Social Art for Behaviour Change (SABC): Promoting WASH in Mali

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Executive Summary

Because of ongoing conflict, political instability, and widespread poverty, people in Mali face significant challenges in getting access to safe drinking water and sanitation services. To help, WaterAid Canada and the One Drop Foundation formed an international partnership with communities to launch the Ji Ni Beseya (JNB) project (also known as the Mali: Healthy Communities project) which ran from 2016 to 2020 in 45 villages in nine rural communes within the Kati and Bla districts in the Koulikoro and Ségou Regions respectively. We examine the factors that led to the successful implementation of water, sanitation, and hygiene (WASH) infrastructure in two communities. We also outline how the use of One Drop’s Social Art for Behaviour Change™ (SABC) approach (which leverages contextually and culturally relevant arts-based activities that are created by and for the priority community) led to sustainable healthy hygiene habits. By investigating how JNB’s dual focus on generating positive health impacts (through improved water and sanitation access) and social impacts (through locally informed, culturally relevant, art-based health-promotion initiatives), we provide insights into how combining WASH and SABC™ approaches can support sustainable development and community resilience.
The Hardest to Reach in Mali

A land-locked nation located in West Africa, Mali is one of the world’s 25 poorest countries, with nearly 45 per cent of its population living below the national poverty line. The economy is largely dependent on gold mining and agricultural exports which produce an annual gross domestic product of about USD 850 per person. The low economic output has worsened during the past decade of political instability, fraudulent elections, and military coups, which has undermined its government’s capacity to address serious issues like access to clean water and sanitation.

Less than 30 per cent of schools have usable and separate toilets for boys and girls.1 Over 1 million people are estimated to still practise open-air defecation — a practice that directly affects health, dignity, and the safety of communities. Although urban areas have experienced improvements in access to drinking water, rural areas still have limited access to water, sanitation, and hygiene (WASH) infrastructure.2

In Mali, common hand-washing practices are problematic — people typically pass around one bucket of water for adults to wash their hands first followed by the children. However, using the same contaminated water to wash hands without soap actually exacerbates fecal-oral transmission. More than 3.7 million people — most of whom live in rural communities — have to collect and use dirty water that leads to illness, and in some situations, death. As in other countries near the equator, during the rainy season there are the most water-borne and sanitation-related illnesses. This is usually when the household food stores are depleted and there is a higher grain price prior to harvest season. However, it is also when there are higher energy expenditures because people need to spend more time farming and preparing for the harvest. Malnutrition further compromises the immune system and makes people more susceptible to disease.

There is also a problem with knowledge dissemination: 29 per cent of people in a study in Mali reported that they did not wash their hands because they lacked an understanding of its importance.3 Over 4,000 children under the age of five needlessly die every year as a result of lacking WASH services, underscoring the urgency for effective and scalable WASH interventions and infrastructure improvement in the country.4

The Ji Ni Beseya (JNB) project specifically focuses on aiding the 60,877 vulnerable people who reside in the rural districts of Kati and Bla.5 These districts are about 300 kilometres east of the capital, Bamako. The populations of Kati and Bla can be classified as hard to reach because seven in ten people there lack access to proper toilets and about half of them do not have access to clean water.6 These places were chosen because WaterAid had experience with interventions in this area and were familiar with the rate of water access and open defecation, hygiene knowledge and practice, and the level of investment and planning needed.

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1 “Sanitation Services in Schools,” JMP.
4 “Mali,” WaterAid.
6 “Our History,” WaterAid.
The Importance of WASH and WASH Initiatives

Water, sanitation, and hygiene (WASH) initiatives and infrastructure are vital to providing access to safe drinking water and deterring the spread of infection and disease, especially in low and middle-income countries (LMICs). Such infrastructure includes points that are improved water sources like piped water, protected springs or dug wells, or rainwater systems. Other infrastructure consists of latrines, incinerators for biomedical waste, water and sewage treatment facilities, hygiene kits, and functional hand-washing devices such as taps. Without adequate infrastructure, infections like sepsis (which accounts for 430,000 annual newborn deaths) are 34 times more likely in incidence. Adequate hand hygiene may deter 1.3 million annual deaths caused by acute respiratory infections and diarrhea, and hand hygiene can reduce diarrhea by 47 per cent in children worldwide.

Specifically in Mali, diarrhea can lead to 759,000 DALYs in children 14 and under. (DALY refers to disability-adjusted life year which is the loss of the equivalent of one year of full health.) In cases where immediate implementation of more complex WASH infrastructure is not possible because of cost, hand washing alone can help reduce the disease burden to prevent fatalities. Unfortunately, in regions with already poor WASH infrastructure, hand hygiene levels are extremely low with less than one-third of people (3 to 29 per cent) handwashing with soap in Kenya, Senegal, Uganda, and Tanzania. Such communities may have a lower likelihood of handwashing because they prioritize the use of soap for other essential household chores such as laundry or dishes.

In response to these issues, the Ji Ni Beseya (JNB) project, (also referred to as the Mali: Healthy Communities Project), was created through an international partnership between WaterAid Canada, WaterAid Mali, One Drop Foundation, and Centre Culturel Kôrô (CCK) to mobilize social art to influence behaviour change and instill long-term healthy hygiene habits. This initiative addresses the UN Sustainable Development Goals 3 (good health and well-being), 5 (gender equality), 6 (clean water and sanitation), 8 (decent work and economic growth), 9 (industry, innovation, and infrastructure), and 11 (sustainable cities and communities).

