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for every child

Music of Life

How informal music shapes children's development and well-being

play for every child

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Introduction

From a mother humming to her baby in the womb to a teenager listening to pop songs on her or his phone, music is a constant in children's lives. It can quiet an infant's crying, keep the beat for a schoolyard skipping game and be the soundtrack for the ups and downs of the day.

These types of informal, everyday music are ubiquitous, usually cost nothing and rarely require any special skills. And yet, despite their apparent ordinariness, they can have profound impacts on the well-being and development of children and young people.

In infancy, the sound of parents singing can ease babies' stress, lower their heart rates and help them to feed more easily.[1] The effect is so powerful that even a recording of a mother's voice can comfort a baby.[2]

As children grow, listening to music with classmates and other children can help them feel calm, spark joy and improve classroom learning.[3] Making music together, such as singing in school groups, can also be a source of fun, happiness and satisfaction.[4]

In later years, teenagers' music choices can say much about how – and who – they identify with socially. Teens may turn to music for solace or excitement; for some, their music choices may be a sign of worrying mental distress.

Despite occasional negatives, the impacts of informal music on children – whether they are newborns or in their late teens – are overwhelmingly positive. Better understanding of these impacts is important if we are to provide space and opportunities – whether in parenting, schools or the wider community – for music to support children and young people.

To explore the extent of knowledge in this area, the UNICEF Office of Strategy and Evidence – Innocenti reviewed existing studies of how informal music affects children and young people's well-being and development. Three main thematic areas emerged from the review's analysis:

- **singing to babies**
- **making music**
- **listening to music**

This report summarizes the key findings and looks at future directions for research and policy.



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Singing to babies

A parent's singing is usually an infant's first meaningful contact with music. Across cultures, around the world and regardless of whether they are rich or poor, parents and caregivers sing to babies. In response, infants focus on their caregiver's face, coo, smile and move their arms and legs.

In the home, regularly singing to a baby has many benefits. Physiologically, it lowers the baby's heart rate, improves feeding and reduces pain.[5] A slowing heart rate indicates the emotional benefits for the baby, such as reduced distress.[6] Singing to babies calms them for about twice as long as speaking to them.[7] Regularly singing to babies can also strengthen their bond with their parents.[8] In addition, there may be cognitive benefits, with research indicating that singing to babies can support language development.[9]

Singing to babies is important in their everyday lives, but it can also be valuable outside the home in moments of distress. A study in Turkey showed that mothers singing to babies during vaccination reduced the pain of the shot, and it was more effective than just touching, hugging or talking to the baby (mothers coped better, too).[10] Other research shows that even a recording of a mother's voice can reproduce some of the benefits of live singing. This could have implications for the medical treatment of babies who must be kept isolated – for example, in neonatal intensive care.[11]

Singing for non-singers

Even though singing to babies is almost universal, some parents may be tempted to hold back if they feel embarrassed or shy about their musical abilities. They should not worry, as research indicates that it is not the parent's musical skills that matter, but rather the fact of engaging every day with their baby through songs and lullabies.[12]

Training can encourage parents to sing more, with important benefits for their babies. A six-week training programme in five countries led parents to sing more frequently to babies and improved their intuition about when to sing. Even when parents had not recently sung, infants' moods were better, suggesting parent or caregiver singing has more general and longer-term benefits for babies.[13]


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Why does singing help babies?


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Several factors combine to help explain the power of parents' songs. Lullabies, as long as they are soft, soothing and relaxing, calm babies because they slow their heart rate and allow for calmer and deeper breathing. Another factor is the feedback loop that develops between the parent and baby during singing.

As infants calm in response to maternal singing, mothers themselves feel more relaxed, emotionally rewarded and increasingly motivated to keep singing further strengthening bonding and reducing stress.[14] A song – combining voice, speech and musical structure – is also uniquely engaging for infants.

Its regular beat and stable pitch help infants build expectations, sustain attention and detect patterns, such as recurring sounds. Music provides the baby with a richer, more predictable input than speech, especially when a regular beat is present, which supports learning.

Making music

Singing and making music – whether individually or in groups – is an important and mostly enjoyable part of life for many children and young people. It is generally a positive experience, leaving them feeling happier and building a sense of connection and belonging. By providing a refuge from community challenges – and a platform to speak out about them – music-making may have particular value for children from disadvantaged backgrounds.

