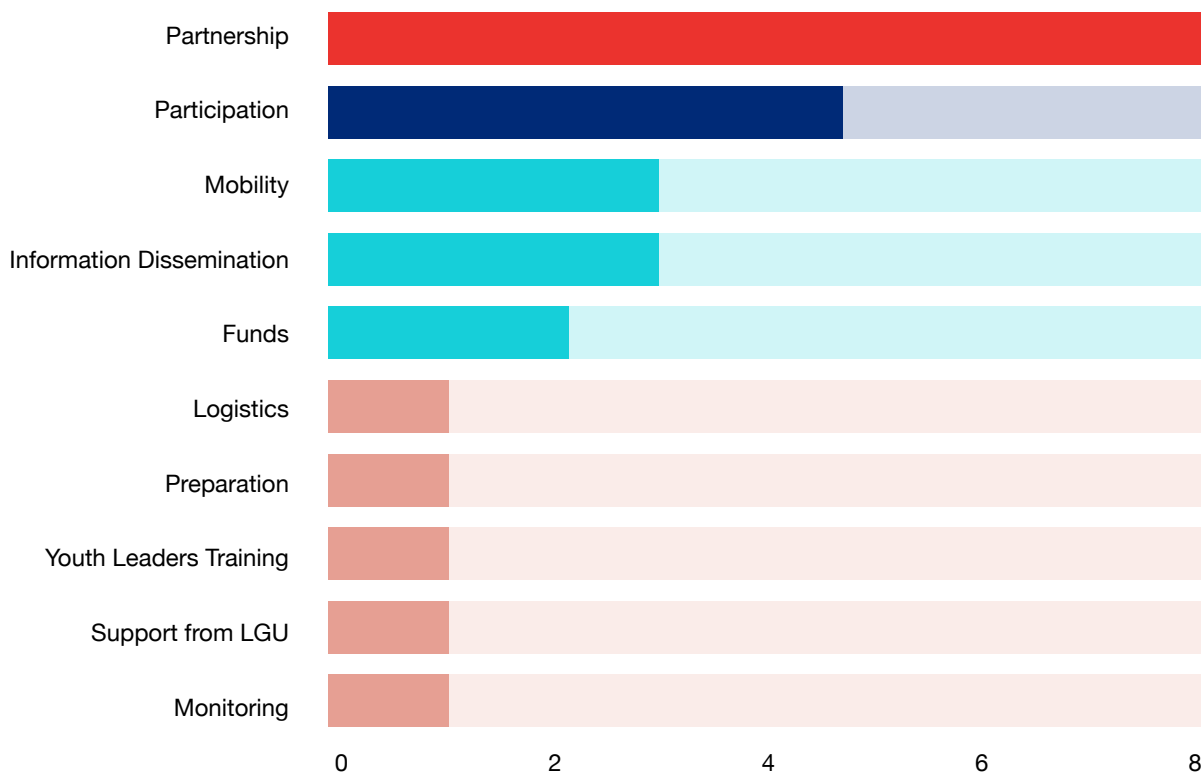
On the other hand, SK Municipality of Jordan raised funds through selling shirts which paved the way for the financial independence of their federation. They started the Bangon sa Gihapon T-shirt for a Cause to raise funds for lactating mothers. Bangon sa Gihapon means To Stand Again – it is initially a tribute to the Guimaras Sea Tragedy last August 2019, which resulted in the death of 31 individuals. Their fundraising activity aimed not just to uplift the name of their municipality but the whole Guimaras. With the profit from the same project, they were able to provide hygiene kits and relief goods to frontliners. Their federation also launched the read-aloud programme in partnership with non-government organizations (NGOs), which provided books for their initiative.

SK Federations in Baybay, Alaminos, and General Santos collaborated with private organizations to launch their projects despite budget limitations. In an interview with SK Baybay, their project Youth in Agriculture was made possible by their partnership with East-West Seed Company, which sponsored them with about 500 sets of assorted seeds. The SK Federation President of Baybay also stressed that the collaboration was made possible by establishing the integrity of their SK Federation.

SK Mate and Kapatagan mentioned mobility as a difficulty they faced in implementing their projects during the pandemic. SK Municipality of Kapatagan launched a sustainable way to tackle food security and solid waste management by exchanging eco-bricks for rice. However, it was challenging to create a systematic way for its residents to participate in their initiative without violating the quarantine protocols.

