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“This program is literally saving lives”: A participatory qualitative study of youth outcomes in a community-based music program to interrupt violence

Hillary M. Kapa^{1*} , Stephanie M. Garcia^{1,2} , Christopher Thornton³, Matthew Kerr³, Carolena Muno¹ , Xadyah Holness³, Aquil Shakur³ and Rachel K. Myers^{1,4}

Abstract

Introduction Despite urgent need for evidence-based violence prevention solutions, demonstrating the impact of community-based violence prevention programs, which are primed to be culturally relevant and community-tailored, remains difficult. Thus, our community-academic research team, conducted a participatory evaluation to identify proximal outcomes of Beyond the Bars (BTB), an urban United States-based music enrichment program seeking to empower young people and facilitate community healing from cycles of disinvestment and violence.

Methods We explored perceived BTB outcomes on student participants through semi-structured qualitative interviews with 16 adolescent students ($M_{age}=17.31$ years, 69% male), 4 adult instructors (75% male), and 6 adult community partners (50% male). We coded interview transcripts and then iteratively analyzed relevant coded text to identify salient themes within and across interest holder groups.

Results Interviewees identified similar programmatic impacts on students, which we consolidated into five themes: (1) access to safe, creative spaces (2), musical and technical skill development (3), personal growth (4), relational and interpersonal growth, and (5) growth mindset and future orientation. They described outcomes as progressive, with students' gaining musical, social, and creative skills and access to a safe and supportive community being foundational to enhancements in self-efficacy and future orientation and budding efforts to advocate within their communities.

Conclusions Our findings demonstrate integration of strengths-based approaches in youth violence prevention programming to support holistic wellbeing beyond risk reduction. Further, our work underscores need to develop evidence for and elevate community-generated solutions to rebuild and heal communities.

Keywords Community-Based participatory research, Program evaluation, Adolescent, Primary prevention, Music, Positive psychology

*Correspondence:

Hillary M. Kapa
kapahn@chop.edu

¹Center for Violence Prevention, Children's Hospital of Philadelphia, 2716 South Street, Philadelphia, PA 19146, USA

²PolicyLab, Children's Hospital of Philadelphia, 2716 South Street, Philadelphia, PA 19146, USA

³Beyond the Bars, 3500 Lancaster Ave, Philadelphia, PA 19104, USA

⁴Division of Emergency Medicine, Department of Pediatrics, Perelman School of Medicine, University of Pennsylvania, 3401 Civic Center Blvd, Philadelphia, PA 19104, USA



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Introduction

Previously declining rates of firearm violence have reversed course since the onset of the COVID-19 pandemic, prompting federal, state, and city governments as well as philanthropic foundations to increase investment in violence prevention solutions to decrease the burden of violence in communities [1–9]. These rapid investments in the face of a public health crisis necessitate investment in evaluation to identify the differential impacts of various violence prevention solutions and enable thoughtful investment. This need is particularly urgent as funders have begun to invest in more grassroots, community-based organizations with expertise in culturally relevant, community-tailored program development and delivery. This long-needed acknowledgement of indigenous problem-solving approaches warrants accompanying realignment of evaluation paradigms to adequately capture program practices and capacity.

The efficacy of youth violence prevention programming has historically been determined through achievement of problem or deficit-focused outcomes that are detached from root causes of the violence epidemic, namely structural racism and disinvestment [10–12]. Such deficit-focused outcomes have included individual-level changes in externalizing behaviors, truancy, and perpetration of crime, and population-level incidence of violence, violence-related injury and/or death, and crime [13–15]. Sole reliance on such outcomes poses challenges for evaluating program short-term effectiveness, particularly strengths-based programs centrally focused on primary and/or universal as they may not capture the more proximal individual-level outcomes that drive future reductions in violence. They also may underestimate intervention effects of youth violence prevention programs as they over-rely on severe outcomes, such as perpetration of violence or criminal arrest, which are relatively rare among adolescents and influenced by a myriad of factors beyond the scope of a single intervention [16–18].

Community-based violence prevention programs have increasingly championed strengths-based, primary prevention approaches to youth violence prevention, such as through positive youth development or developmental assets frameworks. In prior study, positive youth development has demonstrated positive downstream impacts, including reductions in aggression and violence and increases in thriving behaviors [19–21]. These successes are realized through cultivation of developmental assets, including relationships, character traits, and professional and interpersonal skills [20, 22, 23]. Though more limitedly studied as a strategy for violence prevention, arts-based programs employ a positive youth development framework and foster a variety of assets among youth participants, including musical skill development,

self-confidence, self-esteem, perseverance, discipline, prosocial behavior, emotional regulation, and sense of belonging [24–31]. By investing in the skill and personal development of young people, such programs may serve as a primary prevention strategy for youth violence and a capacity-building strategy for communities, though more empirical examination is needed.