7 Sow and Ngongi, “Ji Ni Beseya Bla and Kati Circles in Mali.”
8 “Water, Sanitation, and Hygiene in Health Care Facilities: Practical Steps to Achieve Universal Access to Quality Care,” WHO and UNICEF.
9 Naughton, “Assessing Appropriate Technology Handwashing Stations in Mali.”
10 Ibid.
WASH and Behaviour Change

Many WASH interventions do not succeed for a variety of reasons, including a lack of focus on fostering long-term behaviour change. For example, utilizing the 2015 Nigeria National Water and Sanitation Survey, Andres and colleagues found that there was inadequate long-term maintenance of the installed WASH infrastructure, low community participation, and insufficient collaboration and communication between all the stakeholders and partners.\(^{11}\) Interventions that contextualize the interrelated social and cultural beliefs and gender norms may better tailor interventions to target populations because traditional beliefs often influence gendered use of water and handwashing, especially for women and girls who are often responsible for water use and management for cooking, washing, drinking, cultural traditions, and rituals. For example, some Kenyan communities believe that water purifies bad luck or that carrying water prevents bad omens in children. There are also taboos around latrine usage such as what time of day they can be used and by which family members — transgressing these taboos can lead to curses.\(^{12}\) In Senegal, some believe that soap usage during a spiritual cleansing for prayer would remove its purity.\(^{13}\)

Sometimes washing with soap is considered taboo because it’s believed to affect livestock-rearing abilities, a pivotal skill for income and social status, for example, among the people of Kisumu county in Kenya.\(^{14}\) Interventions can improve their reach and uptake by recognizing the context and needs of specific subgroups like women, whose menstrual hygiene needs are often neglected in WASH programs,\(^{15}\) as well as hard-to-reach communities like day labourers, who have less exposure to handwashing technology like access to soap and taps, interventions, and community social dynamics. Day labourers are often away and thus have less access to important community hygiene messaging or could be victims of crime, having hygiene products stolen from them.\(^{16}\)

Health-Promotion Models

Health-promotion theories like social cognition models often form the foundation of WASH interventions to promote health behaviour change by prioritizing individual and group norms, motivation, goal-setting, implementation intentions, and stages of change.\(^{17}\) Social and emotional drivers are important targets for WASH initiatives since hygiene behaviours are often acquired through family and community

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\(^{14}\) Wasonga, Okowa, and Kioli, “Sociocultural Determinants to Adoption of Safe Water, Sanitation, and Hygiene Practices.”


\(^{17}\) Derek Rutter and Lyn Quine, eds., Changing Health Behaviour: Intervention and Research with Social Cognition Models (Berkshire, UK: Open University Press, 2008).
norms and societal customs. People’s emotional motivations to engage in WASH behaviours can include the desire to feel clean, pride, maintain a social status image on culturally important days, and avoid illness and disgust. For example, role-model posters, video campaigns, and marketing by theatre troupes in the community as well as school-based events generated disgust in a campaign that led to improved handwashing behaviours sustained for 12 months by men, women, and children in Chittoor, India.

These emotional drivers can interact with personal factors such as privacy, individual perceptions on whether water sanitation infrastructure is convenient, and individual perceptions of hygiene as a social responsibility that affects family and community health. Leveraging social pressure and conformity can therefore be a tool in promoting WASH behaviours. Another health-promotion tactic is televised social-marketing campaigns, such as programs about germs or commercials that highlight the benefits of hygiene practices using humour and disgust as a motivation factor. They typically employ a planned behaviour approach to shift subjective norms, beliefs, and attitudes in the general population. However, prioritizing social norms alone limits the efficacy of behaviour change.

Hygiene promotion that does not consider context, material resources, and structural factors hampers the scale and longevity of behaviour change. For instance, despite acceptance of a televised social marketing campaign, communities face significant barriers like the high cost of toilet paper, facial tissues, and soap in remote communities, and access to communication technologies. Studies have found that combined interventions (social and structural interventions) had more significant changes than with social WASH education alone, since participants often had knowledge or intentions but lacked access to water and soap to sustain the behaviour change post-intervention. Similarly, a review by Dreibelbis and colleagues synthesized the Integrated Behavioural Model for WASH that focuses on the contextual, psychosocial, and technological dimensions. The contextual part represents the individual background and environment, the psychosocial aspect concerns the behavioural and social determinants, and the technological dimension consists of the infrastructure and products needed to facilitate the intervention. They found that many WASH-specific theoretical models in low-resourced settings emphasize individual-level behavioural factors without considering the ecological or structural factors, such as how time spent for agriculture can interfere with the capacity for engaging in proper hygiene behaviours like household water treatment, and reported poor outcomes for habit formation.

