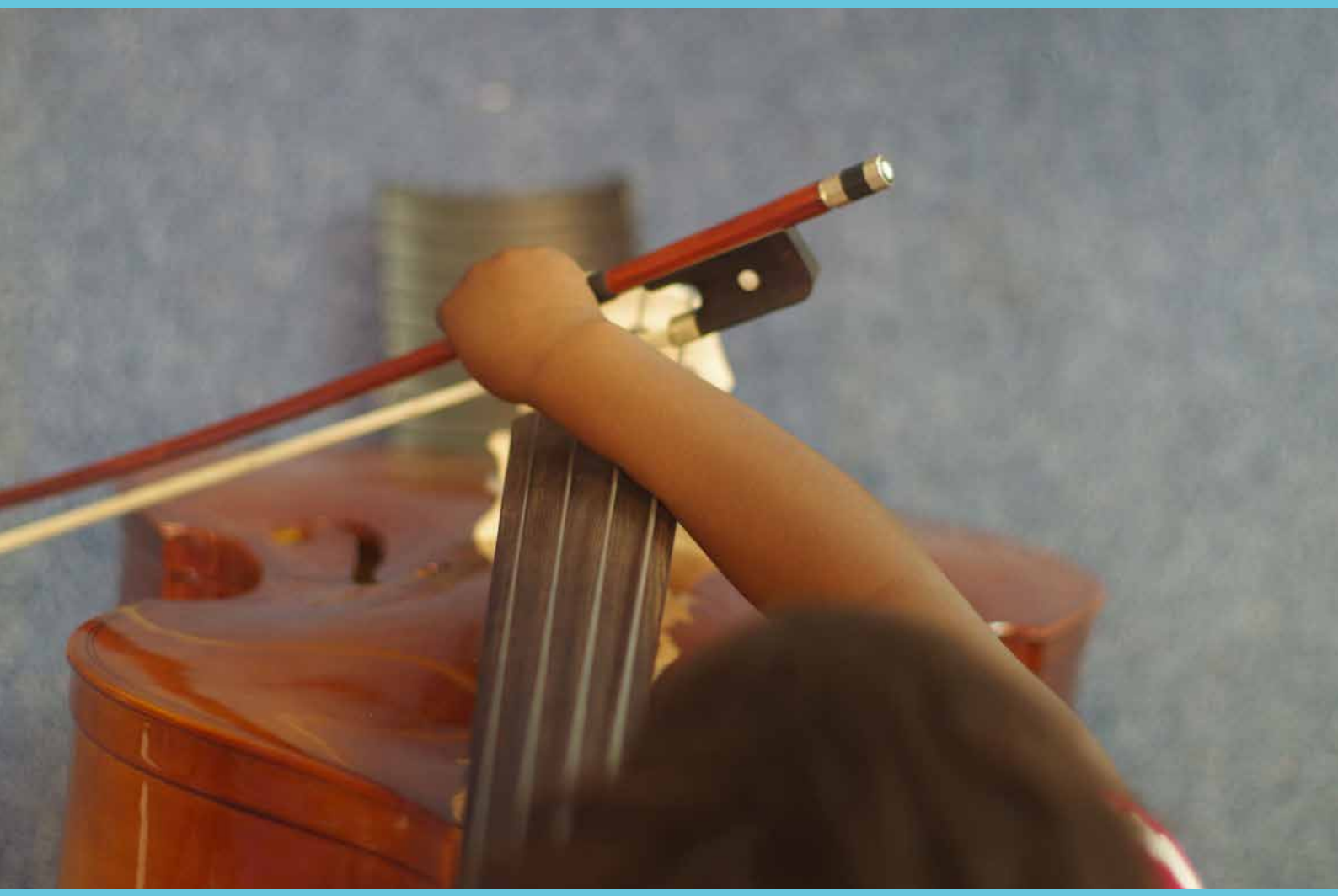

Evaluating Sistema Scotland – Initial Findings Report

June 2015

Glasgow Centre for Population Health

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Chapter 1: Introduction

Sistema Scotland and the Big Noise programme

Sistema Scotland is a charity on a mission to transform lives through music. The Sistema Scotland Big Noise programme in Raploch, Stirling, and in Govanhill, Glasgow is a high-profile social intervention. Through the Big Noise programme Sistema Scotland believes that children from disadvantaged backgrounds can gain significant social benefits and acquire a range of life skills by playing in a symphony orchestra[1]. Based on the Venezuelan *El Sistema* model[2], Sistema Scotland uses music-making to foster confidence, discipline, teamwork, pride and aspiration in the children taking part, their families and across their wider community.

