Original article

# Agents of Change for Mental Health: A Survey of Young People's Aspirations for Participation Across Five Low- and Middle-Income Countries

Gabriela Pavarini, Ph.D. [a],[*], Chantelle Booysen, L.L.B. [b], Tanvi Jain, M.P.H. [c], Joanna Lai, Dr.P.H. [c], Kiran Manku, M.Sc. [a], Ashley Foster-Estwick, M.A. [d], Grace Gatera [e], Damian Omari Juma [f], David Karorero [g], Kumba Philip-Joe [e], Chinwendu Genevive Ukachukwu [h], Claudia Sartor [i], Lian Zeitz [j], Mychelle Farmer, M.D. [k], and Ilina Singh, Ph.D. [a]

[a] Department of Psychiatry and Wellcome Centre for Ethics and Humanities, University of Oxford, Oxford, Oxfordshire, United Kingdom
[b] Young Leaders for Global Mental Health, Durban, KawZulu-Natal, South Africa
[c] Maternal, Newborn, Adolescent Health Unit, UNICEF, New York, New York
[d] Young Leaders for Global Mental Health, Bridgetown, Barbados
[e] Young Leaders for Global Mental Health, Kigali, Rwanda
[f] Young Leaders for Global Mental Health, Mombasa, Kenya
[g] Young Leaders for Global Mental Health, Mariager, Denmark
[h] Young Leaders for Global Mental Health, Ikeja, Lagos, Nigeria
[i] Young Leaders for Global Mental Health, Johannesburg, Gauteng, South Africa
[j] Young Leaders for Global Mental Health, Seattle, Washington
[k] Advancing Synergy, Baltimore, Maryland

## A B S T R A C T

**Purpose:** Effective intervention, policy, and research in mental health and well-being (MHWB) require young people to be understood not only as beneficiaries, but also as active agents in codesigning and implementing initiatives. To identify pathways for young people's participation in promoting MHWB in low- and middle-income countries (LMICs), this study surveyed young people's aspirations for engagement, their spheres of influence, capacity building needs, and key barriers to participation.
**Methods:** Using U-Report, United Nations Children's Emergency Fund's social messaging tool and data collection platform, we distributed a short quantitative survey to a nonrepresentative, but large sample of young people aged 15—29 across five LMICs: Nigeria, Brazil, Jamaica, South Africa, and Burundi.
**Results:** A total of 42,689 young people responded, with representation from most or all provinces within each country. Participants' average age was 23.8 years (SD = 3.77). Young people's core aspirations were to join a mental health awareness project and to support their peers. Participants considered schools and community settings to be the most important spheres for engagement. Lack of information about mental health was the main perceived barrier to participation, and mental health classes the main training need.

**IMPLICATIONS AND CONTRIBUTION**

Young people in LMICs identify clear priority areas for participatory engagement participate in the design and delivery of MHWB initiatives; however, lack of information about mental health is a clear barrier to participation. Interventions such as peer education programs can help build the capacity of youth to be agents of

**Discussion:** In many countries, MHWB is not taught or discussed in schools and youth-led mental health interventions are rare. Findings from this study reveal clear aspirations for participatory engagement to promote MHWB among young people in LMICs. To support meaningful participation, policymakers and youth service providers must ensure that young people have access to mental health literacy training and opportunities to raise awareness in schools or community settings. change in the promotion of MHWB.

Since the publication of the United Nations Convention for the Rights of the Child [1], young people's participation in public life and decision-making has become a central theme in scientific and political discourse. Young people are increasingly understood to be competent and entitled to participate in society and have a say in issues which affect their lives [2—4]. According to the United Nations, young people's participation refers to "the active and meaningful involvement of young people in all aspects of their own, and their communities' development, including their empowerment to contribute to decisions about their personal, family, social, economic, and political development" ([5], p245).

Over the past 20 years, there has been increasing recognition of the importance of youth participation to advance the mental health agenda [6—8]. Young people's level of involvement can range from consultations in projects designed and run by adults, to youth-led initiatives with minimal input from adults [9]. Young people have important insights into their own well-being, and their participation in planning, delivering, and evaluating mental health and well-being (MHWB) initiatives ensures that their knowledge, attitudes, and perspectives, which derive from their lived experiences, are integrated into programming.