Shifting the framework of what constitutes violence prevention is complicated by many factors, chief among them that despite strengths-based approaches having theoretical ties to violence prevention, the traditional metrics used to evaluate “success” (i.e., reduction in violent-related crime) are misaligned with the theoretical short- and medium-term outcomes of these approaches (i.e., growth of developmental assets). A lack of outcome salience is further perpetuated by the historic exclusion of community members in determining agendas and methodology for evaluation and research efforts within their affected communities [32].

Consequently, there is urgency to identify short- and medium-term outcomes of community-based violence prevention programming in partnership with program leaders and community stakeholders to ensure evaluation metrics are aligned with program practices and community values. In turn these efforts can inform evidence-informed investment in community-centered programming. In the present study, our community-academic research team (CART) sought to investigate the salient participant outcomes of a single strengths-based community violence prevention program, Beyond the Bars (BTB). Through a participatory qualitative evaluation process [33], we described core components of the program logic model, specifically identifying the student outcomes of program participation from the perspectives of BTB students, staff, partner organizations. In doing so, we elucidate new opportunities for measuring and demonstrating BTB’s impact and provide a model process for identification of congruent and meaningful metrics to evaluate community-based program effectiveness.

Materials and methods

Design

The current study reports on findings identified from a qualitative community-based participatory formative evaluation of BTB. The present work was initiated in 2021 through a partnership between Children’s Hospital of Philadelphia (CHOP) and BTB with the goal of concretely defining the BTB program model and its impacts on students and communities. Consistent with principles of community-based participatory research (CPBR) and BTB’s mission to recognize and cultivate youth’s leadership potential, we formed a paid community-academic research team (CART)—including CHOP researchers (“academic co-PIs,” HMK and SMG), BTB program

leadership (“community co-PIs,” MK and CT), and three former or senior students (“project advisors,” including authors XH and AS)—met and collaborated throughout the project lifecycle [34]. Specifically, all CART members contributed to development and refinement of data collection tools, codebook development, data interpretation, and dissemination to support co-learning and empowerment, generation of knowledge that was mutually beneficial to community and academic partners, and findings that were appropriately shared with BTB community members.

Setting

BTB is a Philadelphia-based, music enrichment program for middle- and high-school aged youth with a mission to interrupt cycles of violence and combat disinvestment. BTB provides high-quality music programming that is student-driven, accessible, trauma-informed, community-led, and culturally appropriate. Originally founded in 2015 by community co-PIs MK and CT as a music program for youth who were incarcerated, BTB has grown precipitously, presently operating more than 40 community-based programs where young people can receive weekly instrumental and/or production lessons [35, 36]. As of December 2024, BTB teaches more than 1,000 unique young people annually from over 19 Philadelphia zip codes, with a focus on neighborhoods most acutely affected by pervasive poverty and abandonment of community resources. BTB’s diverse programming ecosystem is embedded in community-based, crisis, diversionary, and carceral settings and intentionally includes pathways for young people to matriculate between shorter-term co-located crisis programs to ongoing open-enrollment community-based programs hosted at community

organizations, recreational centers, and schools (Fig. 1). BTB also offers formal opportunities for students to grow as leaders through a dedicated student teaching program in which students progress from participants to paid instructors.

Data collection

The CART co-developed interview guides for each stakeholder group to ascertain the respondent’s overall experience participating in, leading, or collaborating with BTB music programs. A section of each interview guide was dedicated to exploring programmatic impacts on students in the short- and medium-term. We conducted in-depth, semi-structured interviews with BTB students, instructors, and community partner program staff between January–June 2022. We used a purposive sampling approach to ensure our sample represented the wide range of stakeholder experiences across program settings and recruitment pipelines, personal/professional characteristics, and duration of program engagement.

BTB students were eligible to participate regardless of length of program involvement. Students invited for interviews were current or past participants of one of BTB’s voluntary, open-enrollment community-based program settings. In acknowledgement of unanticipated harm, we chose to not interview youth acutely experiencing certain hardships (e.g., homelessness, mental health crises, justice system involvement) and instead interviewed instructors and community partner program staff working in co-located crisis programs (e.g., inpatient mental health crisis treatment, carceral setting, shelters). We also prioritized community partner program staff with longer BTB partnership histories, given their unique ability to speak to student outcomes in youth they have

