

Living, learning, working, and playing during COVID-19: Tackling existing and exacerbated problems of low-income Singaporean youth

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COVID-19's adverse, disproportionate impact on low-income youth, prompting youth-serving professionals to adapt and adjust, is well-documented. However, research gaps exist, including explanatory processes underlying COVID-19's deleterious impact, systematic documentation of existing and exacerbated problems, and short- and long-term responses of youth-serving professionals. Using a multi-informant mixed methods design, guided by a live-learn-work-play theoretical framework, exploratory findings indicated that COVID-19 worsened existing problems across all domains. In the short-term, Singaporean professionals prioritised, moved online, and evaluated programmes. Progressively, they sought to build youth communities, empower families, collaborate, and experiment. Findings have implications for understanding and resolving structural problems perpetuating pre-disaster vulnerabilities.

Keywords: COVID-19, mixed methods, social determinants of health, social work, youth

COVID-19's persistent, deleterious impact on youth is well-documented. Although threats to their physical health are less severe, many youth have struggled psychologically (Magson et al., 2021; Qi et al., 2020), experienced strained relationships (Astle et al., 2021), and missed key adolescent milestones (Allmang et al., 2022). Similarly, many youth-serving professionals have been stretched and stressed (Goh et al., 2022; Seng et al., 2021). Lockdowns and non-pharmaceutical interventions (NPIs) further worsened these problems by complicating social interactions (Sun et al., 2022). Moreover, COVID-19 has exposed pre-existing disparities, with low-income households disproportionately affected (Kanter et al., 2021; Patel et al., 2020; Rodríguez-Planas, 2022) – including in Singapore (Beyond Social Services, 2021; DBS Group Research, 2021; Ng et al., 2022) – which has necessitated professional interventions with low-income youth.

However, beyond focusing on *whether* low-income youth have been most affected by COVID-19, the explanatory processes warrant investigation. In other words, *how* has COVID-19 affected low-income youth? Additionally, existing research has rarely specified how youth-serving professionals adapted and adjusted when responding to youth problems vis-à-vis other civic engagement and participation forms (Kwan, 2022a, 2022b). Even fewer studies have examined existing and exacerbated youth problems and short- and long-term professional responses simultaneously. The conditions under which youth live, learn, work, and play determine their quality of life, constituting the social determinants of health (Braveman et al., 2011; Felter et al., 2021), and a live-learn-work-play theoretical framework can be used to understand how individuals were affected within each domain. Generally, living refers to youth's home environments and relationships with household members. Learning relates to their schooling experience. Work concerns centre on their household's economic disadvantage, while play is about friend and social media engagement and access to support.

Therefore, in this study, using the theoretical framework allows for a systematic and more holistic examination of the problems faced by low-income Singaporean youth before COVID-19, how COVID-19 exacerbated these problems, and how professionals responded. Because COVID-19 follows ongoing crises such as climate change and global inequalities (Wray-Lake et al., 2021), this study not only highlights professionals tackling urgent youth problems, but also documents structural problems perpetuating pre-disaster vulnerabilities. Furthermore, effective professional practices can be extended when responding to future crises.

Literature Review

Existing and exacerbated problems of low-income youth

Throughout COVID-19, many youth experienced sudden life changes, resulting in adverse psychological effects, strained personal, social, and familial relationships, and missed school- and work-related milestones. Following school closures, most youth transitioned to distance-learning, though learning disruptions persisted for many. Furthermore, with disruptions to the delivery of physical and mental healthcare, COVID-19 compromised the psychological well-being of some by limiting access to help. Among Qi et al.'s (2020) Chinese adolescents, those with low or medium levels of social support reported higher depression prevalence. US adolescents in Magson et al.'s (2021) sample reported greater depressive symptoms and anxiety and reduced life satisfaction, reflecting concerns over government NPIs. They also expressed worries over the virus, online learning, and parental conflict (Magson et al., 2021). In compliance with lockdowns, youth relied heavily on digital platforms to communicate with those outside their households. Despite the essential nature of digital devices and connections, some low-income youth did not have stable access, thereby rendering lockdowns and NPIs even more stressful.

Within homes, youth well-being may be closely linked to the quality of parental and familial relationships. Family-level strategies are needed to address COVID-19's psychological impact. For many, such as Astle et al.'s (2021) Latinx pregnant and parenting adolescents, household experiences – encompassing economic and health stress, school pressure, and time with family – were often complicated. At the workplace, COVID-19's long-term impact on youth employment remains under-studied, especially those missing educational milestones, incomes, and work experience (Allmang et al., 2022).