Recommendations of SKs relative to the improvement of their COVID-19 response

Figure 21. Distribution of the recommendations of the SK Federations relative to their COVID-19 response



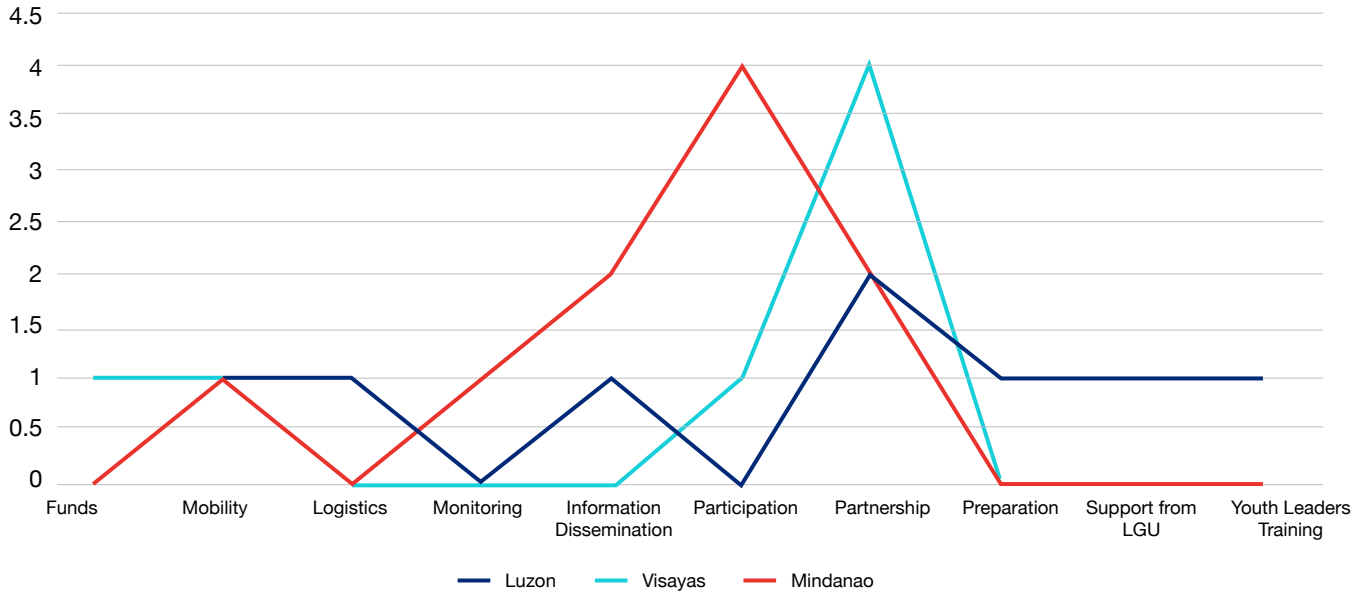
Most of the SKs listed partnership as their recommendation for the implementation of their PPAs. In an interview with SK Occidental Mindoro, it was stated that partnerships and having the right connections could have made the process of launching their project more convenient. It is also evident that most of the SKs that lacked the

funding for their projects were able to continue their initiatives by eventually collaborating with organizations and individuals who sponsored their projects. For both Luzon and the Visayas, establishing partnerships is also the most cited recommendation.

In Mindanao, participation of the target beneficiaries is the most frequent recommendation. SK General Santos City, which launched the Sukagod Series that aims to discuss issues on mental health through

live streaming on Facebook, mentioned that it is a struggle to keep the viewers watching because of the lack of interaction in online platforms.

Figure 22. Distribution of the recommendations of the SK Federations relative to their COVID-19 response per island group, gathered via interviews



Other effects of COVID-19 that the SK Presidents want to focus on

Figure 23. Focus of the next projects the SK Presidents are about to launch based on the interviews made with nine SK Presidents