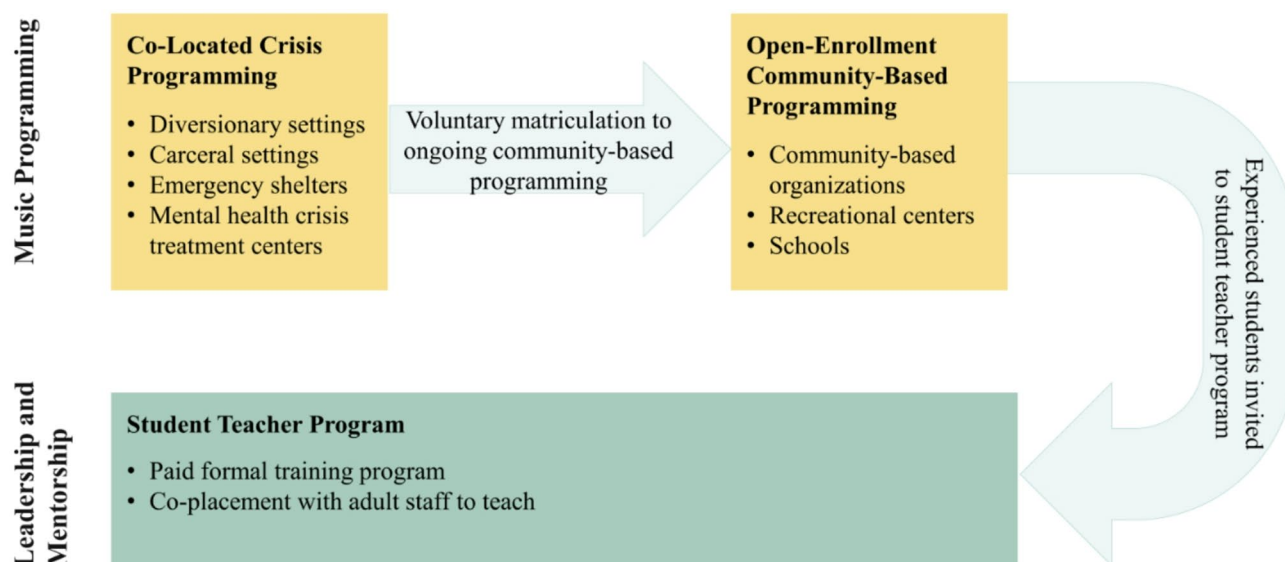


Fig. 1 Beyond the Bars (BTB) Programming Ecosystem

known for months or years prior to BTB program participation. Lastly, all BTB-employed instructors were eligible to participate. While most had a specific musical expertise (e.g., vocal instruction, production), all instructors worked directly with students across program settings and held various responsibilities related to music education, curriculum planning, and program coordination.

To facilitate intentional selection of study participants, the BTB co-PI (MK) connected eligible individuals to the research team via a text message that briefly explained the project and invited interested participants to schedule an interview with the researcher. Prior to their interviews, interviewees reviewed a study consent/assent form outlining the study purpose and potential benefits and risks and verbally agreed to participate. Academic co-PIs (HMK, SMG) unknown to interviewees conducted all semi-structured interviews by phone or HIPAA-compliant video platform. The Children's Hospital of Philadelphia Committee for the Protection of Human Subjects deemed this study exempt (IRB 21-019005) and due to the low-risk nature of study activities and to minimize documentation linking participants to the study, granted a waiver of documentation of participant consent/assent and parental consent (for participants under 18 years).

Data analysis

We employed participatory thematic analysis, grounded in Braun and Clarke's six-step approach [37, 38]. Following a period in which the CART familiarized themselves with the data through repeated line-by-line readings, we developed a coding schema for each stakeholder group. The CART open-coded 4 transcripts and created a codebook based on repeated ideas and concepts (inductive) as well as a priori (deductive) codes to support the initial project goal of concretely defining the BTB program logic model. Two academic team members then applied the codebook to interview transcripts, double-coding 44% (7/16), 100% (4/4), and 83% (5/6) of student, program instructor, and community partner interviews, respectively, until satisfactory agreement was reached ($Kappa > 0.9$). An academic project PI (HMK, SMG) resolved coding discrepancies via triangulation.

Subsequently, CART members iteratively analyzed outcomes-related text that had been collated during the coding process to search for salient themes within and across stakeholder groups. We concluded this phase of analysis once all outcome-related data extracts had been reviewed and incorporated into a preliminary list of themes, inclusive of a brief definition to maximize coherence [37, 39].