The impact of young people's participation and sensitization to their civic role can be particularly significant in low- and middle-income countries (LMICs), where most young people live [5] and investment in mental health is particularly scarce [6,10]. However, opportunities for youth engagement in MHWB remain scarce [11—13], and our understanding of young people's own perspectives on participation is still limited. To support young people's role as partners and change agents in the promotion of MHWB, it is necessary to understand their interests and priorities: how they wish to make a difference. Equally important is to identify settings that are conducive to participation, since environments play an important role in whether or to what extent young people participate [14]. Meaningful participation also depends on capacity building and structural support [15—17]. Young people might need more access to platforms to voice their perspectives, support for their own mental health, or more information about MHWB. These are just a few of the factors that might influence young people's capacity to contribute effectively. In order to support young people's meaningful participation in promoting MHWB, we must identify and address needs, barriers, and limitations.

As an initial, but important step to understanding the best pathways for young people's participatory engagement to promote MHWB in LMICs, this study surveyed young people's priorities across four domains: aspirations for engagement; spheres of influence and impact; support and training needs; and barriers to engagement. These four domains, targeting *what*, *where*, *how to assist*, and *how to overcome*, were thought to provide critical information to inform strategies and mechanisms for better engaging and supporting young people in promoting MHWB. Given the importance of age-appropriate involvement [18], age differences in responses were assessed as an exploratory aim.

## Methods

We conducted a cross-sectional, descriptive survey with a large sample of young people aged 15—29 across five LMICs: Brazil, Burundi, Jamaica, Nigeria, and South Africa. The study included not only youth (aged 15—24) [19], but also emerging adults (aged 25—29) because we understand that many youths are only able to engage with and lead mental health projects in their mid-late twenties. The specific five countries chosen were selected because (1) their diverse contexts can offer a broad picture of participatory engagement aspirations in LMICs in Africa and Latin America; (2) mental health promotion among young people is a core programmatic priority for United Nations Children's Emergency Fund (UNICEF) in these countries; and (3) the authors have strong partnerships with local governmental and non-governmental organizations to support translational efforts.

### Youth involvement

This study was coproduced with the Lancet Young Leaders for Global Mental Health. The core group includes 10 mental health advocates from several countries in Africa and America, who work to integrate the voices of youth into decision-making in mental health. Group members work directly with young people, and lead mental health initiatives locally and internationally. Across several WhatsApp and Zoom sessions, the core group led the design of the survey and ensured that all questions and response options were relevant for youth and young adults in the targeted countries. The group also supported interpretation of results, writing, and dissemination plans.

### Participants and survey platform

Participants in this cross-sectional survey were recruited via UNICEF's U-Report, a social messaging tool aimed at promoting community participation. At the time the survey was conducted, there were over eight million registered users [20]. The platform provides and collects information on key issues that affect young people. Almost 70% of registered users are under 24 years old, and 44% female [2], from a range of socioeconomic backgrounds [21]. Young people can register voluntarily for U-Report, at no cost, and users respond anonymously to polls and surveys through Facebook Messenger, Viber, WhatsApp, or SMS. Responses are aggregated in real time and without unique identifiers. U-Report is available in 68 countries, most of which are LMICs.

The present survey was circulated to registered users of the U-Report Burundi, Jamaica, Nigeria, South Africa, and Brazil between February 17, 2020 and March 6, 2020. The survey was translated and distributed in the main local language of each target country: English in Jamaica, Nigeria, and South Africa; Portuguese in Brazil; and French in Burundi. Minor language adaptations were made to conform to culturally appropriate style

**Table 1**
Survey questions and response categories across domains

| Domain | Survey question | Response categories |
|---|---|---|
| Aspirations for engagement | How can young people improve the mental health and well-being of their communities? | ○ Support each other<br>○ Help improve the social and emotional support young people receive<br>○ Help collect information on mental health and well-being<br>○ Inform local leaders about our challenges and how we wish to be supported<br>○ Be part of a project or campaign to raise awareness about mental health and well-being<br>○ Other |
| Spheres of influence | Where do you feel young people can make the biggest difference to improving the mental health and well-being of those around them? | ○ At school<br>○ Where I work<br>○ At home<br>○ Online<br>○ In community spaces<br>○ Other |
| Support and training needs | What do young people need from their schools or communities to be able to make a difference? | ○ Classes about mental health and well-being<br>○ Support to cope with the stresses of life<br>○ Opportunities to connect with other young people<br>○ Platforms to speak and express our ideas<br>○ I do not think that is the school's responsibility<br>○ Other |
| Barriers to engagement | What do you think is stopping young people from helping improve the mental health and well-being of their communities? | ○ We do not have enough information<br>○ This is not a priority for many young people<br>○ We do not know how to get involved<br>○ We are unsure that we can make a difference<br>○ Other |

of communication in each of the five countries. Our inclusion criteria consisted of young people aged 15–29, as extracted from participants' U-Report registration information, and who answered at least one of the survey questions.