Researchers also theorised – immediately following COVID-19’s emergence and in the context of marginalisation and histories of adversity – that existing socio-economic disparities would widen. Empirically, low-income and lower-middle-class US households with school-aged children reported greater instrumental and financial hardships (Chen et al., 2022). Kanter et al. (2021) found that COVID-19’s economic impact was felt most acutely by lower-income Black and Latinx US families. Similarly, Patel et al. (2020) reported the vulnerability of many low-income UK individuals, given poor housing conditions, non-remote work options, work and income insecurity, poor health conditions, and limited healthcare access. Youth themselves, such as low-income urban US college students, were likely to face job loss, reduced individual and household earnings, and other forms of economic insecurity, including negative impact to their educational and employment outcomes (Rodríguez-Planas, 2022). Overall, across different contexts and countries, individuals and families facing socio-economic disadvantage were more vulnerable to the ramifications of COVID-19, thus necessitating improved interventions.

Youth-serving professionals’ responses to the COVID-19 pandemic

With NPIs in place (Sun et al., 2022), most youth-serving professionals adapted and adjusted. They prioritised moving critical activities and interventions online, which required professionals themselves to be trained virtually, as many US child protection caseworkers did (Schwab-Reese et al., 2020). Relatedly, some also advocated for legislative and policy changes, as South African professionals did for increased child protection (Fouché et al., 2020). Despite limited training and knowledge of evidence-based interventions, technology-enabled platforms were critical, but remote adjustments were complicated by non-profits scaling back programmes and suffering financial losses.

Early studies of professional responses to COVID-19 coalesced around common themes, including reliance on digital interventions, social workers' creativity and flexibility, and ethical challenges vis-à-vis lockdowns. A qualitative survey of international social workers documented challenges related to relationship maintenance (Banks et al., 2020), when prioritising those with greater needs, evaluating personal COVID-19 risks, exercising professional discretion, caring for self, and rethinking future social work. On that final theme, Pentini and Lorenz (2020) characterised the pandemic not just as a test of social solidarity, but also an opportunity for the profession to re-evaluate and improve. Still, when contemplating the future of social work post-COVID-19, conversations remain stuck on general proclamations of change and social justice without deeper evaluations of existing responses.

Within the profession, individual well-being has historically been precarious, which has only been exacerbated by COVID-19. A survey of Hong Kong social workers documented mild to severe anxiety and depression and the need for positive psychological resources (Ho et al., 2022). In Singapore, although many social workers were resilient and addressed community needs immediately, additional supports were needed. Frontline social workers in Seng et al.'s (2021) survey were psychologically distressed but benefited from organisational support. Similarly, workplace support helped reduce burnout among social workers in Goh et al.'s (2022) survey. Additionally, social support also moderated secondary traumatic stress through resilience.

Singaporean socio-economic disparities and youth problems

Demands for professional interventions also increased in Singapore. Despite initial confusion over social service types deemed “essential” and which programs would function

through work-from-home arrangements – across different viral waves – many youth-serving professionals adapted to community needs and adjusted to evolving restrictions. Nevertheless, socio-economic disparities and divisions have persisted. Based on a study of applicants for its COVID-19 Family Assistance Fund, a charity reported a significant 69% drop in median household income among low-income families, from S\$1,600 pre-pandemic to S\$500 post-pandemic (Beyond Social Services, 2021). Similarly, using its customer database, DBS Bank – Singapore’s largest bank – reported that lower-income Singaporeans (with monthly incomes >S\$3,000) were the worst hit (DBS Group Research, 2021). For instance, approximately 49% of these lower-income earners experienced drops in salaries. Furthermore, news reports have documented challenges of low-income families, including food insecurity, congested living spaces, and stress caused by declining household incomes. Singapore’s high population density means that low-income families living in one- or two-room rental flats with multiple household members were already challenged pre-COVID-19 (Kwan, 2021).

More specifically, many low-income Singaporean youth experienced identical challenges as their global counterparts, with psychological distress and strained relationships stemming from distance learning, curtailed in-person socialisation, and family conflict. NPI measures in Singapore were enforced strictly with stiff penalties. Worryingly, Ng et al. (2022) found that COVID-19 worsened polarisation for low-wage young workers – often mired in employment instability – who had poorer psychological well-being. Therefore, improved interventions and social support for low-income youth are needed.