Big Noise Raploch was established in 2008 and delivers an intensive orchestral programme for preschool and school-age children and young people as a means for social betterment. A variety of music-teaching formats are delivered during school time, after school and over school holidays. The Big Noise programme also involves regular performances and wider opportunities for development such as local and international trips. Big Noise Govanhill has been operational for two years and currently delivers music lessons for children from nursery to Primary 4 (ages six months to nine years), although this level of delivery will expand year-on-year.

The ambition and drive of Sistema Scotland combined with the intuitive benefits of the Big Noise programme has led to high-profile coverage and much interest as to the impacts being achieved. The 2011 Scottish Government-led evaluation of Big Noise Raploch programme reported very positive initial gains for the children participating and their families[3]. The evaluation reported that the Big Noise programme is progressive, immersive and inclusive; potentially contributing to a range of Scottish Government national outcomes.

Sistema Scotland is currently at a pivotal stage of its development as the programme moves from a 'one-off phenomenon' in Raploch towards developing a model of delivery in Govanhill and beyond. At the time of writing, Aberdeen is initiating a Big Noise programme in Torry, a disadvantaged neighbourhood on the outskirts of the city. At this important juncture, and building on the learning from the 2011 evaluation, it is clear that more needs to be learned concerning how Sistema Scotland operates, whether the Big Noise programme represents 'good value' and whether it achieves the desired impacts on the children participating, their families and their wider community.

Putting Sistema Scotland into context

For several decades Scotland's health has fared poorly, relative to that of comparable European countries[4]. Some of the factors detrimental to health in Scotland have changed in recent decades[5]. Important 'epidemiological transitions' have occurred, which present new and complex challenges to improving Scotland's health[6]. These transitions include evidenced increases in the rates of disease of socio-behavioural origin such as heart disease, obesity, depression, anxiety, alcoholism and drug misuse[7-11]. These contemporary diseases exert a disproportionate grip on disadvantaged communities and are a key driver of health inequalities within Scotland[12,13]. The aetiology of such disease is embedded within social class[14], damaging social behaviours[15] and coping mechanisms, including addiction[16] and overconsumption[17], as well as social exclusion[18].

International evidence is clear that the early years are the key life-stage during which future health is determined[19-21]. It is during the early years that a range of effective universal services[22,23] and quality interventions can yield significant positive impacts in later life[24-26]. Stressors in the early years (including pre-birth) are more likely to be evident within families affected by poverty and disadvantage and result

in a range of adverse social behaviours and health inequalities in later life[27,28]. These stressors might include parental/familial illness, diminished access to care and services, neglect, lack of stimulation, inconsistent parenting, poor diet, inadequate housing, lower school attendance and attainment, and exposure to violence and harmful substances such as tobacco, alcohol and drugs[29,30].

Considering the complexity and diversity of mechanisms that affect health[31], it is clear that improving population health and reducing Scotland's health inequalities must involve a variety of sectors and incorporate a wide range of skills and inputs, beyond that of health professionals and the NHS alone. It is also clear that the collective action needed to improve Scotland's health must incorporate a focus on addressing or preventing the scale of social issues and damaging behaviours evidenced within disadvantaged communities and families in Scotland.

Within Scotland, policies to mitigate inequalities in the early years include a focus on parenting, quality preschool provision, and action to promote healthy behaviours[32]. High-quality, sustained and immersive interventions are likely to achieve the greatest impact. However the evidence base concerning targeted early years interventions of a social nature for disadvantaged or high-risk families and children is less clear cut. Many interventions are fixed term as they rely on short-term funding. Evaluations are limited by an absence of long-term analyses of outcomes, use of control groups, evidence of causal pathways, consideration of replication or upscaling and economic cost-benefit analyses.

In recent years the arts have been increasingly utilised as a means for delivering social regeneration and intervention, to strengthen and improve communities, to address damaging social behaviours and enhance social capital and employability. The GCPH commissioned a range of systematic literature reviews[33-35](published October 2014), specifically investigating evidence concerning arts interventions in the early years and impacts on educational attainment and future life and health trajectories. The reviews conclude that the arts have a positive impact on health and wellbeing and on academic performance. However, they also highlight that there is little evidence or understanding of arts-based early interventions, their delivery, their life-course effects and their potential contribution to addressing health and other inequalities: the causal pathways in the field are under-theorised[36].