Music for fun and connection

Whatever it involves – from humming along to singing or playing instruments solo or in groups – young people generally find making music rewarding. It is fun, generates happiness and emotional satisfaction, builds motivation and supports 'meaning-making' – or finding a sense of purpose or meaning in an activity or experience.[15]

There may be some gender differences, however. With singing, for example, boys may face a loss of self-confidence as their voice breaks during puberty. As one boy said in Thailand: "This sound that I hear and the sound that everyone else hears is different. I don't know what my voice is like now."[16]

Children's learning may benefit, too, from music-making. Several studies have shown that playing an instrument or singing in a choir is linked to stronger academic performance and language skills, with some evidence that playing music fosters better educational outcomes.[17]

For many children, developing a sense of connection with others and a sense of their own identity is an important part of music-making. In Australia, one teenage girl commented that "one of the best things about the choir is making more friends every year."[18]

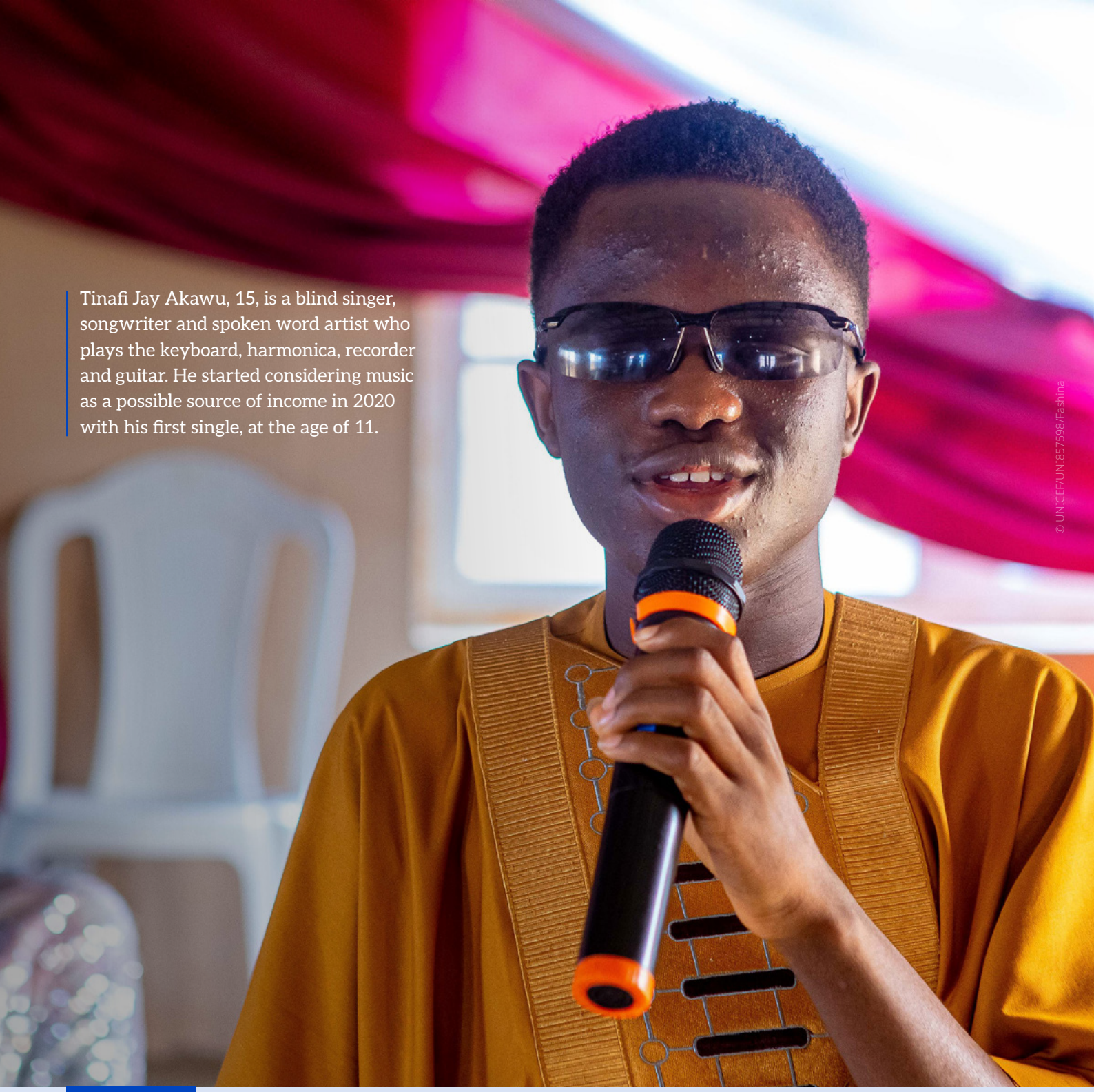
Regarding identity formation, children may benefit when they feel some sense of control over music activities, choices and singing partners.[19] In contrast, their experience may be less positive if they feel a lack of family or community support or pressure to join competitions.[20] Development of cultural identity can also be an important part of music-making: As one Chinese-American student said: "Traditional music has brought me joy, honour and a deeper understanding of Chinese culture ... The more I understand traditional music, the more I love it."[21]