To enhance the validity and authenticity of the research findings, we engaged the full CART team in the conceptualization, refinement, and final summary of identified themes. Aligned with best practices for meaningful member checking [40], we convened member checking

sessions with community PIs and youth advisors prior to which they received a draft of results and related discussion points. During these sessions, participants referred to their experiences as BTB leaders, instructors, and students as they reacted to the results, including interpretation of quotes, the extent to which the results resonated with their own BTB experiences, and potential changes to improve accuracy. Additionally, they engaged in discussion of the implications of findings to ensure that the reflections, priorities, and future directions put forth in dissemination efforts aligned with their own perceptions.

Results

We conducted interviews with 16 students, 4 program instructors, and 6 community partners (their characteristics are shown in Table 1) to inform development of a cohesive logic model that described BTB development of student outcomes (Supplemental Fig. 1). These stakeholders identified similar programmatic impacts on students' musical, social, and creative skills and access to a safe and supportive community, which were foundational to enhancements in their self-efficacy and orientation to the future (Supplemental Table 1). These outcomes fell into five overarching themes: [1] access to safe, creative spaces [2], musical and technical skill development [3], personal growth [4], relational and interpersonal growth, and [5] growth mindset and future orientation.

Access to safe, creative, and supportive spaces

Students, instructors, and community partners all credited BTB with providing otherwise absent safe, supportive, and prosocial community spaces for musical learning and creativity. BTB's impact was particularly pronounced as a result of its positionality within disinvested areas. Students, instructors, and partners all described their awareness of this disinvestment and its limiting impact on accessibility to artistic opportunities that "we know are protective factors" [CP6]. By providing free programming and equipment to students in underserved and disinvested areas, BTB enabled novel access to extra-curricular opportunities and resources. One student reflected:

"To be honest, I've never even thought about producing until they gave me that opportunity and that chance. Because there's... To be honest, now I think about it, there's really no music programs down in Philly borough to really help us like Beyond the Bars did...I've never heard of any other music program here just beside Beyond the Bars" [S11].

Similarly, an instructor described how BTB filled a gap in music education and spoke to the impact of this access in a safe environment on students' demeanors:

Table 1 Self-Reported interview participant characteristics

		Students (n = 16)	Program Instructors (n = 4)	Communi- ty Partners (n = 6)
		n (%) [†]	n (%) [†]	n (%) [†]
Race and ethnicity	Black/African American	13 (81%)	3 (75%)	3 (50%)
	Hispanic/Latinx	2 (12%)	0 (0%)	3 (50%)
	White	0 (0%)	1 (25%)	0 (0%)
	Other	1 (6%)	0 (0%)	0 (0%)
Program engagement	< 6 months	5 (31%)	0 (0%)	0 (0%)
	6 months-1 year	2 (13%)	0 (0%)	0 (0%)
	> 1 year-2 years	3 (19%)	1 (25%)	4 (67%)
	> 2 years	6 (38%)	3 (75%)	2 (33%)
Age	14–15 years	3 (19%)	-	-
	16–17 years	5 (31%)	-	-
	18–20 years	8 (50%)	-	-
Gender identity	Male	11 (69%)	3 (75%)	3 (50%)
	Female	5 (31%)	1 (25%)	3 (50%)
Primary organizational services	Creative enrichment, career development, and mentorship	-	-	2 (33%)
	Behavioral health services	-	-	2 (33%)
	Emergency shelter for children and families	-	-	1 (17%)
	Juvenile justice services	-	-	1 (17%)

[†] Due to rounding, some percentages may total greater than 100%

“After a while they walk in like this ready to go. Happiness, safe. You can tell when someone feels safe. You have to understand this is not something that we, my generation, we didn’t have anything like this where you could just go. If you wanted to go make music it was \$50 an hour. You weren’t taught anything. You needed to show up knowing what you were doing” [I2].

Community partners and instructors in particular noted that the BTB environment and music uniquely let students put “their guard down,” “be kids,” and “have fun for a change” by giving them the “safe space to be a goofball” [I4]. Across stakeholder groups, interviewees also noted that the BTB programming promoted students’ physical safety and prosocial engagement, with one student explaining:

“Before...I was like outside, at the parks, just doing whatever. And then when they told me about [BTB]...I went there every Tuesday and Wednesday and Monday. And that kept me out of trouble. It was something I was looking forward to after school, going to” [S15].

Musical and technical skill development

Every stakeholder group described students’ gaining and advancing their musical and production skills through participating in BTB. Students described acquiring fundamental knowledge of musical theory and expanding

their musical repertoire through personalized instruction to their skill level and musical interests that “never felt like a classroom environment” [S7]. Likewise, community partners and instructors identified students of all levels becoming stronger musicians and producers as they advanced their technical abilities. One community partner explained:

“Beyond the Bars, helps them to create their own sound and to provide structure to their music...clean up their beats so there’s not as much static in the background. He teaches them the active productive elements of music...helps them to hone their skills that they already have and then for those that’s just exploring, he helps to really expose them to the core of music...how [a] song was built entirely...all of the building blocks that go into with the different vocab and everything and understanding just how music is developed in general” [CP2].