The long-term positive social change that Sistema Scotland aims to achieve through the Big Noise programme is relevant across a range of policy areas including health, education, social care, justice, welfare, regeneration and culture. The delivery of the Big Noise programme is influenced by and is of significance to the Programme for Government 2014-15[37] and the Government's social policy framework (Equally Well[38], the Early Years Framework[39] and Achieving Our Potential[32]) and the Scottish Government's Economic Strategy[40]. This evaluation will also consider the implications of its findings in the context of the 'Christie Commission'[41] and key policy drivers and challenges such as social regeneration, community engagement, asset-based approaches, preventative spend and early intervention.

Evaluating Sistema Scotland: purpose and approach

The vision for the evaluation is to capture important learning from the implementation and impact of Sistema Scotland's work in Govanhill and Raploch. This will further the understanding, within Scotland and beyond, of effective, targeted, early years, community-based social interventions within disadvantaged areas. The primary focus of the evaluation is to ascertain the contribution made by Sistema Scotland to transforming the health, wellbeing and prospects of children and young people residing in the programme sites. The evaluation will build as complete an understanding as possible of the processes that are integral to the Sistema Scotland approach and the pathways between that approach and the theorised impacts. Furthermore, the evaluation will consider the role that the Sistema Scotland approach might play in helping to generate better, and more equitable, population health outcomes in Glasgow and Stirling.

To achieve this vision, two overarching evaluation aims have been developed. Aim one relates to developing understanding of the theorised programme pathways and for assessing the outcomes and impacts of the programme at a variety of levels. Aim two concerns the process and related learning from the implementation of the programme in Raploch and Govanhill.

Evaluation aim 1. Assess, over the long term, the outcomes of the Big Noise programme in Raploch and Govanhill, in terms of social and behavioural development, educational performance and attainment and future impacts on the lives, health and wellbeing of the children and young people participating in the programme. Additionally, the social impacts at the family and community level will be assessed. The impacts of the programme at a societal level will be assessed through an economic study, which utilises a cost-benefit analysis.

Evaluation aim 2. Gain insight into Sistema Scotland's ethos and vision, its approaches to selecting programme sites, adapting programme delivery to local structures and requirements, local partnership working and the characteristics of the staff and implementation that are critical to enhancing inclusion, engagement and retention and achieving positive outcomes for the individual, family and community.

The Glasgow Centre for Population Health (GCPH)[42] is leading the evaluation of Sistema Scotland's Big Noise programme in Govanhill and Raploch. The GCPH was established in 2004 and is a resource to generate insights and evidence, to create new solutions and provide leadership for action to improve health and tackle inequality. This report represents the substantive output from an initial 19-month phase of evaluation from September 2013 to May 2015. The broad evaluation framework developed by the GCPH is explained in a detailed plan available on the GCPH website[43]. A concise summary of the specific evaluation methods used in this report is also available in Chapter 4 of this report and a more detailed overview is available in Appendix A.

Collaboration within research and evaluation is not new but this evaluation brings together a range of expertise, professional experience and perspectives in an attempt to provide robust evidence to address the evaluation aims. The role of the GCPH within the evaluation is to lead the collection of reliable data and to describe key impacts and outcomes of Sistema Scotland's work on programme participants, their families, their community and the wider benefits of this work at a regional or societal level. In addition to the resources provided by the GCPH, Audit Scotland have funded a part-time research post (0.6 FTE) until May 2015. The post was to support the evaluation and monitoring of Big Noise Raploch and work closely with the GCPH researcher in identifying cross-cutting process learning and programme impact themes across both Big Noise sites.

Education Scotland has also contributed to this initial report. A team of inspectors performed an intensive week-long visit to the Big Noise Raploch programme in September 2014. The focus of this visit was to assess the educational quality and impacts of the Big Noise programme on children, families and the wider community. This report also contains an economic evaluation of the Big Noise Govanhill programme. Finally economists from Glasgow Caledonian University (GCU) have led the economic analysis. This has involved collaborative working with the GCPH and Big Noise Govanhill staff over the course of 18 months.