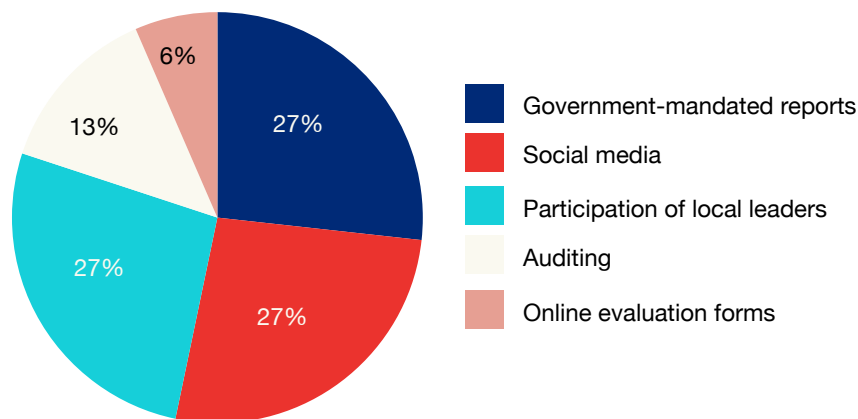
Four out of nine interviewed SK Presidents expressed the alarming rate of residents who were not willing to be vaccinated in their respective municipalities. In a statement made by a collaborator from Mindanao, their fellow Bangsamoro refused to be vaccinated because it is considered haram. They aim to encourage their constituents to get vaccinated and give reassurance that there are available vaccines that do not contain any animal products. On the other hand, there is a municipality in the Visayas whose residents did not believe in the pandemic, and they call it 'plantdemic' because they believe that it is only planted by the government. Lack of awareness about the

pandemic and how vaccines work played a huge role in their residents' compliance with getting the vaccine.

Several SK Presidents also mentioned livelihood and employment opportunities as one of the effects of COVID-19 that their municipality should focus on. In Occidental Mindoro, many students dropped out of school during the pandemic due to power interruptions and poor internet connection. The collaborator from General Santos also mentioned their municipality's pressing issue of displaced workers and out-of-school youth due to the pandemic.

Monitoring of the PPAs

Figure 24. How the PPAs are monitored based on the interviews made with nine SK Presidents



It can be inferred that there is no standard practice in monitoring the PPAs of the SK Federations. From an interview with nine SK Presidents, there is an equal distribution between the following:

1. Government-mandated reports: reports for the Commission on Audit (COA) and the Department of Interior and Local Government (DILG) Annual Accomplishment Reports;
2. Social media: announcements made on the progress of their project through social media posts and social media engagements for online activities; and

3. Participation of local leaders: leaders and volunteers to observe progress for the fulfilment of the projects.

Some of the SK Presidents also cited auditing and distribution of online evaluation forms in order to monitor the progress and impact of their PPAs during the interview.

Analysis and discussion

The primary objective of this research is to document the responses of youth leaders in the Philippines, particularly the SKs, to the COVID-19 pandemic. Based on the data obtained and presented, the following analytical points are inferred.

Youth leaders as disaster risk managers

This research found that the SKs primarily implemented PPAs related to public health. More particularly, most of the SKs were involved in and/or initiated the distribution of various COVID-19 health and safety materials such as face masks, face shields, and alcohol or sanitizers. The response of the SKs could be attributed to their mandate under the SK Reform Act as well as the Philippine Disaster Risk Reduction and Management Act of 2010. Under those laws, the youth leaders' role as disaster risk managers are highlighted and are deemed important. Specifically, Section 20 (c) of the SK Reform Act of 2015 indicates that SK funds must be utilized in implementing PPAs 'that will promote and ensure the equitable access to quality education, environmental protection, climate change adaptation, disaster risk reduction and resiliency', among others (SK Reform Act 2015). Furthermore, according to Section 14 of the Philippine Disaster Risk Reduction and Management Act of 2010, the 'SK councils shall encourage community, specifically the youth, participation in disaster risk reduction and management activities, such as organizing quick response groups, particularly in identified disaster-prone areas, as well as the inclusion of

disaster risk reduction and management programmes as part of the SK programmes and projects' (Philippine Disaster Risk Reduction and Management Act 2010). In this case, the COVID-19 pandemic is naturally seen as a health disaster, posing various risks to the lives of their respective communities.

Youth have also conducted intensive information campaigns relative to COVID-19. This is consistent with the study of the ILO (2020) where it was found that, during the pandemic, youth have been engaged in information drives aimed at 'fighting misinformation' and other online campaigns on COVID-19. The SKs have also maximized the potential of social media in their information drives on COVID-19, such as Facebook and TikTok.

The research also found that the SKs focused on projects relative to food security, such as the distribution of relief goods. This response is still consistent with their mandate under Philippine laws. As one of the main strategies of LGUs in providing relief to affected communities during disasters, the provision for relief goods has become a 'natural' response over the past years. It is notable, however, that some of the SKs integrated innovations in their response. To help in achieving food security amidst the pandemic, the SKs initiated training programmes on home gardening. Their response may be attributed to the emerging food security and sustainability movement in the Philippines which was further popularized and recognized due to the pandemic.