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22 Ibid.
Other WASH Obstacles

WASH interventions can be limited by structural barriers like the high cost of constructing latrines, lack of soap provision to communities during interventions, poverty or low socioeconomic status, poor maintenance of handwashing stations, lack of soap supply, and soap’s unaffordable price. In emergency settings, survival needs often supersede hygiene practices like handwashing behaviours. This underscores the need for WASH interventions to move beyond education alone to promote long-term change and also to consider the local context. Because 42 per cent of healthcare facilities in Africa do not have clean water near them or on location, there is a great need for high-impact WASH interventions in this region.25

The Intervention: Ji Ni Beseya

From 2016 to 2020, WaterAid and the One Drop Foundation collaboratively led a project in Mali called Ji Ni Beseya (JNB) to increase access to WASH infrastructure, reduce water contamination, and improve local health conditions across 45 villages in nine rural communities within the Kati and Bla districts in the Koulikoro and Ségou regions respectively. In Kati, the communities are Bossofala, Dio-Gare, Dialakorodji and Kati. In Bla, the communities are Diena, Samabogo, Falo, Bla and Dogouwolo.26 Together the organizations leveraged local culture and partnerships with communities, nongovernmental organizations (NGOs), arts groups, and government agencies within the region. This strengthened local

capacity and supported the long-term adoption of WASH behaviours and management of WASH-related infrastructure.

When it comes to improving hygiene and sanitation, providing hard infrastructure like taps and toilets is not enough. Promoting healthy behaviours requires applying culture as a conduit for creating widespread change in the community. Mobilizing culture in this way is important for behaviour change because in order for health-promotion strategies to resonate with a community they should be culturally or contextually specific. Malian culture is integrally tied to the arts and traditional ways of storytelling to share both ancestral knowledge and contemporary discourses. Therefore, to deliver the social art used for their hygiene and sanitation campaigns, a partnership with the Centre Culturel Kôrê (CCK), an arts and cultural centre based in Ségou, Mali, was integral to JNB’s success.

Core Partners

WATERAID

Founded in 1981, WaterAid is an international NGO and the world’s largest civil society organization focused on WASH, specifically in poor communities. With current satellite operations in 34 countries and five continents, they establish WASH infrastructure and promote safe hygiene practices through local, governmental, and corporate campaigns, partnerships, and fundraising. Central to WaterAid’s work is its three-pronged approach: (1) promoting good governance by encouraging the development of local government policy to increase WASH services for vulnerable populations, (2) improving good hygiene practices to reduce deadly disease transmission, and (3) working with governments and service providers to promote social and economic equality, fairness, and productivity.

ONE DROP FOUNDATION

The One Drop Foundation, a Montreal-based nonprofit organization, promotes WASH by coordinating social arts-based interventions with communities across 12 countries in the Americas, Asia, and Africa, particularly interventions for women, girls, and youth. Given the founder’s artistic roots with Cirque du Soleil, their unique art-based approaches are integral to their Social Art for Behaviour Change™ Approach that guides their ABC for Sustainability Model™. The One Drop Foundation promotes a participatory approach to cater its arts interventions, community-engagement strategies, and local implementing partners to the local community’s context, demographics, and needs.

CENTRE CULTUREL KÔRÊ (CCK)

Founded in 2011, CCK provides capacity-building opportunities for artists and artisans to support local communities’ economic and social development. Their work involves four key components: arts and education (for artists and artisans through their partnership with Institut Kôrê des Arts et Métiers —IKAM), a resource centre (where they conduct research through their Kôrê media library), production and sharing of cultural works (through performance, visual, and multimedia exhibitions), and heritage preservation and promotion.

Additional Project Partners

The project also collaborated with several other local NGOs and pre-existing community groups such as Association Malienne pour la Sauvegarde du Bien Etre Familial (AMASBIF), Association Pour la Promotion de la Femme et de l’Enfant (APROFEM), Association Libre pour la Promotion de l’Habitat et du Logement (ALPHALOG), and Services de Développement Intégrées (SDI). Other community groups, such as Coalition Nationale pour l’Eau Potable, Hygiène et
Assainissement (CAEPHA), the Troupe Djonkala, and cooperatives were formed from various JNB-related activities.

The Ideas Behind the One Drop Foundation’s Work

In interviews, participants from the One Drop Foundation explained the key frameworks they have developed that guide their work and the implementation of Ji Ni Beseya: the ABC for Sustainability Model™, the SABC Approach™ (and the guiding Inspire, Activate, and Sustain framework), which are all informed by the Transtheoretical Model (TTM). Together these models explain how behavioural change works and the critical role that art can play in helping groups not only learn new behaviours but also adopt them as their own.

The ABC for Sustainability Model™

The ABC for Sustainability Model™ is premised on the idea that creative interventions that foster local empowerment support the sustainable adoption of WASH principles and services. The model is a holistic approach to improving WASH by increasing Access, Behaviour Change, and Capital. While our case study primarily focuses on behaviour or component B of the framework, the remaining A and C pillars of the model are essential to understanding how to best leverage the arts/cultural knowledge when designing and implementing WASH interventions.

Access refers to the improved access to WASH infrastructure (such as toilets, waste incinerators, taps, water filters, hygiene kits, etc.) and the establishment of local governance mechanisms (e.g., tariffs, sanitation committees, and other community-monitoring systems) that ensure its long-term maintenance.

Project stakeholders told us that when it comes to adopting healthy WASH behaviours, providing access and changing behaviours is not enough. Often, insufficient access to financial resources and long-term infrastructure impede adopting WASH behaviours since funds are necessary to purchase, maintain, and/or repair services (e.g., water) and commodities (e.g., soap).