Methods

Guided by the live-learn-work-play theoretical framework (Braveman et al., 2011; Felter et

al., 2021), this study uses the live-learn-work-play theoretical framework to holistically examine the problems faced by low-income Singaporean youth before COVID-19, how COVID-19 exacerbated these problems, and how professionals responded. We address three research questions:

- (1) Who were the youth most affected by COVID-19 and what problems did they previously face when living, learning, working, and playing?
- (2) How did COVID-19 exacerbate pre-existing problems?
- (3) With existing and exacerbated problems, how did youth-serving professionals tackle youth problems in the short- and long-term?

Using secondary data from REACH Community Services, Singapore (“REACH”), a multi-informant mixed methods design was used. REACH is a community-based Singaporean social service agency working with vulnerable and low-income families and individuals since 1998, and its youth service operates strengths-based interventions (e.g., arts and sports programmes, mentorship, casework, and rehabilitation work). REACH collected data at the height of Singapore’s COVID-19 restrictions to understand the emergent needs of its service users, and not explicitly for research. Retrospectively, we saw value in documenting youth problems and professional responses. This study was approved by the University of California, Los Angeles Institutional Review Board (IRB).

Perspectives were drawn from youth, parents, and youth-serving professionals, most of whom lived in or operated in Singapore’s western region. In the first quantitative phase (June-July 2020), we analysed data from youth ($n=218$) and parent ($n=69$) surveys. In the subsequent qualitative phase (July-August 2020), we analysed four focus group discussion transcripts involving full-time professionals and volunteers ($n=21$).

Youth and parent surveys

Data collection

Given COVID-19 restrictions, REACH disseminated the surveys virtually through emails or text messages to existing service users through purposeful sampling. Some but not all youth and parents were of the same household. Survey questionnaires were very short (five minutes). Youth were asked about programme interest (“What kind of programmes would you be interested in?”), social media platforms frequented (“Which social media platform(s) do you frequently use?”), and volunteerism interest (“Will you be keen to volunteer in the following ways in your community?”). They were also asked about their sex, age, race/ethnicity, and current education level. Parents were asked about household income (“What is your current monthly family income?”, 1=“<S\$1,000”; 2=“S\$1,001-S\$2,000”; 3=“S\$2,001-\$3,000”; 4=“>S\$3,000”, with Singapore’s median household income at slightly above S\$10,000), whether COVID-19 affected their families (0=“No”; 1=“Yes”), number of COVID-19 impact categories (“How has COVID-19 impacted you and your family?”, range=0-4), and number of resource categories needed (“Which of the following resource(s) do you need at this point in time?”, range=0-6). They were also asked about their sex, race/ethnicity, and whether they purchased or rented their flat. Sample characteristics are presented (Table 1). COVID-19-affected youth reported reduced income (31.0%), compromised mental well-being (16.1%), and family issues (13.3%). They needed financial aid (19.3%), tuition support (15.6%), and food ration (12.8%). Support from friends (67.4%), family (61.0%), and school (18.8%) were critical. Instagram (70.6%), WhatsApp (59.2%), and YouTube (48.6%) were the most popular social media platforms.

Among the youth-serving professionals, 38.1% identified as male and 61.9% as female. Most were in their 30s-40s. About 23.8% worked in schools, 42.9% in social service agencies, and 33.3% in government-linked agencies. Most were professionals (81.0%).

[TABLE 1]

Data analysis

Because of small sample sizes (especially for parents), limited variables, and inability to match youth and parents, we used basic descriptive and correlational analyses. The Stata 17 software was used. For youth, we reported proportions of those affected by COVID-19, resources needed, support sources, and social media platforms frequented. For parents, we ran correlational analyses and reported statistically significant correlations between household income, whether COVID-19 affected their families, number of COVID-19 impact categories, and number of resource categories needed (the Pearson correlation coefficient at a pre-specified alpha of 0.05). The continuous variables were normally distributed.

Youth-serving professionals focus group discussions

Data collection

REACH's youth workers facilitated three focus group discussions involving full-time youth-serving professionals from other Singaporean agencies and organisations – including social workers, youth workers, educators and teachers – and another involving REACH volunteers, with email invitations extended purposively. Discussions were conducted over

Zoom, each lasting approximately 90 minutes. Participants were asked about how COVID-19 affected organisations or youth programmes, motivations, and perceptions of youth strengths and assets.