Ensuring accessible education amidst the pandemic

The SKs helped in ensuring that education was accessible to school learners amidst the pandemic. Given the limitations on physical mobility of both learners and educators due to quarantine restrictions and protocols, the education system shifted to a combination of both virtual and physical (modular) mode of learning. This prompted the SKs to help in the printing and distribution of learning modules as well as the establishment of free Wi-Fi zones.

This response is still consistent with their mandate under the SK Reform Act.

Challenges encountered

The research found that one of the main challenges encountered by the SKs in responding to the pandemic is budget insufficiency. However, under Section 20 (a) of the SK Reform Act of 2015, 'Ten percent (10%) of the general fund of the barangay shall be set aside for the Sangguniang Kabataan' (SK Reform Act 2015). The Act further states that 'the Sangguniang Kabataan shall have financial independence in its operations, disbursements and encashment of their fund, income and expenditures' (ibid.). A possible explanation for this, which was also mentioned during their interviews, was the lack of technical knowledge on budget utilization and overall project management. It must also be noted that the budget allotment for each SK varies depending on their LGU's income class. The restrictions on physical mobility and logistical capacity due to quarantine restrictions also greatly posed a challenge on the SKs' capabilities to respond to the pandemic. The SKs also identified the lack or insufficient support from their LGU as a challenge in actualizing their pandemic response plans. Despite this being identified as a challenge, the SKs ranked this low in their recommendations.

Driven by their willingness to serve their community during the pandemic, the SKs found a solution to address financial and logistical constraints by forging partnerships with both government and NGO. This is consistent with the study of the Organisation for Economic Co-operation and Development (OECD) where it was found that various youth-led organizations have collaborated with national governments and other organizations to implement their initiatives during the pandemic.

Context-based responses

The research found that the responses of the collaborators differ depending on the needs of their respective communities and on the quarantine level of their municipalities. The youth leaders in Luzon primarily focused on the distribution of relief goods and hygiene kits, while the SKs in the Visayas and Mindanao regions mostly implemented programmes on education such as provision for assistance in distance learning. The quarantine level of their respective localities also influenced their responses. For the first quarter, specifically in March where the nationwide lockdown was implemented by the national Government, most of the projects focused on public health such as the fabrication and distribution of face masks, face shields, and hygiene kits. Another context-based response was documented in Visayas where an increasing rate of suicidal tendencies among the youth was recorded. The SKs in that region implemented projects and activities anchored on mental health awareness. It is therefore inferred that the youth leaders were also able to tailor their programmes and projects based on the specific needs of their communities. Another evidence of their context-based response is observed in the planned PPAs of the SKs during the remaining months of 2021. Due to rampant spread of misinformation, the SKs planned to intensify their campaigns on the importance of vaccination against COVID-19. With the alarming rate of unemployment and out-of-school youth, the SKs in the Visayas and Mindanao also aim to focus on those issues in the coming months.

Partnership and participation as the way forward

As the country continued to grapple with the public health crisis brought by COVID-19, the SKs have identified some recommendations which they believe would greatly help them in their COVID-19 responses. The youth leaders across the three major island regions believe that partnerships and linkages would make significant contributions in their responses, most especially in the pooling of

resources, both human and financial. This may be explained by their experience of how previous challenges encountered due to financial constraints have been addressed by forging partnerships. The SKs also recommended the creation of platforms that would strengthen youth participation, cooperation, and volunteerism during the pandemic.

Conclusion and recommendations

Using quantitative and qualitative methods through surveys and in-depth interviews, this research undertaking presents a clearer perspective on how the SK Officials responded to the COVID-19 pandemic. Specifically, this research has identified the common PPAs implemented by the SKs, the challenges encountered during implementation, as well as the recommendations of the SKs relative to the improvement of their COVID-19 response initiatives.

The youth leaders' PPAs implemented in response to the pandemic revolve around public health, followed by food security, education, and peace and order. From the foregoing discussion, it can be surmised that the youth leaders have an important role in DRR and management. On the other hand, mobility and logistics, budget constraints, lack of support from their LGUs, and participation from the youth sector are the identified challenges in the implementation of PPAs in response to COVID-19. Lastly, the majority of the SKs have emphasized that partnerships are their recommendations for the improvement of the implementation of their PPAs. Other notable recommendations include the active participation of target beneficiaries, increased mobility, and an intensified information dissemination strategy.