Overcoming disadvantage

Although research is limited, there is interesting evidence on the value of music-making for disadvantaged young people. In Ireland, a study used rap music workshops to connect with adolescents on an impoverished social-housing estate.[22] The young people created their own collective rap, giving them a platform to comment on their community's struggles and strengths. As one student wrote: "Listen to what we have to say, We're the future we're here to stay. So deal with it, Just deal with it."

In Brazil, a music project involved young people from a low-income community in a string orchestra.[23] The project provided them with a "refuge from their external problems" and a place where they could relax and feel supported. One participant commented, "Well, for me it's family because this is like a second home to me, because I come here, they help me and support me." Teachers appeared to be a key factor. In the absence of strong parental figures at home, conductors demonstrated respect and provided much needed attention and support to the students.





Tinafi Jay Akawu, 15, is a blind singer, songwriter and spoken word artist who plays the keyboard, harmonica, recorder and guitar. He started considering music as a possible source of income in 2020 with his first single, at the age of 11.

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Music and children with disabilities

Listening to and playing music can enrich and support the lives of children with a range of special needs and disabilities. In infancy, interactive music experiences with neurodivergent children can help improve their ability to pay attention and express themselves.[24] Studies of parents' own experiences echo these findings, indicating that they notice the calming effect of music on children with profound and multiple learning disabilities.[25] There are also benefits for children with disabilities later in life – from middle childhood into late adolescence – with music activities linked to significant improvements across a range of skills, including communication.[26] In a Canadian study, adolescents with various degrees of hearing loss described music as a vital source of confidence and energy.[27]

Listening to music

Listening to music is generally good for children and young people, regardless of whether they are listening alone or with friends, to live or recorded music, or whether or not they have chosen the playlist themselves. In particular, it can help them to manage their moods and to develop their sense of identity.

The benefits of listening to music – as distinct from listening to parents singing (see first section) – start young. Even before birth, there is evidence that the foetus in the third trimester can become familiar with music that was played at an earlier time.[28]

After the child is born, recordings of music – whether it is a 'happy'[29] upbeat children's song or a 'sad'[30] lullaby – can be calming for newborns.[31] In addition, brain scans indicate that newborns learn best from nursery rhymes with clear rhythmic patterns, suggesting that rhythm and predictability help babies process sound and may lay early foundations for language and attention development.[32]

For adolescents, listening to music can be a way to manage boredom, lift their mood and process sadness.[33] As countless adolescents experience every day – and as many more adults will remember from growing up themselves – teens may use music that either matches their mood or that can help change it. As one 15-year-old boy said, "If I'm feeling down usually I'd try and listen to something a bit upbeat and it helps me get out of that mood."[34]

Elsewhere, another teenager said, "Instead of hiding under the rug, you listen to that sad song and really immerse yourself for a few minutes and then afterwards, I sort of feel better."[35]

Listening to music

Music on screen

Music combined with visual media, such as music videos, can also shape children's meaning-making and social understanding. In Australia, primary-aged children who frequently watched highly sexualized videos appeared more likely to copy adult dance moves, focusing on looking 'pretty' or 'cool', and showing early signs of self-objectification. At the same time, many demonstrated growing media awareness, recognizing that something can look 'cool' without being 'appropriate'.[36] Research from the Netherlands found that teenage girls who strongly identified with sexualized videos by male artists were more likely to adopt outdated beliefs about gender and consent, underscoring the value of early media literacy support.[37]