Accordingly, capital refers to funding local entrepreneurship and manufacturing to generate economic growth to maintain WASH services and resources in the long term. In JNB, microcredit activities for women and youth included producing soap and creating shea butter co-operatives to support the viability of WASH-related behaviour, encouraging women to generate income for themselves, and supporting female empowerment and independence. Component C is therefore a two-pronged approach that focuses not only on providing and generating financial capital (to fund entrepreneurship opportunities) but also on boosting human capital (through capacity-building entrepreneurship opportunities).

About Behaviour Change

At the core of behaviour change is the One Drop Foundation’s unique SABC™ Approach to development, which promotes social art interventions to encourage healthy behaviours in communities. Effective behaviour change stems from integration with local communities’ social norms and culture to encourage sustainable maintenance and use.

To implement the B of the ABC Sustainability Model™, the One Drop Foundation and WaterAid leaned on CCK’s socio-cultural knowledge and relationships with local artists and community members to develop programming and engage and train local arts facilitators and creatives who can lead and co-create artistic interventions within the community.
The SABC™ Approach

Social arts are arts-based activities that are created by and for the priority community. Such activities require an iterative and interactive process of community participation to develop creative pieces (such as musical performances, murals, and puppet shows) that foster agency among local community members. The collaboration between the community and the artists is key. The artist facilitates dialogue, aggregates community knowledge, and co-creates the creative piece that highlights the public message that emerged from this process in a way that best resonates with the locals.

Within the WASH sector, social arts are especially impactful since they can foster trust, confidence, and a sense of belonging among community members, while also imparting more tangible and transferable arts-based skills. Beyond knowledge and skills, the SABC Approach™ ultimately reinforces positive emotions to generate reflexive thinking and behaviour change. This contrasts with conventional community-led total sanitation projects that focus on targeting negative emotions of shame and disgust to encourage behaviour change.

THE TRANSTHEORETICAL MODEL (TTM): THE CORE OF BEHAVIOUR CHANGE

Health behaviour change occurs in six stages in the Transtheoretical Model (TTM).

• Pre-intention. There is a lack of awareness of the target problem.
• Intention. There is an awareness of the target problem.
• Preparation. The community outlines the steps required to address the problem.
• Action. The community takes steps to address the problem.
• Maintenance. The actions and behaviours that helped solve the problem are now embedded within the social norms and consciousness.
• Termination. The new behaviours have been adopted and become the new norm.²⁷

SABC’s™ Inspire, Activate, Sustain Framework

This co-designed artistic process prioritizes the community’s specific culture, needs, and desires throughout interventions to inspire, activate, and sustain healthy WASH behaviours.

Inspire. The One Drop Foundation understands that behaviour change is not a linear but an iterative process in which communities are prone to relapse. Changing behaviours takes time and requires a great deal of care and research. Once a community can identify what psychosocial barriers impede the adoption of WASH behaviours they can then apply the appropriate strategies to best target them.

The “inspire” stage of a social arts intervention prioritizes the pre-intention and intention stages of the behaviour change process and ensures that the desire to change stems from the community and is not a decision imposed upon its members from outside. Debates convene different demographics within a community (e.g., women, children, seniors, etc.) to engage with the artists, the art, and most importantly one another to discuss collective interpretations and understandings about the produced creative pieces and the WASH behaviours that inspired them.

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Activate. Segmenting the population in this way allows social arts interventions to be tailored to locals’ needs. This way, priority groups can determine the art medium applied, guide the hired artists’ facilitation role, and inform the final art pieces in different settings. For example, if a community needs more support with menstrual hygiene management, then the interventions might focus on women and girls as their priority population, but if the barrier identified by the community is a social norm or belief held by men and boys, then alternatively the intervention might be focused toward this priority population. Within a community, the priority groups can also vary and be further segmented (e.g., school-aged girls).

Sustain. Providing arts-based visual and auditory reminders are the final stage of the behaviour change spectrum to reduce relapse and ensure that the community maintains the learned healthy behaviours. This is achieved through community capacity building — previous WASH workshop participants now have the skills to promote the importance of healthy WASH behaviours to other community members and become leaders of change within their community. This was also achieved by ensuring that reminders are easily and publicly accessible (e.g., murals, dances, poetry, radio shows, books) and disseminated in artistic mediums that resonate most with the community.
Leveraging Arts for Behaviour Change

JNB is not solely focused on implementing WASH infrastructure but also supports sustainable behaviours driven by community initiatives. To implement all components of the ABC for Sustainability Model™, it leverages culture and arts to transcend social barriers. It also collaborates on capacity-building opportunities with the community and different stakeholders throughout the different stages of implementation. These are the steps JNB took to implement behaviour change with the key partner, CCK.

1. **CONDUCT BACKGROUND RESEARCH ON THE COMMUNITY CONTEXT.**

   Years in advance, a needs assessment and formative background research was conducted on the region and its community to identify the optimal location to launch a project, its priority groups, and feasible community partners to build relationships with. For JNB some key local actors included elected officials and craftsmen.