Data analysis

Guided by a systematic six-step thematic analysis process (Braun & Clarke, 2006), the focus group discussions were transcribed, read, and re-read to develop familiarity. Second, transcripts were coded systematically to generate initial codes revolving around the live-learn-work-play theoretical framework. Third, initial codes were collated into themes with data. Fourth, an analytical thematic map was populated after themes were checked to coded extracts and short open-ended survey responses. Fifth, each theme's definition and name were refined. Finally, evocative exemplars were chosen. We worked together to ensure the quality of data analysis, gaining familiarity through multiple readings, coding, and re-coding of transcripts. Themes were also checked for saturation, recurrence, repetition, and forcefulness (Lincoln & Guba, 1985). Technically, the ATLAS.ti 22 software was used by team members to organise the transcripts as documents. The documents were labelled with quotations, which were then used to generate and collate the initial codes. Subsequently, theme-based reports were generated for further analysis.

Results

Low-income youth and live-learn-work-play problems

Among parents, household income was negatively correlated with whether COVID-19 impacted families ($r(65) = -0.24, p < 0.05$) and number of COVID-19 impact categories ($r(65) = -0.25, p < 0.05$). Reduced income was the top impact category (30.4%). Household

income was negatively correlated with number of resource categories needed ($r(65) = -0.21, p < 0.05$). Financial aid (37.7%), food ration (30.4%), and job opportunity (17.4%) were the main resource categories. From the surveys, it was clear that youth from low-income households were the most affected (RQ1).

Guided by the live-learn-work-play theoretical framework, insights of youth-serving professionals from the focus group discussions illustrated the problems that low-income youth faced pre-COVID-19, and how COVID-19 exacerbated these problems (RQ1/RQ2) (Table 2). In the short-term, the professionals tackled youth problems using three strategies. First, they prioritised important cases, crises, and emergencies, dealing with “high-risk cases,” “high-needs students,” and “urgent and critical” needs. Second, they moved online, exercising flexibility by “adjusting,” “coping,” and “adapting,” even if building initial rapport was challenging. Third, they actively evaluated the effectiveness of online programming. “I really do question in terms of how effective online or virtual counselling is,” a social worker shared. Another reflected: “I had one who refused to meet me cause she doesn’t want to be online. So we end up spending the whole circuit breaker [or lockdown] just sending WhatsApp messages, which I think is really not enough.” In the long-term, professionals sought to build sustainable youth communities, empower families, and improve inter-agency collaboration and experimentation (RQ3).

[TABLE 2]

Live: “It really gets a bit squeezey”

Existing problems

Low-income youth lived in small rental flats. Sharing rooms meant having little privacy.

Before COVID-19, it was already difficult to have personal conversations or concentrate when fending off distractions. Additionally, poor familial relationships were strained by economic stress, with disagreements over finances, caregiving, and parentification.

Exacerbated problems

With strict lockdown laws, low-income youth were stressed by having household members around 24/7. While they previously spent time outside or found occasional alone time at home, youth felt suffocated without privacy. This was complicated by poor familial relationships, with increased conflict manifesting through tensions, quarrels, and fights. A senior social worker shared:

Their home environment is not very conducive for them to stay at home because there are so many people in the small rental house and with so many people coming in, there is tension in the family and they might end up quarrelling and fighting. And youth want to get out of the house.

Short-term professional responses

Professionals created online and offline safe spaces – adhering to evolving pandemic restrictions – where youth could get away. A volunteer shared: “Most of them would appreciate having a shelter to escape to temporarily. At least if there’s anything going on at home and they really want to escape somewhere.” Because this did not alleviate more serious problems, professionals also checked on youth and provided counselling, as a teacher did: “Students come to me to seek help in terms of managing conflict at home.”

Learn: “I miss school”

Existing problems

Before COVID-19, disconnected youth were disengaged from academic and co-curricular activities and had trouble with school attendance. Consequently, they did not maintain strong peer and teacher relationships. Conversely, for connected youth, the school environment – physically and socially – provided respite from other problems.

Exacerbated problems

Online home-based learning (HBL) was the default, and without technological necessities many youth experienced further disruption. They needed functional laptops or iPads and stable Internet connections to attend lessons, meet teachers, and complete homework. Even with donations and technological support, low-income youth often shared a single digital device with school-going siblings. With household members connected simultaneously, Internet connections were often unstable. Consequently, many felt lost and those with national examinations were unprepared.

Even though some could use school spaces, disconnected youth opted not to. Previously, social workers worked with teachers and counsellors on home visits, which was now complicated. Connected youth too were affected. They reported more intense isolation because school was not just about academics but also socialising with peers and teachers and participating in co-curriculars. Online options were inadequate substitutes.