Structure of the report

Following this Introduction is a description of the two study sites: Raploch and Govanhill. These short sections provide an overview of the intervention areas, their communities and the Big Noise programme being delivered. Chapter 4 outlines the evaluation methods for three distinct evaluation components. The first component, authored by the GCPH, describes the methods used for the process evaluation and for establishing the programme pathways and impacts. The second component is authored by Education Scotland and concerns the evaluation of the educational quality of the Big Noise programme in Raploch. Finally, the cost-benefit analysis of Big Noise Govanhill is described by colleagues at GCU. Chapter 5 (Results) is similarly structured to reflect the three components described, summarising the key findings from the evaluation to date. The report concludes with a Discussion chapter, which synthesises the learning themes across the evaluation components and makes a series of recommendations for policy, practice, and future research.

Chapter 2: Profile of Big Noise Raploch

Table 1: Summary overview of Raploch and Big Noise Raploch

Raploch overview
• Raploch is a predominantly White Scottish, settled community of around 3,000 people. The main language spoken is English. • Raploch has undergone extensive regeneration in recent years, including significant housing and environmental improvements. • In 2008 the building work for the 'Raploch Community Campus' was completed. • Raploch's population lives in the 10% most deprived postcodes in Scotland, with 82% of the population living within the most deprived 1% of Scottish postcodes. • Raploch endures a range of social, health and economic inequalities including reduced life expectancy, higher unemployment and lower educational attainment; compared with the Scottish averages. • 7.7% of the children living in Raploch are currently 'looked after', while another 3.4% have previously been in social service care.
Big Noise Raploch overview
• Established in 2008. • Approximately 490 children are engaged. • Participants aged from six months to 16 years. • Approximately 15 children are engaged in baby and toddler provision. • Approximately 100 children are engaged in nursery Big Noise activities. • Approximately 280 children are engaged in 'in-school' provision. • Approximately 175 children are engaged in 'after-school' provision. • Of these, approximately 55 children regularly engage in 'school holiday' provision. • Current programme costs are £770,000 per annum. • Public funding provide 70% of programme funding. • The remaining 30% of funding is from charities, trusts and private donations.

Raploch overview

Raploch (An Raplach in Scottish Gaelic) is adjacent to Stirling, one of Scotland's newest cities, which lies to the south of the river Forth in central Scotland. The area currently has a population of approximately 3,000 and is steeped in history and Scottish folklore, not least; it is where a Scottish army, led by William Wallace, defeated the English army, led by the Earl of Surrey, at Stirling Bridge in 1297.

In recent decades the wider area of Stirling has enjoyed increasing economic activity and prosperity, relative to the rest of Scotland, and Scottish Index of Multiple Deprivation (SIMD) data from 2012 show that the level of income deprivation in Stirling is below that of Scotland as a whole. Despite this, Raploch has not fared as well and the gap between Raploch and the rest of Stirling has grown. Raploch faces a range of health and social inequalities, including relatively low life expectancy, high crime, high unemployment and, until recently, poorer quality housing. In addition, two of Raploch's four SIMD zones had, in 2012, the third and fourth lowest education outcomes of Scotland's 6,505 zones. Moreover, analysis of the 2012 SIMD demonstrates that Raploch has seen a consolidation and deepening of deprivation over the past decade. Three of its four zones were among the most deprived 1% in Scotland in 2012, while the remaining zone saw only a slight improvement between 2009 and 2012 and remained within the bottom 10%[44].

Many residents have a long association with the area, some for generations, and in some cases, three generations live beside one another. In contrast with Govanhill, Raploch is a settled community with

almost 90% of children of White British/Scottish backgrounds and only 6% of children for whom English is not their first language. Raploch appears to have a strong sense of identity and community pride; levels of antisocial behaviour and crime in Raploch are not as high as many other areas of Scotland with similar socio-demographic profiles.

The issues affecting Raploch have been recognised by the Scottish Government and Stirling Council; the area has seen £120 million of investment in recent years for extensive physical, economic and social regeneration purposes. Several initiatives are underway involving community members as well as public and third sector partners in the common pursuit of improving the general living and working conditions in Raploch.

Significant housing and road infrastructure development and environmental improvements have been completed in the last few years which are only partially reflected in the 2012 SIMD data. Raploch's new housing, constructed as part of its physical regeneration, is mixed tenure and includes privately owned, privately rented and social housing. This has attracted new residents to the area. The flagship of the redevelopment is the Raploch Community Campus, a multi-partner project at the centre of the regeneration masterplan for the area. The campus brings training and employment agencies into the area as well as providing a central focal point for the community. The building work for the campus was completed in 2008 at an approximate cost of £20 million and has been hailed for its architectural innovation. The campus hosts two primary schools, a special school, a nursery, college teaching accommodation, community sports and exercise facilities and a café. Big Noise has its office within the Community Campus and delivers the programme from there. Big Noise Raploch is viewed as the key social dimension which dovetails with the physical and economic regeneration described as part of Raploch's regeneration masterplan.