2. **COLLABORATE WITH LOCAL ARTS ORGANIZATIONS.**

   The One Drop Foundation and WaterAid identified CCK as their lead local arts organization to lead component B of the project. CCK leverages their contextual knowledge of the community, the cultural landscape, and relationships to recruit skilled artists to facilitate the social arts-based interventions according to the community’s needs and preferences. For this component to be successful in the long term, the relationship needs to be mutually beneficial. For example, thanks to their collaboration at the end of JNB, CCK grew their organizational capacity to execute more complex projects that benefitted their organizational needs and their stakeholders (i.e., local artists like the Troupe Djonkala). Their current status as the lead arts organization on the Beseya Blon project, the follow-up project to Ji Ni Beseya, underscores this.

3. **LOCAL ARTS ORGANIZATION BUILDS CAPACITY OF LOCAL ARTISTS.**

   CCK’s creative interventions required accessing existing artist collectives in Kati (12 artists total), and developing a new collective of artists, known as the Troupe Djonkala, who conducted art activities in Bla alongside another pre-existing acting group (10 artists total). Both groups required CCK’s training on facilitation skills, how to improve their craft, and professionalization so that these artists could leverage new skills to pursue future work opportunities. Since JNB’s completion,

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**GENDER**

The JNB project supported gender equality and women’s empowerment by creating women’s user committees and including women leaders as key priority groups for artistic workshops. Involving women in WASH interventions is crucial because female hygiene is a stigmatized or taboo subject in Mali, where there are limited spaces exclusively for women. The capital aspect of the JNB project in particular (which was not our focus) also supported women’s economic empowerment since it allowed for the creation of women’s co-operative groups and supported their involvement within entrepreneurship and income-generating activities. Ultimately, this has helped to address the unique water insecurity and gender dynamics that women face and improved their decision-making power and leadership capacity at both the household and the community level.
Troupe Djonkala’s continued performances in the region demonstrate this success.

4. ARTISTS COLLABORATE WITH THE COMMUNITY TO DEVELOP ARTS-BASED INTERVENTION.

Troupe Djonkala and CCK worked with the community to craft the various interventions that took any one of three formats: performance based (i.e., theatre), visual based (i.e., comic books), and radio based. The art pieces can be found in schools, health centres, and public spaces. This combination of arts mediums and locations ensures that the targeted message is heard by the community in different ways, but is always determined by the community members themselves.

The Intervention’s Impact

According to respondents, the project’s main objective — increasing access to water and sanitation resources for community members of Kati and Bla — was achieved. From data collected from a mid-term and final project evaluation, they observed an 8-point increase in the number of households using both improved water and sanitation infrastructure, a 79-point and 41-point increase in the rate of waterworks and sanitation facilities that remained functioning for at least one year, a 36-point increase in the number of households that maintain three adequate WASH practices, and a 100-point increase in the number of villages that maintain a “no open air defecation” status.\(^{28}\)

Community-led financing mechanisms ensure WASH projects’ long-term viability

The tariffs and income-generating opportunities (such as the production of soap, shea butter, and vegetables) were financial mechanisms to sustain and safeguard the water infrastructure in the long run. One respondent from the One Drop Foundation told us that the method of tariff collection that the community decided upon (tariffs were collected by the local water management committee) fosters a sense of ownership and ensures that there are funds available for infrastructure maintenance and repair in the inevitable case of damage.

This is supported by work that the World Bank and UNICEF completed which found that tariffs are the most sustainable source of funding and should, at minimum, recover the operations and maintenance costs. Tariffs that do not recover operations and maintenance costs have been shown to lead to the deterioration of service: reduced maintenance shortens the infrastructure’s lifespan.\(^ {29}\)

The increased capital had far-reaching value within the communities. The capital generated led to lower costs of medication for women who give birth in healthcare facilities. Normally, pregnant women are immediately given costly antibiotics to combat potentially harmful bacteria in the clinic. With the integration of WASH practices, clinics are able to reduce the risk of infection for patients and therefore lower the cost associated with the pregnancies.


Social arts interventions enable discussion around WASH-related taboo topics and sociocultural norms

Prior to implementing the JNB project, WaterAid and the One Drop Foundation conducted a needs assessment and evaluation of the cultural landscape to identify the community norms and cater the intervention to the local context. The artistic elements, such as visual murals, plays, and performances, initiated community dialogue around topics that were conventionally taboo (e.g., menstruation). As one interview respondent described, this was culturally appropriate since art was historically a method to educate the population and make socio-political commentary in Mali. Providing social art and entertainment provided an accessible medium to share messages about good practices and reach communities who may have limited exposure to handwashing’s significance.

Unlike conventional community-led total sanitation which targets shame and disgust to incite an emotional/behavioural response, this intervention applied the One Drop Foundation’s SABC’s™ Inspire, Activate, and Sustain framework as the primary mechanism. By gathering community members in a discussion at the conclusion of every artistic showcase, they leverage the power of public debate and encourage critical analysis of the art piece to share the lessons and insights with the community (i.e., the “inspire” stage). The JNB project also activated behaviour change by involving three priority groups: school children, parents in the household, and community members where the entire family visits and then activities are co-created based on participants’ needs and preferences (i.e., the “activate” stage). Finally, the “sustain” stage of the framework ensured that the healthy behaviour was adopted over the long term while including mechanisms to address relapse. Reminders provided in the form of performance pieces (and recordings of them) co-created throughout the project ensured effective knowledge translation, accessible dissemination, and relationship building. It also broke down socio-cultural barriers. Community-engaged art is more powerful than individual one-on-one art interventions.