Based on the findings of the study, the young researchers are able to consolidate and propose a set of recommendations which may be adopted by various agencies, both government and non-government. It is recommended:

- That the national Government and LGUs craft new policies or amend existing government policies in order to improve the financial planning and management skills of the SKs, as well as to improve their capacities to access funds especially during calamities and disasters.
- That a series of workshops and training on entrepreneurship organized by both the Government and NGOs may be conducted to improve the capacities of SKs and other youth leaders in organizing and implementing entrepreneurship initiatives which have been found to be effective in augmenting funds for the SKs.
- For a series of workshops or trainings on developing youth-led (SK) disaster resilience, response, and recovery plan, including an intensive training on results-based project management, to be organized by the government (e.g. DILG, Philippine NYC, Development Academy of the Philippines [DAP]), higher education and learning institutions (e.g. UP National College of Public Administration and Governance, Ateneo School of Government, Asian Institute of Management) and NGOs, to better equip the SKs and other youth leaders in responding to the pandemic and future disasters.

- That the Government conduct seminars, summits, and conferences in order to provide the SKs with avenues for collaboration, partnerships, and linkages both with public and the private sectors.
- That the national Government institutionalize a reward or incentive programme for the best SK-led PPAs on disaster response to encourage project sustainability and innovation.
- For both the national and local governments to forge partnerships with higher education institutions (HEIs) and other institutions of higher learning to ensure the regular conduct of research and documentation of youth-led disaster responses. The research outputs will serve as an important resource for policy and programme development by the national and local governments.
- For both government and NGO to conduct a series of workshops or trainings on (Risk) Communication Plan (online and offline) and Digital Literacy and Marketing to improve the capacity of the SKs in implementing Education and Information Campaigns (EICs) relative to the pandemic or disasters; and
- For the Government to take the lead in exploring partnerships within the sector, private, and voluntary sectors to ensure better synergies and clearer direction for national youth development in the Philippines.

References

- Alhambra, A. M. V. (2021). Legislative and Policy Review on Key Areas for Implementing the Nairobi Commitments and ICPD POA for the Youth: The case of the Philippines. *Legislative and Policy Reviews on Population and Development*, pp.19–20. Retrieved from https://www.apda.jp/pdf/p06_jinkou_kaihatu/reviewphilippines_2021_en.pdf
- Balanon, F., Granada, J., Ong, M., Puzon, M., Torre, B., Trinidad, A., (2007). The Impact of Youth Participation in the Local Government Process: The Sangguniang Kabataan Experience. United Nations Children's Fund, Philippines.
- Boutebal, S. and Azzeddine, M., (2020). The COVID-19 Outbreak in Algeria: What is the university youth help in fighting the epidemic? *Indian Journal of Public Health Research and Development* (online). November 2020. Retrieved from doi:10.37506/ijphrd.v11i11.11392
- Capoluongo, F. (2020). Youth leading way in pandemic. *Bangkok Post*, 13 August 2020. Retrieved from <https://www.bangkokpost.com/opinion/opinion/1967299/youth-leading-way-in-pandemic>
- Checkoway, B. and Aldana, A. (2013). Four forms of youth civic engagement for diverse democracy. *Children and Youth Services Review* (online). 35 (201), pp.1894–1899. Retrieved from doi: 10.1016/j.childyouth.2013.09.005
- Halabisaz, F. and Ramos, V.J. (2020). (ANALYSIS) In times of crises, the youth is left behind. *Rappler*. Retrieved from <https://www.rappler.com/voices/ispeak/analysis-in-times-crises-youth-left-behind/>
- International Labour Organization. (2020). Youth and COVID-19: Impacts on jobs, education, rights and mental well-being, Survey Report 2020, International Labour Office. Retrieved from https://www.ilo.org/global/topics/youth-employment/publications/WCMS_753026/lang--en/index.htm
- Fernandez, G., Shaw, R. (2013). Youth Council participation in disaster risk reduction in Infanta and Makati, Philippines: A policy review. *International Journal of Disaster Risk Science* 4, pp.126–136. Retrieved from <https://doi.org/10.1007/s13753-013-0014-x>
- Organisation for Economic Co-operation and Development. (2020). The impact of COVID-19 on student equity and inclusion: supporting vulnerable students during school closures and school re-openings. OECD Publishing.
- Philippine Disaster Risk Reduction and Management Act 2010. Retrieved from <https://www.officialgazette.gov.ph/2010/05/27/republic-act-no-10121/>
- SK Reform Act 2015. Retrieved from <https://www.officialgazette.gov.ph/2016/01/15/republic-act-no-10742/>
- Tubeza, P. (2013). SK, hope of motherland, but breeding ground for political dynasties. *Philippine Daily Inquirer*, 4 July. Retrieved from <https://newsinfo.inquirer.net/437705/comelec-mulls-seeking-law-to-abolish-sk>
- Zeldin, S. (2004). Youth as agents of adult and community development: Mapping the processes and outcomes of youth engaged in organizational governance. *Applied Developmental Science* (online). 8(2), pp.75–90. Retrieved from doi: 10.1207/s1532480xads0802_2