Short-term professional responses

Professionals provided additional technological necessities, making sure that each

household was equipped with at least one fit-for-purpose digital device and stable Internet or mobile data connections for HBL. Unable to meet face-to-face, Professionals used text- and online-based platforms to provide support. For disconnected youth, when urgent, professionals advocated for youth by communicating with parents. For connected youth, additional stimulus was emphasised. Professionals enlisted community volunteers as part of broader support systems, created online interest groups, and provided tuition to those preparing for national examinations.

Work: “Can I catch up? Am I missing out?”

Existing problems

Before COVID-19, as members of low-income households, youth experienced economic disadvantage, which can perpetuate family stress. Parents strove to make ends meet – settling bills, buying groceries, and paying for educational expenses – while juggling employment and caregiving. When they came up financially short, low-income youth worked part-time or on contracts to supplement household incomes.

Exacerbated problems

With COVID-19, many household members were unemployed or had to work as essential workers. The former resulted in reduced household income, thereby creating further financial stress, while the latter increased viral risk exposure, especially with immunocompromised household members. A community worker observed that employment and income losses were paired with rising expenses.

While labouring part-time or on contracts to contribute financially, low-income youth often had limited guidance over future career or higher education options. Because their work arrangements were necessitated by economic circumstances, they rarely considered long-term trajectories.

Short-term professional responses

Most immediately, professionals worked with youth to help families, connecting them with government grants and *ad hoc* financial assistance such as COVID-19 grants, upgrading courses, and job opportunities. IT-savvy youth were resourceful assets, taking up pandemic-related positions (e.g., temperature screeners) and browsing online aid portals. Once households achieved some financial stability, professionals emphasised financial literacy and connected youth through individual and group mentorship to gain insight into long-term career options. For a senior social worker, this was about “building rapport with the youth to bridge them to the resources.”

Play: “I feel like I’m going to lose my mind”

Existing problems

Before COVID-19, for low-income youth with poor familial relationships and disconnected from school, having peer and social relationships was critical. They relied heavily on social media, where they were bombarded by online content influencing their identities and behaviours. Youth also had poor access to social and mental health support, rendering them psychologically vulnerable.

Exacerbated problems

Vulnerabilities were acutely exacerbated during lockdown, as youth were denied in-person social interactions and further increased social media usage. A youth worker observed: “Youth are cooped up at home and there’s not much avenue for them to express their emotions.” Physically, desperate to meet friends and play sports, some flouted social distancing rules, resulting in public nuisance complaints. Digitally, many reported being cyberbullied, and despite knowing that their children spent more time online, parents were ill-equipped to appropriately track and intervene. Overall, their lack of support was compounded by other life stressors.

Short-term professional responses

Transitioning online, professionals replicated in-person activities – learning journeys, drop-in centres, and community walks – virtually. Using Zoom, Facebook, and Instagram, popular activities included sports and fitness classes and e-gaming competitions. A community worker described: “An activity that is truly fun that lets them hang out with their friends, and then afterwards, we can get them on board with another agenda, or they can attract their friends and we can grow our reach.” However, with lockdowns, social workers struggled to recruit and retain increasingly fatigued youth participants: “Traffic just went down, really went down.” Some social workers had to patrol neighbourhoods to make sure youth were not flouting COVID-19 restrictions.

Direct support was provided to cyberbullying victims. Professionals also offered cyber wellness programmes to youth and parents. Progressively, professionals positioned themselves as “first responders,” especially for youth with multiple stressors, by validating

experiences, responding to needs, and engaging through small social groups, as one reflected: “How do we react or reach youth, and how to comfort their friends?”

Long-term professional strategies

Building sustainable youth communities: “Giving them opportunities to show their strengths”

While meeting immediate youth problems, building sustainable youth communities was useful for the future. Adopting a youth-centred approach, professionals will provide resources and create initial opportunities as youth volunteers shape programmes and communities. Youth interest groups can help build bonds and camaraderie, and community partnerships can reinforce shared values and goals. A social worker said: “When they are given the opportunity or the platform to really participate or be engaged, that would really bring out the benefit and also bring out their individual strength.” During COVID-19, professionals already leveraged upon tech-savvy youth to help families and community members, such as elderly residents. Low-income youth were “quite participative,” and many were “looking for opportunities” to volunteer in meaningful and enjoyable ways, as a youth worker reflected: “We just need to give them the opportunity, just need to give them the guidance, and to actually see them blossom.” Progressively, youth workers wanted youth to develop a sense of belonging to communities and be motivated to make a difference.

Empowering families: “Families need help”

Professionals acknowledged the long-term limits of their work with youth if families and parents – who would in turn improve their children’s well-being – are disempowered.