Ethics approval was given by the Health Media Lab's Institutional Review Board (IRB) (#238ESEV20). This IRB serves UNICEF regional and individual country offices under a global arrangement (LTAS #42107154). It is authorized by the U.S. Department of Health and Human Services, Office of Human Research Protections (IRB #1211, IORG #850), and has DHHS Federal-Wide Assurance approval (FWA #1102). Given the brief, low-risk, and anonymous nature of the survey, and the time we had available for the project, we only obtained approval from this central committee. We do, however, acknowledge the importance of obtaining additional ethics review from each site to best ensure adherence to local standards.

All survey participants provided electronic consent for their responses to be publicly available when registering for the U-Report platform. All participants were assured that their decision to participate or not to participate in each poll was voluntary and that their responses were anonymous. In addition, each respondent was asked if they wish to participate in this poll by opting in to this specific survey. Participants were briefed with information about the goal of the study, organizations involved, and intention for use of information collected from the poll.

*Survey*

The domains, questions, and response categories were developed through an iterative process by the Lancet Young Leaders for Global Mental Health, the researchers, and UNICEF specialists, guided by the relevant literature. The survey consisted of four questions with single answer multiple choice responses, covering four domains of participatory engagement: aspirations, engagement spheres, support and training needs, and barriers to engagement. These domains were jointly defined as the most important by the Lancet Young Leaders and the researchers.

Survey questions and response items are presented in Table 1. Response options for aspirations for engagement included core areas of patient and public involvement in mental health identified in the literature and our experience [6,22,23]: participation in awareness projects, provision of peer support, and participation in the development of research, policy, and interventions. Engagement spheres included immediate settings young people spend most of their time [24]: school, home, workplace, online environments, and the community. Response options for support needs and barriers reflected factors highlighted in the general literature around participation [2,17] or reflected in our experience. Namely, support and training needs included classes about mental health, platforms to participate, emotional support, and opportunities to connect with others. Barriers included lack of information about mental health, lack of information about how to get involved, low self-efficacy, and lack of prioritization by young people. "Other" was always included as one of the response options.

In addition to the four key questions, some of the U-Report surveys included 1–2 additional questions at the end of the survey, covering support preferences, perspectives on prioritization of mental health by government leaders, and practical aspects related to the U-Report platform. These questions are beyond the scope of this paper and will not be discussed here. No further questions were included.

All questions were reviewed and approved by the U-Report Steering Committee, which consists of young people and technical experts at global and country levels. The survey was translated and adapted for local context by U-Report at the country level. When available, participants' country, province, and gender information were extracted from U-Report registration information, collected when users first signed up to the platform. No other demographics were available or collected as part of the survey.

**Table 2**
Number of participants per country and age band

|  | Brazil | Burundi | Jamaica | Nigeria | South Africa |
|---|---|---|---|---|---|
| Younger youth (15–19) | 1,891 | 13 | 176 | 2,460 | 1,915 |
| Older youth (20–24) | 246 | 696 | 194 | 11,264 | 3,017 |
| Young adults (25–29) | 97 | 1,512 | 199 | 18,278 | 731 |
| Total | 2,234 | 2,221 | 569 | 32,002 | 5,663 |

### Data analysis

Data were exported from U-Report to Excel and analyzed using R. For descriptive results we used percentage of participants who chose each response option for each of the four domains, at the country level, with plots generated to illustrate response patterns. Given the importance of disaggregation by age in global health programming [25], we also provide country-specific supplementary plots to describe results stratified per age group. For disaggregated age results, we used three 5-year age bands suggested by Kinghorn et al. [25]: 15–19 years old (younger youth), 20–24 years old (older youth), and 25–29 years old (young adults) (Please note that Kinghorn et al. define persons aged 15–19 as "middle adolescents" and 20–24 as "late adolescents," following the expanded definition of adolescence suggested by Sawyer et al. [26]. However, the United Nations understands "adolescents" to include persons aged 10–19 and youth as persons between the ages of 15 and 24 years [19]. To avoid confusion, we use the term youth throughout, differentiating between younger youth (15–19 years old) and older youth (20–24 years old). We also acknowledge that "youth" constitutes a heterogenous group, and that the definition of "youth" varies between countries and cultural settings). Finally, we conducted exploratory analyses to investigate whether differences in responses among the three age groups were statistically significant, using $\chi^2$ test or Fisher's exact test for small cell counts. Bonferroni correction was applied for multiple comparisons. Given the cultural differences among the target countries, we conducted age analysis for each country separately (The number of young adults in the Brazilian sample was too low to allow for inferential analysis; therefore, we merged the categories "older youth" and "young adults." The number of Burundian younger youths was also limited so we merged the categories "younger youth" and "older youth." This applied to exploratory age analyses conducted for these countries and the respective plots presented in Supplementary material. For all remaining countries we used three age brackets).