Big Noise Raploch

Big Noise Raploch was established in 2008 as the first site of Sistema Scotland's Big Noise programme. Big Noise Raploch works with children attending Raploch Nursery, Our Lady's Primary, Raploch Primary, and Castleview School, as well as those who have previously attended these schools but now attend Stirling's high schools – Wallace High and St Modan's High. The orchestra is also open to children who live in Raploch but attend school elsewhere. The programme has three key elements: singing and musicianship for younger children; instrumental and orchestral tuition for children in Primary 3 and above; and instrumental and orchestral tuition for adults. The curriculum begins with Baby Noise, which offers drop-in sessions once a week for parents and carers with babies and toddlers aged up to three years old. Baby Noise uses play-based learning to teach and nurture children; including the basics of singing and musicianship (pitch, tone and rhythm) as well as social and developmental skills. This learning continues into nursery school, where the programme is delivered to all children who attend Raploch Nursery, and subsequently primary school, where in-school musicianship is delivered to all children from Primary 1 to Primary 7 attending Raploch and Our Lady's Primary schools, as well as all children with complex additional support needs enrolled at Castleview school.

Children begin learning a string instrument in Primary 2, at the start of school term children make a paper replica instrument to develop co-ordination and learn the fundamentals of holding and caring for the instrument. After Christmas children then receive the real instrument and form part of the Primary 2 string orchestra. At the end of Primary 2 children are offered the opportunity to opt-in to the Big Noise after-school and holiday programme, which runs up to four evenings per week during term time and three half-days per week during most school holidays. It is here that children join the Big Noise orchestra for the first time. At first, children learn to play a stringed instrument but by their later primary school years are offered opportunities to transfer to instruments in other parts of the orchestra.

Big Noise Raploch currently works with a total of 490 children and young people, with approximately 376 participants engaged with in-school programme delivery. Approximately 174 also make use of after-school provision and, of these, a further 55 children attend during school holidays. Twenty-seven Castleview pupils are also currently engaged with Big Noise. Finally, 14 families engage with Baby Noise and 18 individuals engage with the adult programme, 'The Noise', on a weekly basis.

Big Noise Raploch has made concerted efforts to engage with the wider Raploch community since its inception. Several high profile concerts have taken place within Raploch and it appears that awareness of, and support for Big Noise is high within Raploch. Big Noise also provides wider opportunities for participants, for example in January 2014, the 'Big Trip' involved taking 52 young musicians to the home of *El Sistema* in Venezuela. The trip involved orchestra practice and performances with participants in Big Noise Venezuela as well as other trips and activities. The majority of the 52 participants had not travelled outside of the UK before this trip.

The annual cost of Big Noise Raploch is £770,000, with a crude, indicative average cost per child of £1,571. The programme funding comprises 70% from Stirling Council and 30% from private investors and donations. During the first five years of delivery, programme funding came entirely from private investors and donations. The figures here reflect the costs of Big Noise delivery in Raploch and do not include Sistema Scotland core running costs, which are funded by private investors and donations.

Table 2 summarises levels of Big Noise Raploch after-school programme engagement. Children who live or go to school in Raploch and are in Primary 3 to Secondary 4 are currently eligible to participate in the orchestra. Those who previously met these requirements but have moved away from the area remain eligible as long as they remain engaged with the programme. Table 2 shows the characteristics of: all Scottish pupils (primary and secondary); pupils eligible for Big Noise; pupils currently participating in the Big Noise Raploch after-school programme; and pupils who have previously attended Big Noise Raploch (at any point since its inception) but no longer attend.

It should be noted that the data on Big Noise Raploch participants and former participants only describes those children and young people who currently attend either of the two Raploch primary schools or either of the two high schools in Stirling. Such children make up 92% of current after school participants. The local data in Table 2 was kindly provided by Stirling Council Education Services and relates to the academic year 2014-15. The national data relates to the same year and was provided by the Scottish Government.

Table 2. Socio-demographic analysis of Big Noise Raploch after-school programme participation.