KEY POLICY MESSAGES

Through their papers, presented in the previous sections, the young authors convey valuable ideas and policy messages to different stakeholders. These messages are informed not only by the young authors' own perspectives and analysis, but, most importantly, by the perspectives of the young respondents of these 10 studies.

To facilitate the uptake of these messages, this section proposes a synthesis of the key messages for each of the main stakeholder groups identified by the young authors in their studies. The messages below must also be read in conjunction with the global and the theme-specific recommendations of the YAR on COVID-19 initiative that are presented in the [UNESCO Global Policy Brief 'Youth as Researchers Exploring the Impact of COVID-19 on Youth'](#).

Overarching policy message: youth experiences and voices should consistently be included in the research, policies and practices that are relevant to the realization of their rights. In doing so, it is important to consider that youth are not a global homogeneous group and have considerable diversity in their needs, voices and perspectives, which need to be meaningfully included and considered.

Priority on multistakeholder partnerships: partnerships between government actors, public and private sector entities, civil society organizations – including youth-led organizations – and multilateral or bilateral development actors are critical in addressing the complex and diverse challenges faced by youth. In doing so, mechanisms and practices to ensure meaningful youth engagement need to be in place, as well as related institutional capacity to operationalize them.

Priority areas for multistakeholder collaboration include:

- **Youth mental health**, namely measures to ensure mental health literacy, care and support for students' mental health and advocacy efforts to end stigmatization. Such measures could leverage the power of social media applications to encourage youth to interact with one another and to provide mindfulness outlets for youth (e.g. partnering with already existing mindfulness platforms for a subsidized price or bringing in licensed therapists and mindfulness specialists to speak to youth about how they can improve their mental health).

- **Access to online learning**, namely through financial assistance schemes for marginalized communities, female students – scholarships, awards and subsidies for renting and purchasing of devices. Such investment is critically needed to address the disparity in access to internet devices to technology and education. Investment in building infrastructures to facilitate online learning, with emphasis on provision of affordable and reliable electricity as well as wide coverage, accessible and affordable internet services is also key in addressing access challenges.
- **Life-school-work balance**, namely in terms of ensuring a balance between academic and household chores, especially through a gender lens, designated space to study and digital infrastructure. Awareness programmes targeted at the parents and guardians encouraging them to support continued education and learning of young people at home can prove highly beneficial.
- **Youth capacity to respond to crises**, namely in terms of strengthening youth and youth organizations' capacities to respond to disruptions in everyday life that can be created by crises or disasters. In this direction, priority should be given to building capacities relevant to digital literacy and marketing, youth entrepreneurialism, (Risk) Communication Planning (online and offline), implementing Education and Information Campaigns (EICs) relative to pandemics or disasters, and youth-led disaster resilience, response, and recovery. Opening avenues for youth to collaborate, partner and link with the public and the private sector on these is also greatly needed.

Pressing need for targeted government policies addressing:

Mental health: the young authors recommended that governments allocate a minimum of 4% of the national budget to the mental health care sector specifically. They also identified a need for a close collaboration between the Ministries of Health, Education and Information Technology to design and implement policies on Mental Health that must include targeted policy measures to:

- Protect and support youth and the mental health of young people and, particularly, students
- Introduce compulsory courses on mental health care, stress management, personal well-being, in the undergraduate curriculum
- Combine existing health care and mental health resources
- Develop evidence-based quality reports to ensure quality assurance (measures to ensure quality of services), control and monitoring (using indicators to ensure the said recourse is of benefit to the patient)
- Establish mechanisms to regulate state bodies and ensure that they have requisite funds to invest in early detection and quality treatment. This is critical in reducing the financial burden on respondents as a barrier to access the needed service

Online learning: the young authors identified the need for targeted policies and earmarked funding aimed at institutionalizing accessible and inclusive online learning in universities and ensuring quality and equitable access, adequate curriculum, preparation for professors, as well as free and affordable internet services and infrastructure. Leveraging the power and potential of social networks to enable greater access of youth to education and learning was also recommended.