### Results

#### Participants

A total of 42,689 U-Reporters aged 15–29 completed the survey, across the five target countries. Table 2 provides total numbers of participants per country and per age band (see Figures S1 A–E for age distribution). The majority of respondents were from Nigeria, followed by South Africa, Brazil, Burundi, and Jamaica. The sample included representatives of all provinces in Nigeria, South Africa, Brazil, and Burundi, and 14 of 17 Jamaican provinces (Tables S1–S5). The dataset is available open-source for province-level analysis. Gender information was not available for most U-Reporters; among those who reported their gender (N = 10,296), 42.4% were female, 57.1% male, and 0.5% identified as "other."

There was a gradual dropout throughout the survey (Table S6), hence sample size varied across analyses; 31,371 participants (73.5%) answered all four questions. Dropout rates varied per country and age group (Table S7). Dropouts were lower for younger youths (20.8%) than older youths (28.4%); Brazil had the least dropouts (13.2%) and Jamaica the most (27.2%).

#### Aspirations for engagement and spheres of influence

Figure 1 shows the proportion of participants who chose different aspirations for engagement and spheres of influence, in each of the five target countries. Joining a mental health project or campaign was young people's highest priority in four out of five target countries (ranging from 26.2% in Burundi to 43.8% in Nigeria) and the second highest in South Africa (27%). Other key priorities were providing peer support—particularly for South Africa (35.7%) and Burundi (23.8%)—and improving MHWB services for young people—particularly for Brazil (24.5%) and Jamaica (25%). The least chosen options were helping with research (from 6.9% in Jamaica to 17% in Burundi) and engaging with policymakers (10.9% in Brazil to 14.8% in Burundi).

Across all countries, youth felt they could have the most impact in schools (from 30% in Jamaica to 51.4% in Brazil) and community spaces (from 22.5% in Brazil to 38.7% in Nigeria). Between 60.6% (Jamaica) and 79.3% (South Africa) of all participants selected one of these two options, which were clearly preferred over online settings (5.3%–14%), workplaces (2.4%–5.1%), and the home environment (5.1%–14.2%). Most young people who selected "other" did not further specify; however, among those who did specify the most common answer was "everywhere" followed by places of worship (e.g., mosques, churches).

#### Support needs and barriers to engagement

Figure 2 illustrates support and training needs and perceived barriers to engagement across the five target countries. With regards to support and training needs, classes about mental health (mental health literacy) were the top priority for participants in four out of five countries (from 33% in Jamaica to 45% in Burundi) and the second most chosen option by Nigerian participants (32.5%). Having a platform to share ideas was also a priority need—particularly for Nigerian (34.6%) and Jamaican (26.9%) respondents—as well as support to cope with MHWB needs—especially in Brazil (32.3%) and Burundi (26%). Importantly, only a small minority (between 2% and 5.8% in all countries) considered the provision of support and training for participatory engagement with mental health *not* to be the school's responsibility.