Shared experiences

Teens often listen to music alone, but they may also listen with friends and classmates or share playlists. This can help them maintain friendships, build feelings of connection with other teens, and provide them with an escape from their own thoughts and concerns.[38] There may be benefits for learning, too: Research from India showed that children who listened as a group to Indian and Western classical music in the classroom did better on their tasks compared with children in silent classrooms.[39]

Family listening can be important as well, valued by both adolescents and their parents as a way to connect.[40] Sometimes it may involve just listening to music together, providing "a safe emotional space and a way for children to express feelings indirectly and for parents to be with them without words".[41] Other times, music may spark family conversation, allowing parents to revisit their younger years through their children's playlists.[42]



Alicia, a 16-year-old from Pavuna Favela in Rio, is a talented singer and musician supported by UNICEF programmes.

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What is your favourite music?

Young people often have strong views on music, preferences that can be a source of concern for parents and teachers if they feel that these choices are 'a bad influence'. However, the relationship between adolescents' musical taste and their behaviour and well-being is rarely straightforward. It is usually an overstatement to say that music 'causes' certain moods or behaviours; instead, musical tastes need to be understood as reflecting – and interacting with – a young person's emotional and developmental states.

For example, research from Poland showed that various genres of music can have different effects depending on existing moods. Hip-hop and metal energized adolescents with low or average mood but dampened the mood of those already feeling positive. By contrast, pop music showed the opposite pattern.[43] In the Netherlands, a long-term study of adolescent fans of Goth music – a gloomy style of rock whose followers typically wear black clothes and pale make-up – showed that up to around one in ten became progressively more depressed over time; however, the research indicated that the preference for Goth music was a mark of mental distress rather than a cause.[44]

The impact of certain genres of music on young people's behaviour is also often a focus of attention. However, once more, the relationships are rarely straightforward. In South Africa, urban contemporary music, such as hip-hop, is seen by many young people as empowering. "Music is life ... it plays a big role in my life," one adolescent said.[45] Nevertheless, others linked lyrics glorifying violence or misogyny to normalization of risky behaviour: "They like trying to say that having a gun and being a gangster is okay." These testimonies suggest that certain genres of music need to be seen less as causes of certain behaviours but rather as mirrors of social context and the ways in which adolescents navigate mood, belonging and identity.

Conclusions

The potential benefits of music for human beings in general are well known. Research has consistently shown music to have powerful, far-reaching effects on and for humankind.[46] Its healing attributes have been documented as far back as 4000 BC.[47] Yet it has been called the "most under-utilized asset on the planet" given its potential societal health and economic returns.[48]

This project enriches that knowledge with a unique overview of the evidence on the impact of informal music on children's well-being and development. Across the four domains of outcomes examined for this project – physiological; mental and emotional; cognitive and skills development; and sociocultural – evidence was strongest in the areas of emotional regulation, identity and social connection, and language development.

The **physiological** impact of informal music is perhaps clearest with babies and infants. Singing to babies has been shown to lower their heart rates, raise oxygen levels in their blood, ease feeding and reduce pain. Listening to music has also been shown to have an impact on foetuses and infants, with evidence suggesting that the rhythmic structures of music help underpin early emotional and attentional development.

The **mental and emotional** impacts of informal music are evident in how babies respond when parents sing to them, which helps them to become calmer and to develop deeper emotional closeness with their caregivers.

Later in life, listening to music can give children emotional comfort and strengthen their self-confidence and self-belief. Adolescents may use music strategically for emotional catharsis and to balance their moods.

While less evidence is available than for other outcome areas, studies have shown that music benefits **cognitive and skills development**. Singing to babies supports attention and language development, for example. Some studies also show that listening to music – especially in groups such as in classrooms – can improve children's concentration, engagement and task performance.

On informal music's **sociocultural** impact, group-based activities – such as singing in choirs and playing in orchestras – have been shown to foster a sense of belonging and to support children and young people's identity development. Interestingly, both these outcomes appear to be highly interconnected, with each influencing the strength of the other. Listening to music, especially when children choose their own tracks and playlists, fosters agency, self-expression, belonging and social connection. Shared listening within families or peer groups functions as a bridge for communication, empathy and cultural continuity.