Improving hard infrastructure requires strengthening soft infrastructure

Whereas hard infrastructure refers to physical structures like pipelines and roads, soft infrastructure refers to the institutions required to maintain the economic, health, cultural, and social standards of a population. According to the UN Children’s Fund (UNICEF), countless interventions have attempted and failed to develop sustainable WASH infrastructure in communities that would benefit from such interventions (approximately 30 to 50 per cent fail within two to five years) because they prioritize the implementation of hard infrastructure and forget to cultivate the relationships, partnerships, and governance structures required for long-term success.30

Respondents explained that washing stations are routinely put in place within communities, but local uptake was low. Weak interventions aimed at affecting behaviour change (such as placing posters around the communities promoting WASH practices) do very little. As one respondent put it, “knowledge and information is not enough. Behaviour change happens when you reach the emotions of the community.” One interviewee suggested that the SABC™ strategy, which prioritizes the community members’ emotions by understanding their barriers and drivers, will lead to the desired behaviour change.

Beyond working with local community members, the JNB project reached out to healthcare institutions to involve the doctors, nurses, hospital janitorial staff in various managerial levels so that community members could see that their own neighbours were helping to facilitate the intervention. Recruiting healthcare workers was also successful in integrating men and women in different levels of the institutional hierarchy.

**Centring community roles in partnerships facilitates sustainable WASH interventions**

A notable impact of the JNB project was that a network of community partnerships was created to build the collective capacity and reach of the WASH project. As a respected and trusted organization in Mali, WaterAid led the technical water infrastructure and mobilized partnerships with five other community-based organizations such as APROFEM to support the implementation of various project components. Meanwhile, CCK was in charge of the behavioural component by selecting, supervising, and training artists. The selection of local artists was based on leadership, locality, mastery, influence, intelligence, ability to mobilize, and community connection.

Establishing WASH committees and women’s co-operatives were other crucial ways to promote community-led interventions, maintenance of infrastructure, and creation of income-generating activities. These partnerships’ holistic socio-ecological approach integrates the community at all stages of the project and the ABC for Sustainability Model™ and aligns with broader governance initiatives in the region. A One Drop Foundation respondent noted that all interventions were developed according to priorities outlined by the municipalities of Kati and Bla’s five-year development plan and follow-up visits were conducted by the One Drop Foundation to determine the degree of community engagement. In contrast to other larger NGOs in the area that had never fostered long-term collaborative partnerships, the relationships developed among community members and between project partners as a part of JNB demonstrate a key impact of the project.

These partnerships aim to break down silos and involve ministries and local communities from the beginning and throughout the project, rather than at the end. For example, prior to engaging the community, the artists participate in two- to three-day planning sessions with staff from all levels to build rapport and bond over dance, music, and acting. CCK’s open space venue is designed to host shared meals and community events, and fosters a comfortable environment that rewards people for their time and participation throughout the process. Partnerships with local government officials were also critical to implementing this work.

**Engagement in rural versus urban communities requires different strategies**

JNB focused on two Malian communities: the urban community of Kati and the rural commune of Bla. While the project was successful in implementing sustainable WASH infrastructure in these two communities, each experienced different outcomes. Respondents mentioned notable differences in the uptake. For example, the healthcare clinics in Bla, but not in Kati, were committed to the JNB project and its success. Their rationale for this discrepancy stems from how management in urban communities is typically overloaded with wide-ranging tasks, leaving limited capacity for new projects. With limited staff to spare, the priorities of the urban healthcare clinics shifted to higher-priority issues.

One participant explained that while the hospital systems varied in their commitment to ensuring the JNB project’s success, uptake at the level of the community members also varied across...
urban and rural districts. Kati is located close to the capital, Bamako, whereas Bla is further away. As a result, a large number of interventions have been brought into the urban district of Kati, while a much more limited number of interventions have been introduced in Bla. According to people we spoke with, the significantly higher number of interventions taking place in Kati led community members to assume that the failure of a particular intervention would simply be replaced by a new intervention. In contrast, another interviewee explained that given the limited interventions occurring in the rural community of Bla, the novelty of the JNB project was salient to community members and led to increased participation.

Lessons Learned

Good Research: The Foundation of a Sustainable Arts-Based WASH Intervention

Background research is essential to ensuring that social arts programming is technologically, psychologically, and contextually relevant. These programming processes are expensive, time consuming, and resource intensive because they require technical assistance for delivery, evaluation, logistical planning, and management. JNB devoted many resources to triangulating information between focus groups and other sources to identify the community’s needs. A lot of time was also spent prior to implementing any programming: the first year of the project was focused on testing and building the working relationship between the different agencies and project staff. As a result, similar projects would need to ensure that they have adequate time, funding, and resources for the situational analysis and gather all the available evidence prior to the intervention.