Young people in all countries (from 29.7% in Brazil to 49.8% in Burundi) except Jamaica (19.8%) reported the greatest perceived barrier to engagement to be the lack of information about mental health. For Jamaican participants, the main barrier was the perceived lack of prioritization of mental health by young people, chosen by 31.9% (but between 11.5% and 21.1% in the remaining four countries). The remaining options were chosen by 15.9%–28.8% of participants in all countries.
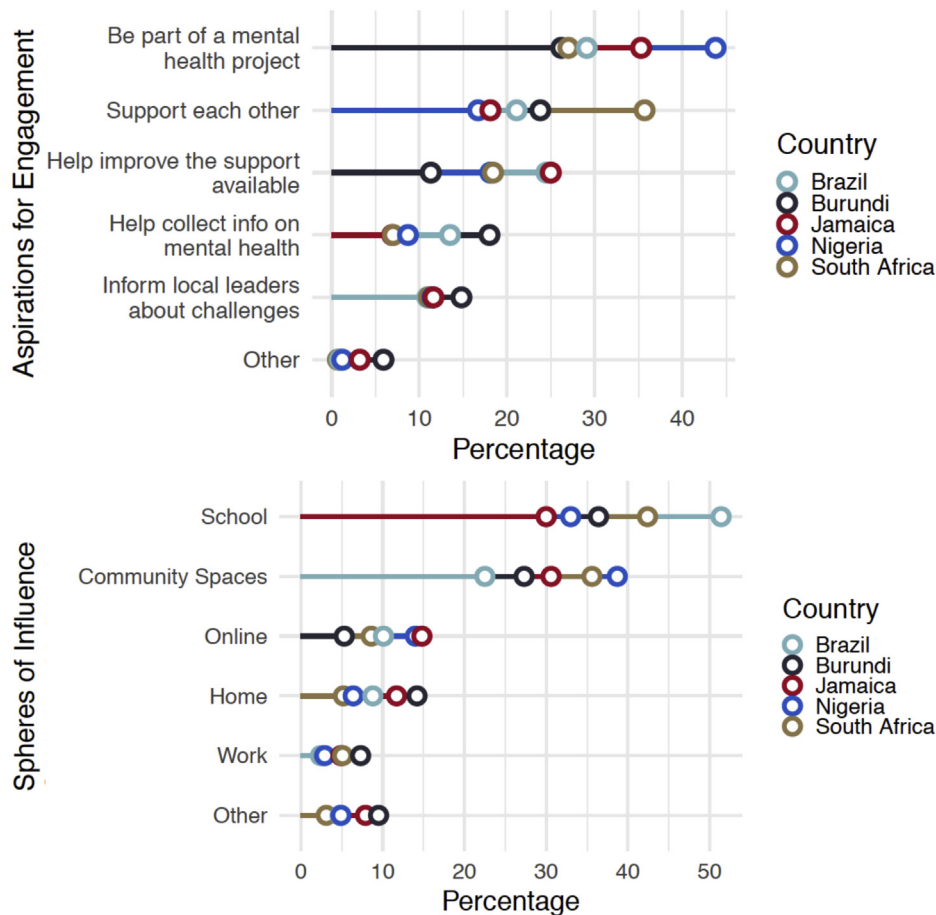
**Figure 1.** Young people's aspirations for engagement and spheres of influence across five LMICs.

*Age differences*

Figure S2A–E presents plots of results stratified per age group, for each country. In all countries, young people's aspirations for engagement, spheres of influence, training needs, and barriers were highly consistent across age groups and followed the same (or closely similar) order of priority. Only a few notable age differences were observed specifically in South Africa and Nigeria (see Table 3 for relevant statistics). With regards to aspirations, younger youths were more likely than older age groups to report aspirations to support each other (SA: 40.1% vs. 35% and 31.2%; NI: 22.6% vs. 18.6% and 14.8%); in contrast, they were less likely than older participants to want to join an awareness project (SA: 24.1% vs. 28.3% and 29.7%; NI: 29.8% vs. 38.5% and 49.0%). Younger youths were more likely than their older counterparts to choose "schools" as a sphere of influence (SA: 48% vs. 40.2% and 37.1%; NI: 39.6% vs. 34.4% and 31.2%). In Nigeria alone, younger youths were less likely to choose "community spaces" as a sphere of influence than older participants (31.3% vs. 36.3% and 41.3%).

With regards to training needs, younger youths were more likely to select "classes about mental health" than young adults (SA: 43.9% vs. 32.2%; NI: 40.5% vs. 30.6%). In contrast, younger youths were less likely than older participants to select "platforms to speak about ideas" (SA: 19.1% vs. 24.8% and 26.9%; NI: 28.1% vs. 33.8% and 36.1%), and in Nigeria alone also "support to

cope" (11.9% vs. 15.8% and 18.8%). Only small (<6%) or nonsignificant differences were observed among age groups in relation to barriers to engagement.

**Discussion**

Through a large-scale survey in five LMICs, this study investigated young people's aspirations for engaging in the promotion of MHWB in their communities, their spheres of influence and impact, their support and training needs, and key barriers to their active participation. Across countries, young people felt that they could make the biggest difference by being part of a larger project to raise awareness about mental health, supporting their peers, and improving youth services. Participants consistently reported that they could have the most impact in their schools and communities, and expressed a clear need for more information and classes on mental health (i.e., mental health literacy). In all countries results were highly consistent across age groups; however, in Nigeria and South Africa, younger youths were more likely than older youths to indicate aspirations to provide peer support, to choose schools as a key sphere of influence and to identify classes about mental health as a priority need.