		All Scottish pupils	Pupils eligible for Big Noise	Big Noise attendees	Former Big Noise attendees	Observations
Pupil numbers		676,955	326	160	110	Half of eligible pupils attend, 34% have attended at some point and 17% have never attended.
Gender	M	50%	48%	41%	48%	Female pupils are more likely to attend than male pupils.
	F	50%	52%	59%	52%	
Identify as 'White: Scottish' or 'White: British'		85%	89%	90%	95%	The ethnicity of attendees reflects that of those eligible to do so.
English is the main language spoken in pupil's household		94%	96%	99%	97%	Pupils with English as an additional language are slightly less likely to attend.
Eligible for free school meals		19%	41%	41%	39%	Pupils receiving free school meals show no differences.
'Looked after' by the local authority	C*	1.4%	7.7%	11.0%	5.2%	Pupils who are 'looked after' are more likely to attend and less likely to stop attending.
	P**	ND	3.4%	3.0%	3.2%	
Average school attendance		92%	89%	93%	86%	School attendance is higher among attendees and lower among former attendees.
Proportion of school absences that are unauthorised		29%	49%	46%	39%	Unauthorised absence is lower among attendees and, especially, former attendees.
Pupils with additional support needs (ASN)***		20%	40%	36%	47%	Pupils with ASN are slightly less likely to attend and more likely to stop attending.
Pupils on a staged intervention (SI)****		ND	56%	52%	70%	Pupils on an SI are slightly less likely to attend and more likely to stop attending.

*C refers to children and young people who are currently looked after.

**P refers to the proportion of children and young people who were at one stage 'looked after' but are not currently.

*** 'Additional support needs' refers to when the child or young person is, or is likely to be, unable to benefit from school education without the provision of additional support.

**** 'Staged intervention' refers to an approach where there is co-ordinated support, involving parents, guardians and appropriate professionals for children and young people with additional support needs or specific life circumstances which may compromise their ability to benefit from school education. The nature of staged interventions can vary significantly.

To place these data in a wider context, children living in Raploch have significantly higher needs compared with other children and young people who attend Stirling's high schools. Data on the whole of Stirling's secondary school population (not shown in the Table 2) shows that 18% receive free school meals, 2.4% are currently 'looked after', 28% have additional support needs and 36% are on a staged intervention. These data represent markedly lower levels of need than among children and young people who reside in Raploch.

Seven years on since Big Noise Raploch was established, this report will look closely at the programme to learn from its successes, understand its challenges and reflect on the impacts of the intervention, as part of the broader regeneration efforts within Raploch.

Chapter 3: Profile of Big Noise Govanhill

Table 3. Overview of Govanhill and Big Noise Govanhill.

Govanhill overview
• Govanhill is a vibrant and ethnically diverse neighbourhood of around 15,000 people in Glasgow's Southside, where over 50 nationalities are represented. • The area experiences high levels of migration with a high population turnover. • Govanhill has the highest concentration of Eastern European Roma migrants in Western Europe. • Govanhill's residents face a range of significant challenges to health, including poverty, overcrowding, poor quality housing and high levels of antisocial behaviour. • Govanhill's statutory and third sector services face a range of challenges in service delivery and barriers in engaging with service users, including the diversity of languages and cultures in the area. • The depth and scale of need within Govanhill are difficult to capture using official statistics, owing to the fast pace of migration.
Big Noise Govanhill overview
• Established in 2013. • Around 800 children aged from six months to nine years (up to Primary 4) engaged. • Approximately 20 children are engaged in baby and toddler provision. • Approximately 650 children are engaged in nursery and 'in-school' provision. • Approximately 125 children are engaged in 'after-school' provision. • Of these, approximately 60 children also engage in 'school holiday' provision • Current programme costs are £560,000 per annum. • Glasgow City Council provide 15% of programme funding, with 55% from the Scottish Government. • Remaining 30% of funding comes from charities, trusts and private donations.

Govanhill overview

Govanhill (Bhrae na Ghobhain in Scottish Gaelic) is situated in Glasgow, south of the river Clyde between the Gorbals, Mount Florida and Queens Park. The Govanhill area currently has a population of approximately 15,000 and was formed in 1877. Govanhill's history is closely associated with William Dixon, a leading ironmonger at the time. The main avenue running through Govanhill is called Dixon Avenue and many local streets were named after the daughters of William Dixon Jr, such as Allison Street, Daisy Street, and Annette Street.