Sexual and reproductive health and rights (SRHR):

the young authors raised the need for government policies to mandate the inclusion of ‘gender-sensitive and rights-based’ Sexual and Reproductive Health (SRH) education in school curricula, as well as to adapt government contingency plans for health emergencies, by allocating budgetary resources to SRH clinical service delivery, in order to ensure that essential services of SRH are not significantly impacted during and post-pandemic.

Youth-led organizations’ capacity: the young authors called on governments to include in new or existing government policies, measures that would help improve the financial planning and management skills of youth-led organizations, as well their capacities to access funds especially during crises.

Clear recognition of the critical role of higher education institutions (HEIs) in:

- **Student mental health**, particularly with respect to the critical need for HEIs to acknowledge young people’s mental health struggles, create motivation and counselling sessions accessible face-to-face or online to help students cope with mental health-related issues, and creating and disseminating a curriculum to equalize youth-oriented mental health services.
- **Inclusive and accessible hybrid learning**, particularly with respect to adopting a flexible approach to learning and assessments and building on best practices to establish a balanced hybrid learning programme for students allowing both engagement and remote access to education. The varied situations and contexts need to be taken into account – through needs assessments organized by the HEIs with the meaningful engagement of students – to set realistic learning outcomes emphasizing critical understanding and analysis. To resolve issues of disconnection from learning communities,

HEIs can develop multimodal communication platforms, such as online chat services that allow students to voice different kinds of needs as well as connect with peers.

- **Student-teacher and student-student relationships**, particularly with respect to arranging online extracurricular sessions to strengthen and maintain these relationships. In the same direction, it is also important for HEIs to establish capacity-building programmes for professors to ensure their preparedness to optimally use digital technologies and offer students an interactive learning experience. Finally, regular systems enabling evaluation of professors by students should be established.
- **SRH-related stigma among students**, particularly with respect to reviewing existing SRH education curricula and the teaching of SRH in school contexts to help ascertain if/how stigma is addressed and identify gaps in educational provision of SRH.

Call for academia to invest in policy-oriented research on:

- **Youth mental health**, particularly in order to examine the internal and external factors impacting youth mental health, inclusive of economic, social and political considerations; explore descriptive and injunctive norms and self-efficacy in reluctance to seek professional help; and assessing the availability and quality of professional mental health services at education institutions.
- **SRH**, particularly in order to build further knowledge on women’s experience of abortion care during the pandemic (to better understand the barriers for women during this period), as well as to examine how youth would prefer to access SRH services in the future since experiencing digital options during the pandemic.

- **Youth-led disaster/pandemic responses**, particularly in terms of identifying both key gaps and successful practices that could inform policy and programme development by national and local governments.

Necessity to recognize and invest in the expertise of youth-relevant practitioners (development sector and civil society, including youth and grass-roots organizations and youth workers), particularly in the areas of:

- **Psychosocial support and mental health.** Civil society organizations can make an important contribution in this area through targeted psychosocial support and recreational activities for youth. Also, in some cases, facilitating the collaboration between grass-roots mental health groups is key to increasing accessibility and monitoring of prescription medication for youth. Finally, in rural and suburban areas, community leaders can be supported in promoting mental health literacy and prevention of mental health challenges, improve knowledge and develop positive attitudes towards mental health services.

- **Access to and realization of SRHR.** Youth development practitioners can play an important role in expanding youth access to SRHR information and diversifying outreach mechanisms to ensure youth can access SRH services by proactively bringing information and services to them, with an emphasis on young women and girls as they were primarily affected by delays in the provision of SRHR services during the COVID-19 pandemic. In addition, they can invest in digital infrastructure and training for youth programmes to facilitate peer-to-peer knowledge sharing and SRHR information campaigns.