Young people's desire to participate in the design and implementation of awareness projects and campaigns might be driven by perceptions that mental health awareness is low in the community, which has been documented in many LMICs [27,28].
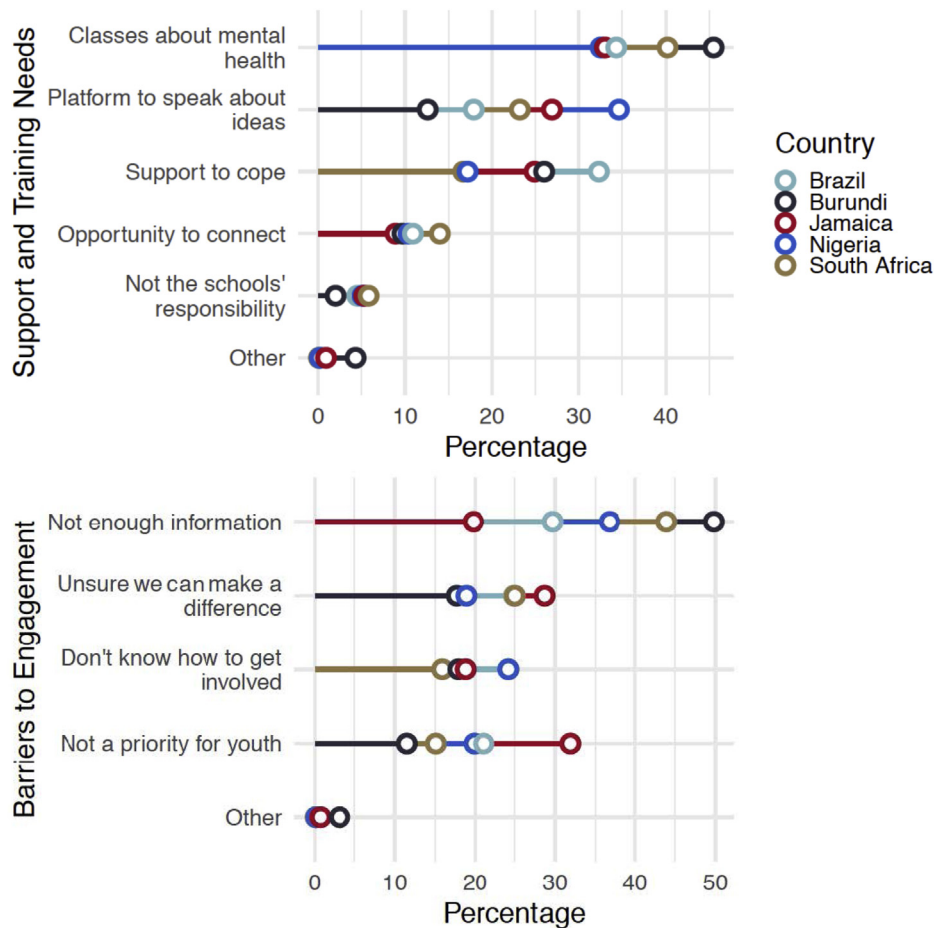
**Figure 2.** Young people's support and training needs and barriers for engagement across five LMICs.

Given the high levels of stigma surrounding mental illness these initiatives are important to increase help-seeking and reduce social exclusion [29]. Peers are a critical resource to youth [30] and horizontal communication by youth with lived experience might be perceived as more relatable, and be more effective in reducing stigma, than messages distributed vertically by adult experts [31]. In Nigeria, where this type of engagement had the highest priority, large-scale youth campaigns are already in place [32]. It is critical that these efforts are financially supported and systematically evaluated for their effectiveness.

Young people's aspirations to provide peer support aligns with emerging task shifting, preventative approaches to address unmet mental health needs in LMICs [33]. Although many MHWB initiatives are highly medicalized, peer support offers a unique, low-resource solution to upscale mental health and psychosocial support [23,34]. Our findings suggest that this solution is likely to have high uptake in South Africa, particularly among 15—19 year olds. A comprehensive peer-to-peer mentoring program around health and wellness in South Africa provides an illustrative example, though accessible primarily through higher education institutions [35]. Strengthening mental health components of peer-based programs and expanding delivery in secondary schools would align with the priorities voiced by young people in this study.