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Taking the research further

Research carried out for this project showed some significant gaps in knowledge on the impacts of informal music on children and young people. Progress on filling these gaps would help to deepen understanding, which, in turn, could guide the development of policies and practices that enhance and deepen the role of informal music in children's lives.

One major challenge is that most research comes from high-income, English-speaking and European contexts. There is a strong need for greater cross-cultural and contextually grounded research, especially in regions where music holds distinctive educational, social or cultural significance for children's development and well-being.

While studies make use of a wide range of designs – qualitative, quantitative and mixed-methods – the field remains dominated by descriptive and interpretive approaches. Wider availability of rigorously controlled experimental or longitudinal studies would improve understanding of the pathways through which music affects children's lives.

Finally, inclusion, disability and cultural variation remain underexplored outside clinical or therapeutic research. Few studies explicitly address accessibility, neurodivergence or the experiences of children with disabilities in informal musical contexts.

Making more of music

The evidence – despite its gaps and limitations – consistently portrays informal music as a potent everyday resource for well-being and development throughout childhood. Informal music is probably under-utilized in many areas of children's lives.

Parents can easily integrate various musical moments – lullabies, car-ride songs or listening together – into family routines. Music is a simple, low-cost way to lift mood, spark conversation and build confidence as children grow. Training and support for parents could help them to sing more to their babies. Parents could also be encouraged to strengthen the musical atmosphere at home by listening more to music with older children and teens, which can help build connections between the generations.

Schools could probably also make better use of, and create more opportunities for, informal music, providing children with low-cost activities such as listening to music together and singing in school groups.

The important role that music can play in the lives of young people in deprived communities is also clear. Performing and playing music together can provide children and young people with spaces in their lives where they feel welcome and protected, and opportunities to express themselves.

In short, informal music is already a hugely valuable part of many children's lives, but it could do even more. Its value and potential were never better described than by the legendary singer Aretha Franklin: "Music does a lot of things for different people," she once said. "It's uplifting, it's encouraging, it's strengthening."[49]

About the research

This report is based on a literature review carried out by the following researchers at the UNICEF Office of Strategy and Evidence – Innocenti – Cristina Pozneanscaia, Natalie Rykiel, Anna Gromada and Gwyther Rees. This short report was written by Brian Keeley, also at UNICEF Innocenti.

Scoping

The review began with an initial scoping exercise, which revealed a heavy emphasis in the literature on clinical and medicalized approaches. In response, and to address gaps in evidence and provide conceptual clarity, the researchers prioritized studies capturing music within its broader cultural and social contexts – including community music and practices such as singing lullabies.

The scoping also revealed that most studies come from the Global North. In response, the review sought to include underrepresented regions.

In line with UNICEF Innocenti's overall approach to researching child development, the review adopted an ecological systems approach. This sees children's development as influenced by their interactions with the multiple layers of their environments, radiating out from the immediate family to broader society. In this context, music is not just an isolated influence in a child's life but is woven throughout these environmental layers, affecting – and being affected by – the child's development.

Approaches

Reflecting the scoping review, the researchers focused on **informal** music activities. These can be thought of as times when children are sung to (often by a parent) or listen to or make music themselves. They are *not* formal music activities, which are typically structured, goal-oriented and delivered by trained professionals, for example, private music lessons and music therapy.

While acknowledging that the differences may not always be clear, the researchers also distinguished between **elective** music activities, such as where a child chooses to sing, dance, create playlists and so on, and **non-elective**, where the child's participation is guided more by external factors such as family routines and peer influence. The researchers classed child development and well-being **outcomes** into four domains: physiological; mental and emotional; cognitive and skills development; and sociocultural. Each domain captures a distinct aspect of music activities' influence on children's lives.

Methodology

The evidence synthesis was conducted in line with the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines. Based on carefully considered criteria, more than 70 studies were included in the final synthesis. The researchers' work was guided by an external advisory board of experts in areas including music education, music therapy, pedagogy, and youth culture.

Full details of how the research was carried out can be found in a working paper ('The Impact of Informal Music Activities on Child Development and Well-Being: A mixed-methods review') at www.unicef.org/innocenti

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“Music does a lot of things for different people. It’s uplifting, it’s encouraging, it’s strengthening.
– Aretha Franklin
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