Socioeconomic and Political Instability Impedes the Long-Term Adoption of WASH Behaviours

One major hurdle for communities to adopt WASH interventions involves the barriers that impede behaviours. It’s not true that people are unaware or uninformed of their unhealthy WASH behaviours — they often don’t have access to resources that allow them to adopt the desired changes. One respondent from the One Drop Foundation mentioned how the protracted socioeconomic and political instability in Mali affected the project’s activities and outcomes. Economic sanctions, for instance, affected revenue streams for the most vulnerable populations.

Without the resources provided through the JNB project, community members might have prioritized other factors in their lives, leading to an inability to maintain their desired behaviours. When thinking about the sustainability of WASH behaviours in Mali, leaders of interventions must first diagnose the observed barriers and identify the broader obstacles and socioeconomic and political context. This underscores the importance of capital in the SABC™ framework since capital or the lack of it led to procurement and time delays.

Target a Community’s Psychosocial Barriers

An individual may or may not adopt certain behaviours because of thoughts or beliefs (i.e., personal, familial, attitudinal, etc.), socio-cultural norms, and/or feelings (i.e., distrust, unfamiliarity, disgust, etc.). These also vary widely based on different demographics, stages along the behaviour change spectrum, social location, and much more. Addressing specific psychosocial barriers based on the community’s demographic or general social location is important when developing social arts programming.

Several respondents identified how certain socio-cultural beliefs about handwashing prevented the
adoption of this behaviour for fear of “looking like a Westerner.” One respondent shared how, in some instances, women attending their workshops felt uncomfortable voicing their opinions and subsequently created women-only focused workshops to provide a “brave” space for them to discuss WASH-related topics. Given the diversity of psychosocial determinants, WASH interventions applying the SABC™ Approach need to adapt, re-evaluate, and cater their social arts programming according to targeted barriers in the local context.

Prioritize Local Talent

Since many respondents viewed artists as agents of change, their fit with the community was crucial to the project’s success. It is imperative that artists are engaging, that they understand their role, and that they can effectively transfer knowledge to others without imposing their own beliefs. It is also important that the artists facilitating the creative interventions are from the community. As one of the respondents shared, collaborating with local artists from within the community enables them to build the community’s capacity and engagement, and develop visual and/or performance pieces that resonate better with the community overall. Wherever possible, collaborating with local artists helps to build community trust, which is critical to the project’s success.

Artists Should Facilitate, Not Dictate

The key to the SABC™ Approach is community-driven arts programming. Therefore, the selected artists should not think of themselves as teachers but as guides who support the community in executing their creative projects and enabling them to use their own voices to express their thoughts about WASH-related topics through different mediums and contexts. This focus on community-led arts puts the community in the driver’s seat and makes them the agents of change who will continue encouraging healthy behaviours among their peers. Another interviewee mentioned the pivotal role of debate facilitators, whose adaptive roles as artists, animators, facilitators, and educators were key to facilitating reflective dialogue with community members without convincing, persuading, or forcing people to change. Some key guiding principles that the partner organizations used to facilitate this included: staying neutral, understanding people’s emotions before checking their comprehension, avoiding persuasion, using humour, and celebrating dialogue. In doing so, this established trust and avoided perpetuating colonial tactics of forced behaviour change.

Create Opportunities for Community Capacity and Ownership

Many respondents mentioned that fostering community capacity and community buy-in when utilizing social arts interventions is critical to long-term success because it ensures that the project will continue to grow and expand beyond the project’s completion. The JNB project achieved this by boosting the capacity at a local community and organizational level.

At the culmination of each arts-based intervention, there were opportunities for the community to gather and share their opinions about the piece they had created and/or seen. Several respondents indicated how critical this was for the adoption of healthy behaviours because it can create a safe space for debate and discussion about often-taboo or sensitive topics in the community. Through community discussion and debates, the community can move further along the behaviour change spectrum because these public engagements may signal more respect and provide opportunities for dialogue and conversation.
At the organizational level, since One Drop adopted a hands-off role for technical assistance (making only a few visits over the project’s duration) the local community played a major role in leading all project activities. For example, one CCK respondent reported that participating in this project increased its organizational capacity, which enabled them to integrate a new focus on innovation in their work and learn and apply some financial and management structures that have since allowed them to take on more complex projects.

**Develop Community-Based Funding Methods**

When considering the sustainability of the WASH infrastructure, it is important for communities to develop strategies to create consistent streams of capital. One such approach involves the introduction of annual household contributions or small tariffs, which are not imposed on people but developed with community consultation. These contributions are priced to be affordable, while also giving community members a sense of ownership over the infrastructure to facilitate long-term maintenance. At the same time, the contributions are normalized so that everyone is expected to contribute.

For example, collecting these tariffs on a fixed monthly, annual, or spontaneous schedule makes it possible to fund maintenance and repairs if the equipment becomes damaged. Collection times can also be synchronized with known periods when communities receive their income or harvest payments. This is especially important since many financial barriers impede households from accessing and maintaining water services, soap, and hygiene products. Second, establishing the local co-operative unions rather than individual co-operatives and providing support from Integrated Development Services enabled access to microfinancing institutions and the ability to apply for national funds to support communities’ income-generating activities. Greater collaboration between neighbouring municipalities and civilian involvement in the budgeting and costing of water sanitation projects are also ways to share learnings and costs while increasing long-term engagement.