As our survey suggests, schools can be a strategic entry point for participatory engagement initiatives. Projects within community organizations (e.g., community centers, church groups, sports clubs) can also reach vulnerable groups of youth and promote holistic and sustainable change that can be far reaching and equitable [36]. Similarly, increasing evidence from LMICs indicates that student participation, social emotional learning, and dialog in comprehensive school-based programs can promote better health outcomes and mitigate health risks [37]. Our results contribute to this literature, suggesting that young people in LMICs would welcome such initiatives and be motivated to codesign and codeliver these programs. To enable implementation, however, it is important to understand teachers' or other school personnel's perception of whether they can, should, or are equipped to support such efforts, and address potential barriers such as lack of dedicated staff or inadequate infrastructure [38].

Even though workplaces and online settings are increasingly being recognized as important targets of mental health interventions [6], only a minority of participants preferred these settings over community or school, regardless of age. This might be due to high levels of mental health stigma in the workplace [39] but possibly also reflect the high rates of youth unemployment in our target countries [40]. With respect to online settings,

**Table 3**
Preferred engagement spheres, aspirations for engagement, support and training needs, and barriers to engagement among younger youths (15–19), older youths (20–24), and young adults (25–29) in Nigeria and South Africa

| | South Africa | | | Nigeria | | |
|---|---|---|---|---|---|---|
| | 15–19 | 20–24 | 25–29 | 15–19 | 20–24 | 25–29 |
| **Aspirations for engagement** | | | | | | |
| Be part of a mental health project | 24.1[a] | 28.3 | 29.7 | 29.8[a] | 38.5 | 49.0[a] |
| Support each other | 40.1[a] | 35.0 | 31.2 | 22.6[a] | 18.6 | 14.8[a] |
| Help improve the support available | 18.3 | 18.4 | 19.0 | 19.4 | 19.2 | 17.2[a] |
| Help collect info on mental health | 7.0 | 6.9 | 7.7 | 12.8[a] | 9.7 | 7.5[a] |
| Inform local leaders about challenges | 9.7 | 11.8 | 11.9 | 13.9 | 12.7 | 10.4[a] |
| Other | 0.89 | 0.67 | 0.55 | 1.4 | 1.2 | 1.1 |
| | $\chi^2(10) = 34.06$, $p < .001$ | | | $\chi^2(10) = 566.45$, $p < .001$ | | |
| **Spheres of influence** | | | | | | |
| School | 48.0[a] | 40.2 | 37.1 | 39.6[a] | 34.4 | 31.2[a] |
| Community spaces | 32.1 | 36.7 | 40.0 | 31.3[a] | 36.3 | 41.3[a] |
| Online | 8.0 | 9.0 | 8.1 | 13.0 | 14.6 | 13.8 |
| Home | 4.5 | 6.6 | 5.3 | 7.0 | 6.6 | 6.3 |
| Work | 4.2 | 5.1 | 7.3 | 3.2 | 3.1 | 2.8 |
| Other | 3.2 | 3.3 | 2.2 | 5.8 | 5.1 | 4.7 |
| | $\chi^2(10) = 46.89$, $p < .001$ | | | $\chi^2(10) = 144.2$, $p < .001$ | | |
| **Support and training needs** | | | | | | |
| Classes about mental health | 43.9 | 39.9 | 32.2[a] | 40.5[a] | 33.6 | 30.6[a] |
| Platforms to speak about ideas | 19.1[a] | 24.8 | 26.9 | 28.1[a] | 33.8 | 36.1[a] |
| Support to cope | 17.5 | 15.7 | 18.2 | 11.9[a] | 15.8 | 18.8[a] |
| Opportunity to connect | 13.3 | 13.9 | 16.0 | 12.0 | 10.6 | 10.0 |
| Not the school's responsibility | 6.1 | 5.5 | 6.5 | 7.1 | 6.0 | 4.3[a] |
| Other | 0.06 | 0.20 | 0.16 | 0.48 | 0.21 | 0.21 |
| | Fisher's exact test, $p < .002$ | | | Fisher's exact test, $p < .002$ | | |
| **Barriers to engagement** | | | | | | |
| Not enough information | 41.5 | 45.3 | 44.4 | 39.8 | 36.5 | 36.5 |
| Unsure we can make a difference | 26.6 | 25.1 | 20.4 | 22.4 | 20.4 | 17.5[a] |
| Don't know how to get involved | 14.5 | 15.8 | 19.8 | 22.10 | 23.5 | 25.0 |
| Not a priority for youth | 17.1 | 13.8 | 15.3 | 15.4[a] | 19.4 | 20.8 |
| Other | 0.21 | 0.04 | 0.18 | 0.31 | 0.17 | 0.19 |
| | Fisher's exact test, $p < .004$ | | | Fisher's exact test, $p < .002$ | | |

[a] Significantly different from older youth (20–24 year olds), $p < .05$.

significant challenges remain to be addressed including data affordability, privacy concerns (especially with shared devices), and bandwidth quality [41]. Future research should map ethical concerns and barriers that might impede scalable youth engagement across these spheres. Mapping ethical concerns around online initiatives, in particular, is urgently needed given the current COVID-19 pandemic and increased need for remote engagement [42].