Stakeholders shared myriad ways students applied these skills through more independent artistic ventures, including creating their own songs or albums, joining student bands, and performing at large musical venues. Some students also shared their knowledge through engagement in BTB’s student teacher program.

Personal growth

Stakeholders viewed students’ learning, practicing, creating, and performing music as foundational to their

personal growth, including enhanced sense of self, self-confidence, and self-efficacy. Students and community partners credited the validation and support of instructors and other students and the experience of musical performance for facilitating this personal growth:

"Everybody said I killed it....I felt like I could really be myself when I was performing. I just got that vibe where like, this is me. I belong on the stage. It's beautiful. It's where I need to be" [S10].

"Again, this is a group of kids who are having difficulties connecting safely with others....what a powerful example of 'you can do this.' You can do this, given the right people, the right care, the right support, the tools, the opportunity you actually can be successful....up until that point, potentially many of these kids are like, what's the goal? What's the purpose? I'm going to fail anyway...They're made to feel like there's no choice you have in the world. You're just going to end up a delinquent. You're going to end up a criminal. You're going to end up in jail. You're going to end up dead because you're going to use substances. You're going to get caught up in that mess. We are in...the badlands of the city, and these are what our kids are living in day in and out. There is no sense of hope. And this what BTB is doing with us, helping to provide that sense of hope, of help, of potential, of there are good people in the world" [CP6].

Alongside their enhanced self-confidence, students "over[came] the fear of being different" [S7] and became more comfortable expressing themselves and making mistakes within musical and social contexts. As one explained:

"What I've learned...is that I really have a lot of potential, and I feel like one of the things that I learned is that you can have all the talent in the world and have all the potential in the world, but it's like, you can't just let it just sit there. You got to show people who you really are" [S9].

Community partners and instructors likewise perceived students becoming increasingly comfortable and confident in their unique identities and their abilities to conquer other challenges outside of music, describing associated changes they had witnessed in students' countenances:

"...What I've seen is a bunch of kids that came in, not quite sure who they are and leaving out feeling like they are a little bit more sure [of] themselves than they were before they came. I think that alone is

worth it all to have people come in and leave feeling swole. They feel, their shoulders are a little bit wider, their backs a little bit straighter, their smiles a little bit brighter, their eyes are a little bit lit up" [I2].

Across groups, stakeholders also attributed students' new means for self-expression and emotional processing to BTB with one student explaining music is "another tool in your box to like let off steam" [S18]. A community partner from the mental health crisis setting shared how BTB participation had supported both students' confidence and emotional regulation:

"I see them light up. I see them be proud of what they're creating. It doesn't even have to make sense... it's beautiful to them. And it allows them to express themselves in a way that I think they haven't had that sort of expression in a while. It is a release...This is a treatment activity" [CP6].

Relational and interpersonal growth

Stakeholders universally felt that BTB had a protective effect for students, facilitating their safety and engagement in positive, prosocial behaviors. From their various vantage points, all stakeholder groups identified manifestations of students' relational and interpersonal growth resulting from programming. All groups identified ways in which BTB had cultivated greater connection, community, and trust for students. Students portrayed the safe, trusting, encouraging, and non-judgmental community developed with participants and instructors as a BTB "family." They described broadening their social circles, developing a community with other musically inclined individuals, becoming more trusting, and feeling less lonely, with one explaining:

"Because when I was making music, I'm just by myself, and I ain't really have friends that like to do music or had any friends that want to also pursue music. So finding those connections of other people that were just like me, and that had some of the same goals and the same dreams that I had, was definitely an inspiring experience. Because it was just, I'm just by myself and I felt lonely. And now I have everybody around me. I don't really feel as lonely as I did" [S11].

Practicing and creating music communally helped students develop communication and social skills such as attentive listening, greater ability to engage and develop friendships with peers, and collaboration. From their positionality as outside observers, community partners also noted the value of students engaging in a positive "common activity" alongside other students and

instructors with diverse backgrounds and experiences, identifying BTB as a unique opportunity for unity and trust building:

“...unfortunately we have to say this, most of the judges and the district attorneys and the probation officers that tend to want to punish our kids are white. So [students are not] very trusting. And like I said, [BTB instructors] allowing them to have a voice and allowing them to have an opinion about things... then learning how to trust people that don't look like them” [CP1].