Helping low-income households through social and financial assistance should be prioritised. “Because the parents themselves are really not able to discharge their duty. So it’s affecting the youth because there’s this lack of parental guidance or parental involvement,” a school leader reflected. A counsellor concurred: “[Youth] cannot wake up, they cannot come to school, and then the parents also don’t know what to do.” Specifically, professionals saw limits of their attempts to curb device addictions worsened by COVID-19. Empowering families thus meant consistent parental partnerships to alleviate youth problems, as a youth worker summarized:

They’re cooped up at home for the holidays, especially for those with family issues. I don’t think that’s very healthy for them, or those with mental issues, where they have to keep all their thoughts to themselves, like 24/7.

Improving inter-agency collaboration and experimentation: “Maybe if we all come together and work on a project”

Prompted by fears of duplication and being overwhelmed by multiple youth problems, professionals saw the benefits of inter-agency collaboration. A community worker saw many “double efforts” resulting in poor attendance: “We are all like targeting the same group of people, doing the same thing ... So maybe sometimes if you collaborate then we won’t have manpower issues.” To foster collaboration, professionals have to first secure support from their agencies before communicating clear objectives with others. As sites of socialisation, schools should be included. A school leader proposed: “Collating, aggregating all the different functions and community resources together, funnel it back to the schools, schools communicate to parents.”

Moreover, increased collaboration should lead to experimentation, with professionals collectively piloting programs, trying alternatives, and investing in areas demonstrating initial success. The same school leader added: “It’s just experiments. No outcome is OK, just get them together. And then if it’s successful, then good, further develop ... It’s only when we get them on board, then we set our agenda.”

Discussion

That low-income youth have been especially challenged by COVID-19 has been well-established, including in Singapore (Beyond Social Services, 2021). Existing studies have also documented different explanations for increased distress among these youth (Magson et al., 2021; Qi et al., 2020), yet this study has gone two steps further. First, we presented and categorised domains of youth problems. Second, we drew links between pre-existing problems and their exacerbation during COVID-19. In response to the first two research questions, specifically, the live-learn-work-play theoretical framework proved useful (Braveman et al., 2011; Felter et al., 2021), demonstrating how low-income youth already struggled before the pandemic. Across every live-learn-work-play domain, COVID-19 worsened problems. Future studies should elaborate how the domains interacted. For instance, those labouring part-time (“work”) have less time for their studies (“learn”) or recreation (“play”). Similarly, parentified low-income youth not only lack support from parents working in high-risk roles (“work”) but are also distracted from HBL (“learn”) when caring for household members within cramped quarters (“live”).

Responding to existing and exacerbated youth problems, youth-serving professionals in this study adapted and adjusted in the short-term while considering long-term changes. This directly addressed the third research question. In the short-term, as they

tackled youth problems across all four domains, Singaporean professionals demonstrated the same adaptability and responsiveness as their global counterparts (Fouché et al., 2020; Schwab-Reese et al., 2020), including focusing on those with greater needs (Banks et al., 2020). They prioritised important cases, moved flexibly online, while evaluating online programming's effectiveness. In the long-term, they sought to build sustainable youth communities, empower families, and improve inter-agency collaboration and experimentation. These strategies remain applicable in post-pandemic Singapore, as professionals shape future interventions and tackle emergencies. Nonetheless, despite demonstrating resilience, professionals in this study were still stretched and stressed. Beyond documenting psychological distress experienced by social workers (Goh et al., 2022; Seng et al., 2021), more attention should be devoted to specific and sustainable interventions for organisational and social support.

In the even longer term, especially vis-à-vis social work implications, COVID-19 presents opportunities to address structural conditions which left low-income youth vulnerable, pre-pandemic, in Singapore (Kwan, 2022b), where inequality-focused conversations have gained traction. Given ongoing crises affecting the well-being of low-income youth (Wray-Lake et al., 2021), the live-learn-work-play theoretical framework can be used to ascertain *whether* specific progress *has* been made and specify *how* further change *can* be made. Particular attention can be paid to youth demographics beyond socio-economic status, such as differences across sex and education levels. Even with their commendable pandemic response, professionals have to first articulate theories of change before marshalling agency and community resources to achieve desired long-term goals. Subsequently, the framework can also guide policy responses. Relevant questions for low-income youth include: How can home environments become more conducive and family

relationships strengthened (“live”)? What infrastructure is needed for universal digital access (“learn”)? How effective were COVID-19 income and employment support (“work”)? What are the youth engagement gaps (“play”)?