Consistent with what has been previously described as barriers in accessing MHWB support [43], young people indicated lack of information about mental health as a significant barrier to their active participation in promoting MHWB. Participants' desire for mental health education in schools is aligned with long-standing recommendations by researchers and international organizations [37,44–46]. In Jamaica, where the stigma of mental illness is particularly high [47], the lack of prioritization by young people was seen as a key challenge. To be empowered as agents of change, young people must be provided with the appropriate set of skills and knowledge as well as sensitization to their civic responsibilities [2,16]. Engagement of young people in MHWB initiatives requires capacity building at differing levels. Participation in mental health research, for instance, might require basic training in research methods while provision of peer support might require training in skills such as active listening and psychological first aid. Investing in building the capacity of young people is an important pathway to scaling young people's participation in promoting MHWB.

### Limitations

The findings should be considered within the limitations of this study. Survey participation was restricted to those registered on the U-Report platform, who were possibly already motivated by civic engagement values. Even though the sample covered most or all provinces in each country, we did not use a probability sample and the survey only targeted particular countries in Africa and Latin America. Sample size markedly differed across countries, possibly due to differences in the number of registered U-Reporters. For instance, Nigeria has 3.5 million registered U-Reporters whereas Brazil has 89.9 thousand. Therefore, while our results offer initial insights, the responses may not accurately reflect the perspectives of the whole youth population in these countries or other LMICs.

Although we received substantial input from youth and experts to ensure relevant response options, the nature of the survey implies that results are restricted to the options provided. There might be several other ways young people would like to be engaged in promoting mental health. Critically, our items did not include youth involvement in addressing social, structural, and economic problems that are important determinants of mental health in LMICs (e.g., poverty, political instability). Similarly, there might be many further barriers or needs that we failed to capture. For example, mental health stigma and adults' negative attitudes toward youth participation might be relevant barriers to explore in future research [2,6].

Further in-depth research using mixed methods should be conducted in local settings to investigate additional needs and barriers, and explore aspirations for involvement in promoting radical change to address social determinants of mental health. It is also important to involve young people without access to computers/smartphones or the Internet, who we were not able to reach via U-Report. Given that participatory engagement requires a reciprocal commitment from decision-makers [15], this research must be supplemented by data on the needs and priorities of policymakers, educators, service providers, researchers, and other relevant stakeholders. Finally, we recommend that these research efforts authentically engage local youth through advisory groups and coalitions and/or youth-led participatory action research.

We only conducted exploratory analyses to investigate age differences in responses. Even though young people's general priorities were largely consistent across age groups, it was possible to detect a few differences in countries with large sample sizes (South Africa and Nigeria). To explore this further, future research should explicitly sample participants from different age groups or follow youth longitudinally, allowing sufficient statistical power to detect age effects. It would also be important to explore how young people's aspirations, spheres of influence, barriers, and training needs intersect with other characteristics such as socioeconomic background and lived experience of mental health challenges.

### Conclusion

Young people's participatory engagement is increasingly recognized as critical in developing effective and relevant MHWB programs, and promoting MHWB [6,8]. Through UNICEF's U-Report platform, we were able to rapidly capture engagement priorities from a cohort of over 40,000 young people in LMICs. Young people indicated aspirations to join mental health awareness projects, improve services, and provide peer support, in the school or community. A clear and actionable barrier to participation (lack of information about mental health) was identified. Although this method of surveying is not without limitations, these findings can inform the design of strategies for participatory engagement in MHWB by global and local organizations. By recognizing young people as agents of change in the promotion of MHWB, and providing opportunities for meaningful participation, we can develop innovative yet feasible solutions to one of the most pressing developmental goals of our time.

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### Supplementary Data

Supplementary data related to this article can be found at https://doi.org/10.1016/j.jadohealth.2021.10.037 and the dataset is available at https://osf.io/py5hn/?view_only=8aef188 f241242639355e47fc2ccff33.

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