**(Behaviour) Change Takes Time**

Behaviour change is a slow process that takes years or decades to manifest. These change processes can be difficult to predict in the long term. Given that the JNB project took five or six years, it is important to return years later and assess whether people are still practising the behaviours learned and mobilizing the tools provided. Some respondents argued that five to six years is insufficient to identify benefits and that longer time horizons are needed. Projects can often migrate to new regions, which may not guarantee that existing communities will continue developing or leading the project beyond the initial funding period. Thus, strengthening community capacity, resilience, and social participation are crucial factors to ensure that WASH interventions are sustainable.

To scale the JNB project to all Malian citizens, there are important factors to consider. First and foremost, strategies aimed at implementing sustainable WASH infrastructure take time. Although delivering the physical infrastructure may not require years of work, soft infrastructure is necessary for the sustainability of behavioural change. It also takes time to scale to other communities and to scale deeply within local organizations to ensure that they have a greater capacity to take on more complex projects without outside funding/oversight.

**Remaining Questions**

Our interviews provided insights into how combining WASH and SABC™ approaches can support sustainable development and community
resilience. Further, interviews revealed JNB to be a multidimensional project, with various notable aspects of the intervention being out of the scope of our study. As a result, the team continues to have unanswered questions about components of JNB that may provide a greater foundation for further research on social arts and WASH. Here are some of our remaining questions:

1. What are the different evaluation strategies to ensure that the different components of the WASH interventions are working/adapting to local context?

2. How is knowledge shared between community members? What are the informal community/knowledge networks (e.g., religious leaders, peer to peer, family networks, other social groups, etc.) that support the spread of awareness, attitudes, and implementation of WASH behaviours?

3. How important is capital as a part of the paradigm in promoting the sustainability of WASH and in developing community resilience?

4. How can the local arts organization create revenue streams that sustain their work and ensure that community projects are sustained?
Research Team

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Niharika Burugapalli is a second-year undergraduate student at the University of Toronto, majoring in peace, conflict, and justice and global health. She is very engaged in the arts and community and has co-founded a nonprofit called the EmpowART Foundation. It is dedicated to increasing the use of painting and other visual art media as a healing and therapeutic tool in hospitals and seniors homes while empowering youth to be leaders.

Alexandra Lambropoulos is an MSc candidate in planning in the Department of Geography and Planning where her research focus lies at the intersection of culture and resilience planning and community economic development. She holds a bachelor of arts degree in urban studies, human geography, and geographic information systems (GIS) from the University of Toronto and a certificate in web design and development from Ontario College of Art and Design (OCAD) University. Alexandra hosts a podcast, Urban Limitrophe, exploring how diverse initiatives in cities across the African continent (and the diaspora) build community resilience. She has work experience coordinating public art and creative place-making initiatives in communities across Ontario.

Felix Lau is a first-year MPH candidate in social and behavioural health sciences (health promotion) at the Dalla Lana School of Public Health, with a collaborative specialization in global health and public health policy. He has a BSc (honours) in psychology from Queen’s University. He has previous research experience in mental health and psychiatry and work experience in community events, teaching, consulting, and acting as an evaluation coordinator for an arts-based organization that delivers consent and LGBT+ inclusion programming to youth in the Greater Toronto Area.

Obidimma Ezezika is the founding director and principal investigator of the Global Health and Innovation Lab (an implementation science research and education initiative on the systematic uptake of evidence-based interventions into routine practice in global health) and an assistant professor at the University of Western Ontario in the Faculty of Health Sciences. He also holds a status-only faculty appointment in the Department of Health and Society at the University of
Toronto, Scarborough. Ezezika’s research lies at the nexus of global health and implementation science and examines how to scale evidence-based innovations to meet marginalized communities’ health needs locally and globally. These innovations range from health technologies, vaccination campaigns, and infectious disease treatments to large-scale nutrition programs. He is also the founder of the African Centre for Innovation and Leadership, Development, a nonprofit think tank focused on fostering innovation and youth leadership in Africa, which has launched several innovative initiatives, including the Nutrido™ gamification program for improved nutrition. Ezezika is the inaugural recipient of the University of Toronto Global Educator Award and the recipient of several international awards, including the D2L Innovation Award in Teaching and Learning and the Next Einstein Award. He has a PhD in microbiology from the University of Georgia and a master’s degree in environmental management from Yale University.

The Reach Alliance began in 2015 at the University of Toronto as the Reach Project, a student-led, faculty-mentored, multidisciplinary research initiative. The Reach Alliance has since scaled to include the University of Oxford’s Saïd Business School and Blavatnik School of Government, the University College London, and Tecnológico de Monterrey. Reach’s unique approach uncovers how and why certain programs are successful (or not) in getting to some of the world’s hardest-to-reach populations. Research teams, comprised of top students and faculty from across disciplines, spend twelve months investigating each case study. Once the data collection process is complete, teams write case reports that are published and disseminated across the Reach Alliance’s diverse network of policymakers, practitioners, academics, and business leaders.

Inspired by the United Nations’ call to eliminate global poverty by 2030 as part of a set of Sustainable Development Goals (SDGs), our mission is to pursue the full achievement of the SDGs by equipping and empowering the next generation of global leaders to create knowledge and inspire action on reaching the hardest to reach.