“It's another way for these kids, when they're in that room together, whether it's five, six, all 10 of them to see that this is one thing that is a common activity, a common experience, a common way of communicating... I think it's a powerful experience for them to have as a group of kids who may come from different backgrounds, have different experiences, but this unites them as one, because they're doing this together. And they're giving each other support. They're so proud of what they create. They want to share this with the adults but build it with each other” [CP6].

Additionally, students described their increased self-confidence and communication skills relating to greater confidence as leaders, with one student describing their experience being more assertive as they planned a showcase event:

“Also leadership...[during] that time when we doing the summer showcase. Leadership, like stepping up, you hear people step up, hear people talking...It's probably like inside noticing I have an idea. Why don't I say it? What am I bringing to the table? Why don't I tell this person, tell these people speak out what I want happening. See if they like it, see what they agree with and they like” [S4].

Further, community partners described observing how BTB enhanced students' relationships within their families of origin and caregivers. Community partners noticed students better articulating emotions and experiences to their caregivers and family through songwriting. Witnessing the commitment, discipline, and musical development of children encouraged caregivers to view their children differently; not as “problem kids” (as described by one community partner) but as youth with potential and artistry:

“And then you got some parents that might get a little to annoyed that their youth are trying to be rappers and things like that, but this offers a produc-

tive and disciplined way to hone their musical skills. So now it's not just random raps or something. 'No, mom, I'm an engineer. I can do this.' So it is just helping to strengthen those skills and actually strengthen bonds with families, and then even when [BTB] brings a Mac computer into a household that has never seen a Mac computer in their household, then that kind of strengthens the family. I'm like, 'Oh, this is serious'...[Parents see] their potential” [CP2].

This sentiment was echoed by students, including one who shared their experience feeling newly heard and seen by a caregiver:

“When I showed my mom the video of me playing, she was like, 'You could possibly become like a professional drummer,' or something. I never heard her say that before. So, I showed her that video of me playing, and she actually listened” [S15].

Growth mindset and future orientation

Stakeholders described how BTB cultivated greater discipline, initiative, and persistence in students. These traits were transferrable to other areas of students' lives, with one student remarking:

“...if you don't do those smaller assignments, then you will not be able to understand what's happening next. Which is pretty much the same as guitar. When it comes to theory, if you don't understand this key concept, then you're going to be thrown off and you're going to have to go back and redo it just to continue learning. And that's just how it works with school or probably even life when you really think about it. Like if you miss this really important stuff, you're just going to have to go back and redo it. And when you just stay consistent and do it the first time, you can just move on faster and understand things easier” [S13].

Relatedly, stakeholders across groups identified ways in which BTB oriented students toward growth and thoughtfulness about their futures, including an enhanced understanding of, interest in, and self-efficacy to pursue new career paths and educational opportunities:

“So [BTB is] doing this work with...a number of different youth in our community and...because they're partnering with this program, different families and youth are able to now call on certain skills and resources and materials to build their own talents and that can go on to something else” [CP2].

A few students also described becoming more engaged in social justice. They shared they were more likely to notice injustices and to advocate for changes they wished to see in their communities. Students identified their artistry as an opportunity for social impact, including one student who shared their experience with musical advocacy:

“So there was an event and...the Senator, the government, governor [were there]...It was a peaceful event about a lot of Blacks and Latinos being in situations where they're engaging in gun violence and stuff like that. And that's basically what I like working with people about and talking to people about and engaging in different things about. So that was a major, big opportunity. And I felt like I could really be myself when I was performing. I just got that vibe where like, this is me. I belong in the stage. It's beautiful. It's where I need to be” [S10].

While the focus of student interviewees tended to be on the shorter-term changes to mindset and future planning, community partners and instructors observed a range of longer-term outcomes precipitated by students' BTB participation and enhanced discipline and future orientation. They described BTB “keep[ing] [students] out of the way of the negative stuff” during a pivotal time in their development [I4] and provided several examples of changes to students' life trajectories, including altered judicial decisions that kept students out of the corrections system; actualization of newly accessible career paths, such as musical production, performance, or teaching; and pursuit of higher education. Notably, stakeholders identified students who had already begun to earn income from their musical pursuits.

Discussion

Our work identified wide-ranging short- and medium-term impacts on youth participants of a community-based music enrichment program with a mission to interrupt cycles of violence by combatting community disinvestment through intentional investment in young people. Stakeholders overwhelmingly described ways that BTB enhanced individual strengths of young people, including facilitating access to extracurricular activities and musical resources and fostering students' music and technical skills, personal and relational growth, and future orientation. Staff and community partners identified concrete personal and professional pursuits of students that they perceived to have resulted from BTB participation. Further, the similarities in observed outcomes reported by individuals with different relationships to the program (e.g., students, instructors, community partners) suggest the visible and powerful impact of program activities for young people.