There were limitations. Youth and parent surveys – built quickly by REACH – provided limited insight beyond descriptive statistical relationships. Conducting secondary data analysis, we were not involved in survey design and thus worked with limited variables and statistical power to test additional hypotheses. For instance, we could not distinguish between youth who worked and those who did not. Relatedly, the surveys have limited external validity. Non-probability purposeful sampling was used, with most in the sample already receiving assistance. Nevertheless, the focus group discussions included diverse professionals, and the multi-informant mixed methods approach allowed for methodological triangulation. Even so, no demographic data or information about the professionals’ organisational tenure or experience were collected. Finally, while data were collected at the height of COVID-19, the situation in Singapore has evolved and mostly eased. Still, COVID-19 has fundamentally shaped and re-shaped how professionals operate and how structural youth problems are resolved.

In conclusion, findings indicated that COVID-19 worsened existing problems faced by Singaporean low-income youth across all live-learn-work-play domains, and youth-serving professionals responded efficaciously in the short- and long-term. This study has implications for understanding and resolving structural problems which perpetuated pre-disaster vulnerabilities. In the social work context, besides prioritising emergencies and low-income youth in times of crises and disasters, practitioners can develop and evaluate programmes using the live-learn-work-play theoretical framework, focusing on domains where their youth need the most help (e.g., digital devices and stable Internet connections

to facilitate home-based learning, or matching youth with mentors and career advisors to build social capital and be exposed to future trajectories). For policymakers, besides providing organisational and social support to youth-serving professionals who have been stretched and stressed (e.g., improved supervisory arrangements, or regular check-ins to assess the professionals' caseload and psychological well-being), the same theoretical framework can be used to inform policy responses, so that low-income youth experience less intense vulnerabilities when living, learning, working, and playing in the future.

References

- Allmang, S., Plummer, J. A., Copeland, V., & Riascos, M. C. (2022). Untangling the effects of COVID-19 on youth employment: Directions for social work research. *Journal of the Society for Social Work and Research, 13*(3), 433–439.
<https://doi.org/10.1086/720981>
- Astle, S. M., Duncan, J. C., Toews, M. L., Perez-Brena, N. J., McAllister, P., Maddy, M. A., & E. Feinberg, M. (2021). “A little bit closer”: A mixed method analysis of the effect of the COVID-19 pandemic on the lives of adolescent parents. *Journal of Adolescent Research, 07435584211062116*.
<https://doi.org/10.1177/07435584211062116>
- Banks, S., Cai, T., de Jonge, E., Shears, J., Shum, M., Sobočan, A. M., Strom, K., Truell, R., Úriz, M. J., & Weinberg, M. (2020). Practising ethically during COVID-19: Social work challenges and responses. *International Social Work, 63*(5), 569–583.
<https://doi.org/10.1177/0020872820949614>
- Beyond Social Services. (2021). *Mind the chasm: COVID-19 & deepening inequalities in Singapore*. <https://beyondresearch.sg/wordpress/wp-content/uploads/2021/02/BSS-COVID19-REPORT-080221v2.pdf>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Braveman, P., Egerter, S., & Williams, D. R. (2011). The social determinants of health: Coming of age. *Annual Review of Public Health, 32*(1), 381–398.
<https://doi.org/10.1146/annurev-publhealth-031210-101218>

- Chen, C. Y.-C., Byrne, E., & Vélez, T. (2022). Impact of the 2020 pandemic of COVID-19 on families with school-aged children in the United States: Roles of income level and race. *Journal of Family Issues*, *43*(3), 719–740.
<https://doi.org/10.1177/0192513X21994153>
- DBS Group Research. (2021). *No storm lasts forever: Impact of COVID-19 on financial wellness in Singapore* (Sector Briefing 97; DBS Asian Insights).
- Felter, C. E., Cicone, J., Mathis, L., & Smith, D. L. (2021). Identifying and addressing social determinants of learning during the COVID-19 pandemic. *Physical Therapy*, *101*(11), pzab210. <https://doi.org/10.1093/ptj/pzab210>
- Fouché, A., Fouché, D. F., & Theron, L. C. (2020). Child protection and resilience in the face of COVID-19 in South Africa: A rapid review of C-19 legislation. *Child Abuse & Neglect*, *110*, 104710. <https://doi.org/10.1016/j.chiabu.2020.104710>
- Goh, S. N., Fan, G., Cheng, S., & Khaing, N. (2022). COVID 19 pandemic: Impact of changes experienced on social workers' professional quality of life in Singapore. *Social Work in Health Care*, *61*(4), 298–322.
<https://doi.org/10.1080/00981389.2022.2092582>
- Ho, H. C. Y., Chui, O. S., & Chan, Y. C. (2022). When pandemic interferes with work: Psychological capital and mental health of social workers during COVID-19. *Social Work*, swac035. <https://doi.org/10.1093/sw/swac035>
- Kanter, J. B., Williams, D. T., & Rauer, A. J. (2021). Strengthening lower-income families: Lessons learned from policy responses to the COVID-19 pandemic. *Family Process*, *60*(4), 1389–1402. <https://doi.org/10.1111/famp.12716>
- Kwan, J. Y. (2021). Family structure, the quality of family ties, and the positive development of adolescents: The family social capital of grandparents in low-