CLOSING MESSAGE BY THE YOUTH STEERING COMMITTEE OF THE YAR ON COVID-19 INITIATIVE

The COVID-19 pandemic has not only brought unprecedented challenges but has also shed light on the immense potential and importance of young people as knowledge holders and producers. The example of the Youth as Researchers (YAR) programme showcases the significant role of young people in decision-making processes that directly impact their lives. As young people, we saw this as an instrumental opportunity in addressing the disruptions faced by youth during the pandemic, while also ensuring that their voices were included in policies and programmes. Young people's unwavering resilience and their exceptional teamwork and research work have pioneered the importance of youth knowledge and voice.

During times of crisis, the agency and contributions of youth are often overlooked, and they are not recognized as individuals capable of making meaningful contributions to crisis response. However, the YAR programme proved otherwise. In the face of fear and uncertainty, young people stepped up, eager to contribute and become actively engaged, showcased their perspectives and shared the experiences of other young people. The overwhelming response to the call for volunteer participants in the programme, highlighted their readiness to lead the way out of the uncertainty

we were all facing with unwavering determination. The YAR programme showed that young people are not only the future, but are first and foremost also the present.

The initiative trusted and gave young people the autonomy to research how the pandemic impacted their lives. Policy makers primarily focused on structural challenges such as access to education and disruptions in service delivery during the pandemic. However, young participants of the YAR programme provided a different perspective, emphasizing the personal, social, and psychological challenges that would have long-lasting effects and would require significant efforts to address. They helped us recognize our blind spots and brought attention to the fact that life for young people would not simply return to normal once the pandemic ended. Their fundamental educational, social, psychological, and personal development had been severely hindered, denying them critical years of growth and human experience.

The research topics addressed through the YAR programme were critical and highlighted the meaningful engagement of young people. Studies on the access and quality of higher

education, changes in sexual and reproductive health rights, youth well-being, technological challenges in higher education, barriers to accessing mental health services, online learning transitions, youth access to COVID-19 information, and country-specific assessments provided valuable insights and new perspectives into the experiences and needs of youth during the pandemic. The research within this publication and the research conducted by the young people not only shed light on the critical issues affecting young people, but also provided key recommendations that showcase tangible pathways for improvement, encouraging both policymakers and stakeholders to implement transformative measures to enhance the lives of young people globally.

As we continue to feel the repercussions of the pandemic in the years to come, it is evident that youth voices remain crucial. Their ability to adapt, their dedication to their families and education, and their awareness of the issues affecting them and their communities are all testament

to their resilience and determination. The youth researchers have proven time and again that age is no barrier to making a profound impact, and the YAR programme and curriculum serve as valuable resources for ensuring that youth voices are integrated into all aspects of programme and policy development.

We sincerely hope that the findings and insights generated through the YAR programme inspire informed action and foster greater engagement among youth. By recognizing the unique perspectives and contributions of young people, we can create a more inclusive and responsive society. Let us continue to support and amplify youth voices as we navigate the challenges of the post-pandemic era and work towards a more equitable and sustainable future for all.

Lest We Forget: Youth Lenses on Coping in a Post-COVID World

Insights from the Youth as Researchers Initiative on COVID-19

Youth taking centre stage in research and policymaking is key to unearthing innovative solutions to contemporary crises. The Youth as Researchers (YAR) initiative is part of the UNESCO response to stimulate youth-led research and solutions.

As youth were disproportionately affected by the COVID-19 pandemic, the Youth as Researchers on COVID-19 was designed to ensure, support, and advance youth voices on issues that had been exacerbated due to the crisis. The initiative was operationalised through a global coalition led by a Youth Steering Committee and bringing together international institutions, academia and civil society stakeholders at global, regional and country level. Through online training and mentoring for social research, 270 young researchers from more than 70 countries, with the support of 10,000 young people globally, gathered evidence from youth experiences across the world, providing a comprehensive portrait of youth challenges and ideas for solutions to inform policy decisions, programme design and future research.

This publication is the result of that initiative. It features 10 studies at global, regional, and national level led by youth on issues closest to their daily concerns during and after the pandemic, such as physical and mental health, well-being, education and technology, access to information and social network use, and youth leaders' responses.

The studies are based on youth-led research on these areas and feature recommendations to prompt policymakers, public officials and practitioners to action.

Stay in touch



youth@unesco.org



<https://en.unesco.org/youth>

Follow us



[@UNESCO](https://www.instagram.com/unesco)



[@UNESCO](https://twitter.com/unesco)



[@UNESCO](https://www.facebook.com/unesco)



[@UNESCOyouth](https://www.facebook.com/unescoyouth)



OLLSCOIL NA GAILLIMHE
UNIVERSITY OF GALWAY



PennState