Govanhill has been home to successive waves of migrants, most notably from Ireland, Central and South Asia, East Asia and, more recently, Eastern Europe. Data provided by Glasgow City Council Education Services for the academic year 2013/14 shows that 13% of children enrolled in Govanhill schools were White British/Scottish/Irish, 16% were from other White backgrounds, 48% from Central and South Asian ethnicities and 7% from East Asian ethnicities, with the remainder from other ethnic backgrounds. Within this mix, it is estimated that at least one fifth of Govanhill's school children are from Roma families[45]. This highly diverse mix of nationalities, languages, religions and cultures has created a vibrant and dynamic neighbourhood, where a broad range of communities intersect. This diversity, in the context of high migration (both in and out of the area) has also placed significant and, at times, unique demands on public services in Govanhill.

In recent years, Govanhill has earned a reputation as a neighbourhood with many challenges; the area faces stark inequalities across a range of social, economic, health and environmental markers[46]. As well as being both diverse and transient, Govanhill is also currently home to the highest concentration of Eastern European Roma migrants in Scotland[47] and the area contains the largest concentration of privately rented housing in Glasgow City. The presence of vulnerable groups living within the area,

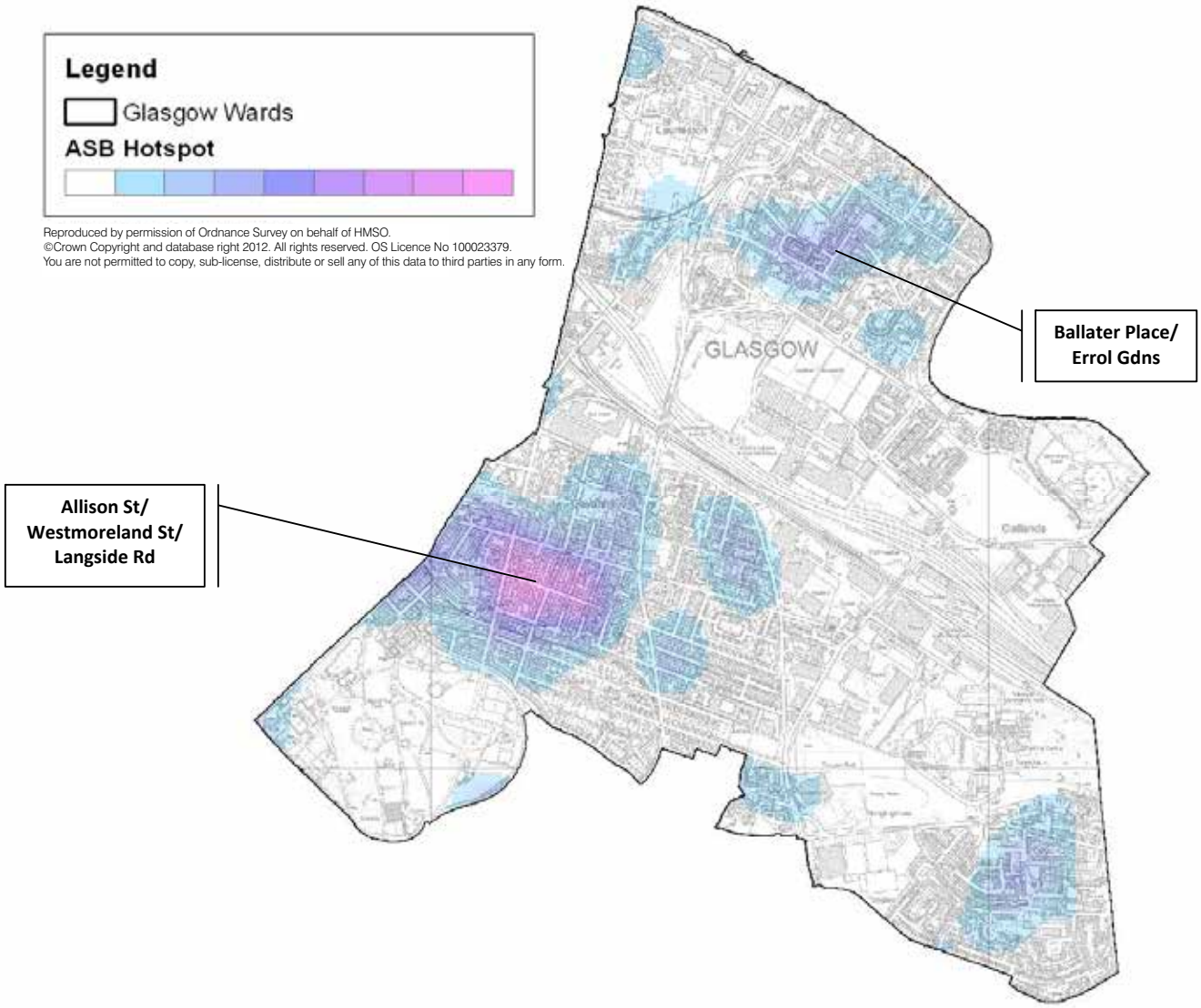
combined with Govanhill's unique housing tenure profile, has seen the proliferation of 'rogue' landlords and a marked increase of overcrowding and below tolerable standard living conditions in the area.