- income Singaporean families. *Asia Pacific Journal of Social Work and Development*, 31(3), 220–235. <https://doi.org/10.1080/02185385.2020.1859409>
- Kwan, J. Y. (2022a). ‘Democracy and active citizenship are not just about the elections’: Youth civic and political participation during and beyond Singapore’s nine-day pandemic election (GE2020). *YOUNG*, 30(3), 247–264.
<https://doi.org/10.1177/11033088211059595>
- Kwan, J. Y. (2022b). Youth civic and community engagement under Singapore’s COVID-19 lockdown: Motivations, online mobilization, action, and future directions. *Journal of Community Practice*, 0(0), 1–21.
<https://doi.org/10.1080/10705422.2022.2108952>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications.
- Magson, N. R., Freeman, J. Y. A., Rapee, R. M., Richardson, C. E., Oar, E. L., & Fardouly, J. (2021). Risk and protective factors for prospective changes in adolescent mental health during the COVID-19 pandemic. *Journal of Youth and Adolescence*, 50(1), 44–57. <https://doi.org/10.1007/s10964-020-01332-9>
- Ng, I. Y. H., Tan, Z. H., Chua, V., & Cheong, A. (2022). Separate lives, uncertain futures: Does Covid-19 align or differentiate the lives of low- and higher-wage young workers? *Applied Research in Quality of Life*. <https://doi.org/10.1007/s11482-022-10068-6>
- Patel, J. A., Nielsen, F. B. H., Badiani, A. A., Assi, S., Unadkat, V. A., Patel, B., Ravindrane, R., & Wardle, H. (2020). Poverty, inequality and COVID-19: The forgotten vulnerable. *Public Health*, 183, 110–111.
<https://doi.org/10.1016/j.puhe.2020.05.006>

Qi, M., Zhou, S.-J., Guo, Z.-C., Zhang, L.-G., Min, H.-J., Li, X.-M., & Chen, J.-X. (2020).

The effect of social support on mental health in Chinese adolescents during the outbreak of COVID-19. *Journal of Adolescent Health, 67*(4), 514–518.

<https://doi.org/10.1016/j.jadohealth.2020.07.001>

Rodríguez-Planas, N. (2022). Hitting where it hurts most: COVID-19 and low-income urban college students. *Economics of Education Review, 87*, 102233.

<https://doi.org/10.1016/j.econedurev.2022.102233>

Schwab-Reese, L. M., Drury, I., Allan, H., & Matz, K. (2020). ‘Oh, this is actually okay’:

Understanding how one state child welfare training system adapted to the COVID-19 pandemic. *Child Abuse & Neglect, 110*, 104697.

<https://doi.org/10.1016/j.chiabu.2020.104697>

Seng, B. K., Subramaniam, M., Chung, Y. J., Syed Ahmad, S. A. M., & Chong, S. A.

(2021). Resilience and stress in frontline social workers during the COVID-19 pandemic in Singapore. *Asian Social Work and Policy Review, 15*(3), 234–243.

<https://doi.org/10.1111/aswp.12237>

Sun, K. S., Lau, T. S. M., Yeoh, E. K., Chung, V. C. H., Leung, Y. S., Yam, C. H. K., &

Hung, C. T. (2022). Effectiveness of different types and levels of social distancing measures: A scoping review of global evidence from earlier stage of COVID-19 pandemic. *BMJ Open, 12*(4), e053938. [https://doi.org/10.1136/bmjopen-2021-](https://doi.org/10.1136/bmjopen-2021-053938)

[053938](https://doi.org/10.1136/bmjopen-2021-053938)

Wray-Lake, L., Gniewosz, B., Benavides, C., & Wilf, S. (2021). Youth civic engagement:

Exploring micro and macro social processes. In A. Kostić & D. Chadee (Eds.), *Positive psychology: An international perspective* (First edition, pp. 152–176).

Wiley.