Most centrally, our findings highlight the protective value of culturally relevant, strengths-based enrichment programming in fostering valuable developmental assets, particularly for youth who historically have had limited access to such opportunities. Such findings point to an opportunity to expand the definition of what commonly constitutes violence prevention beyond predominating deficit- or risk reduction-focused approaches, especially among youth perceived to be a greater risk for violence involvement (e.g., those who are justice involved). Grounded in the belief that all young people are leaders, BTB offers a model that fundamentally reframes violence prevention, offering opportunities for participants to realize their full potentials, pursue their interests, and countering the disinvestment that might otherwise prevent them from doing so. While the literature traditionally has treated prevention science and positive youth development as distinct disciplines, a growing number of researchers over the past three decades have called for greater integration of these approaches and posited theoretical pathways describing their connections [22, 23, 41–43]. We likewise believe that these approaches are complementary, as our findings suggest that the proactive development of individual capacities and connections (i.e., primary prevention) foster key developmental assets and mobilize a new generation of community leaders. This in turn reduces engagement in “risky” activities (e.g., violence) and promote individual and community safety.

Further, the wide-ranging impacts of BTB in the context of the program's core value of centering youth voice and leadership builds on anecdotal evidence that empowering communities, particularly young people, to lead the way in the design and implementation of violence prevention programs enhances programs' cultural relevance, participant engagement, and impact [20, 22, 44]. Perceptions of relevance and high engagement foster not only young peoples' continued ability to learn and grow their technical skills as individuals, but also cultivate their interpersonal connections with one another and caring adult role models, as evidenced by this study. Continued collection of this empirical data is critical to advancing investment in and uptake of effective, youth- and community-led violence prevention solutions.

Notably, “effective” programming may not be synonymous with what the academic literature terms “evidence-based practices.” The BTB model, for example, was conceived of, developed, and refined by community members outside of the academic sphere who relied on their lived experiences as musicians, educators, and neighbors; deep relationships with community stakeholders; and commitment to disrupting the long-term disinvestment they perceived to be driving the violence epidemic in their communities. Throughout BTB's

evolution, these community members have engaged young people and community musicians as co-leaders—empowering them to implement the program as staff or student teachers and guide programmatic decisions and growth. In contrast, academics and many funders continue to lament the research-to-practice gap and prioritize community implementation of “evidence-based programs,” exerting a “pro-innovation bias” that discounts community programs who are not resourced to conduct rigorous evaluation and overvalues emergent, academic-designed programs [32, 45]. Even as a growing literature encourages community mobilization in youth violence prevention efforts, much of this work continues to overemphasize the adoption of evidence-based practices, narrowly characterizing community engagement as a strategy to mitigate implementation barriers [e.g., 46, 47, 48], rather than an opportunity for community experts to innovate solutions most relevant for their contexts and communities. We urge violence prevention interventionists and researchers to exercise cultural humility and resist the urge to innovate without engaging their scientific training to identify, study, and amplify existing community-derived solutions. Our community-engaged study of BTB exemplifies how community-academic partnerships can bridge the gap between the desire for evidence-based practices and community-relevant solutions to longstanding public health challenges, such as violence prevention.

In addition to implications for how we identify and develop violence prevention programming, our findings reflect opportunities to enhance how we evaluate the impact of violence prevention efforts. Importantly, in our participatory program evaluation, program leaders were equal partners in the developing study methodology that engaged diverse program stakeholders, with personal experience with the program, in identifying BTB’s salient youth-centered outcomes. Historically, academics and funders have overwhelmingly driven such work, contributing to potential misalignment of outcomes with programmatic activities and undervaluing outcomes most important and culturally relevant to the community [49]. As our data describe, such outcomes are vital to continued programmatic engagement and investment through cultivating leadership, strengthening relationships, and creating access to safe and supportive spaces for individual growth and exploration. Our evaluation of BTB revealed participating students developed core social and emotional competencies and resources (e.g., sense of self, prosocial connectedness, coping skills, discipline, adult mentoring), recognized not only for their connection to reduction of multiple risk behaviors (including violence), but also importantly, to youth leading productive and fulfilled adulthoods [42, 50]. Yet, such strengths-based outcomes may go unnoticed or underappreciated

when evaluation metrics solely focus on reductions in risk behaviors or generalized assessments of community violence [51]. Employing this deficit framework has several risks. First, we chance concluding inappropriately that impactful asset-focused programs are ineffective because such metrics are discrepant with the more strengths-based short- and medium-term individual-level outcomes participants realize. Second, a focus on generalized assessments of community-level indicators may be inappropriate when programs operate at an individual level, without the resources for widespread implementation. Further, using violence reduction as a single or principal metric for program success is incongruous with the standards to which we hold academically developed “evidence-based” programs. As Miller and Shinn (2005) aptly stated: “...if [academics] were to evaluate our own programs using the standard of elimination of the social problem that they address, we too would fail” [32].

Limitations

We acknowledge several limitations of our study. First, in an effort to ensure study participation was not coercive, we did not interview students from specific BTB program settings where programming was either mandated and/or youth were felt to be presently vulnerable (e.g., within juvenile justice-affiliated programs, crisis treatment settings, shelters). While we did interview staff and community partners from these sites, we recognize that students in these alternative settings may have different perspectives on their individual-level outcomes than students in more voluntary program models. Additionally, given our study’s focus on a single strengths-based enrichment program located in a large urban city, our findings may not be generalizable to other similar strengths-focused and community-based violence prevention programs. BTB is a uniquely trauma-informed and community-driven program, and many stakeholders identified these characteristics as drivers of students’ positive outcomes. Accordingly, our findings may not be replicated by other programs who do not share these same characteristics and core values.

Future directions

We believe our participatory evaluation approach to be a critical and universally transferrable strategy to build needed evidence for community-based violence prevention programs in diverse populations and settings. Future directions of this work should not only continue to engage stakeholders in other programs through participatory approaches to identify salient programmatic outcomes, but also explore how to sustain measurement of identified outcomes in community settings. This includes identifying or developing validated and reliable tools to assess outcomes in the populations in which programs

operate and innovating data collection and management processes that are feasible in non-academic, community contexts. In doing so, we will be poised to generate meaningful and relevant data that can guide community decision making and build needed scientific evidence for community-generated solutions.

Conclusions

Our participatory evaluation of BTB, a community-developed and led music enrichment program, demonstrated the immense potential of strengths-based, culturally relevant programs for growing the developmental assets of young people. Student participants, instructors, and community partners cross validated our findings, with each group describing numerous ways in which BTB promoted students' access to safe creative spaces, musical and technical skills, personal and interpersonal growth, and realization of professional and academic accomplishments. Our work highlights the complementary nature of prevention science and positive youth development approaches, which when applied in tandem, such as in the BTB model, have potential to not only reduce young people's engagement in violence and other risk behaviors but also bolster their inherent strengths to prepare a generation of young people ready to combat decades of disinvestment in their communities. Further, our work supports need for continued elevation of community-generated solutions and highlights opportunities to realign our metrics to evaluate violence prevention programming to reflect the comprehensive impacts of these unique program models.

Supplementary Information

The online version contains supplementary material available at <https://doi.org/10.1186/s12889-025-23145-w>.

Supplementary Material 1: Supplementary Table 1

Supplementary Material 2: Supplementary Figure 1

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Author contributions

Each of the authors contributed sufficiently to be considered for authorship. The following contributions were made to this manuscript: conception or design of the work (HMK, SMG, MK, CT, RKM); data collection (HMK, SMG, AS); data analysis and interpretation (HMK, SMG, MK, CT, XH, AS, CM, RKM); drafting the article (HMK, SMG, CM); critical revision of the article (HMK, SMG, MK, CT, XH, AS, CM, RKM); and final approval of the version to be published (HMK, SMG, MK, CT, XH, AS, CM, RKM).

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Data availability

The data generated by this study are not publicly available to protect participant privacy. The data are available from the corresponding author upon reasonable request.

Declarations

Ethics approval and consent to participate

The Children's Hospital of Philadelphia (CHOP) Institutional Review Board reviewed all study activities and deemed this study exempt (IRB 21-019005) per the Federal Policy for the Protection of Human Subjects 2018 Common Rule (45 CFR 46.104(d) 2(i)(ii)) and in accordance with the Declaration of Helsinki. All participants provided informed consent or assent, as appropriate, prior to engaging in study activities.

Consent for publication

Not applicable.

Competing interests

In accordance with BMC policy, MK and CT wish to disclose that they are Co-Founders and Co-Directors of Beyond the Bars (BTB). Accordingly, they receive salary from BTB. To support the validity and rigor of this study, MK and CT were not involved in data collection or primary analysis of data. Individuals with no significant financial interest in BTB, the outcome of the research, or reporting obligations to MK or CT performed these tasks to limit potential biases in our study methods or findings. XH and AS, who served as youth advisors on this study to share their expertise as former BTB participants and community members, also wish to disclose that they presently collect salary as part-time instructors for BTB.

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