Such conditions have taken root in Govanhill, which, to a certain extent, has led to the breakdown of community cohesion. An overcrowded property means continual noise pollution and nuisance for neighbours, overflowing bins and improper refuse disposal for council services, and repeated call outs for the police and community safety services. To compound matters, there are a lack of services and leisure activities for young people in Govanhill.

> *"Because there is nothing to do, it's resulting in youngsters getting involved in things that annoy people, they are hanging about the streets, they are playing where they shouldn't be, playing football in the street and as they get older that can progress to antisocial behaviour, which can lead to significant problems in Govanhill."*
> (Community Police Officer, Govanhill)

These factors contribute to Govanhill having the highest recorded levels of antisocial behaviour in the South of Glasgow[48]. Figure 1 below illustrates this point, mapping levels of antisocial behaviour (ASB) across Glasgow City's Southside Central ward over a four-week period. The 'hotspot' on the lower left portion of the map is contained within the boundaries of the Govanhill neighbourhood.

Figure 1: Antisocial behaviour 'hotspot' map, 22/12/14 to 18/01/15, Glasgow City, Southside Central Ward.



The 2012 SIMD profile for the area highlights the relatively high levels of young people not in education, employment or training in Govanhill, at some 23% above the Scottish average[49]. Local services and Community Planning Partners have made some progress on all of these issues, in many cases specifically tailoring service delivery to the needs of this unique area. However, there is widespread acceptance that more needs to be done and measuring the impacts of such efforts in Govanhill is a further challenge. Appendix B details selected results of a health and wellbeing survey conducted in Govanhill in 2014. The survey will be repeated in coming years to assess the potential impacts of Big Noise at a community level (for more information on the health and wellbeing survey please see Appendix A). In most parts of the survey Govanhill residents have a less favourable view of themselves, their neighbourhood and their social connectedness within their neighbourhood. Interestingly, levels of mental wellbeing in Govanhill do not vary significantly from those recorded in Glasgow City overall.

The transience, language barriers, cultural diversity and the housing tenure profile within Govanhill directly compromise the accuracy of official statistics and monitoring information for the neighbourhood; for example, the 2011 Census dramatically underestimates the level of Roma residents in the area and is considered inaccurate. There is the potential for the socioeconomic status of Govanhill residents to be substantially overestimated in the area's SIMD profile. Households in Govanhill suffer from intense overcrowding in the private rented sector, with multiple families often sharing one property, a problem which is largely invisible in official statistics. This leads to underestimations in the levels of income and employment deprivation, which are in any case hard to measure due to the prevalence of informal and insecure work in the area.

Big Noise Govanhill

Big Noise Govanhill is Sistema Scotland's second orchestra centre and was launched in 2013. In a similar fashion to the Raploch programme, Big Noise Govanhill has three key elements: singing and musicianship for younger children; instrumental and orchestral tuition for children in Primary 3 and above, and instrumental and orchestral tuition for adults. The curriculum begins with Baby Noise, which offers drop-in sessions once a week to parents and carers with babies and toddlers up to three years old. It uses play-based learning to nurture and teach children the basics of musicianship (pitch, tone and rhythm) as well as social and developmental skills. This learning continues into nursery school, which is delivered to all children who attend Govanhill Nursery and Cuthbertson Nursery class, and subsequently primary school, where in-school musicianship is delivered to all children in Primary 1 and Primary 2 attending Cuthbertson Primary, Annette Street Primary, Holy Cross Primary and St Bride's Primary.

Children begin learning a string instrument in Primary 2, at the start of school term children make a paper replica instrument to develop co-ordination and learn the fundamentals of holding and caring for the instrument. After Christmas children then receive the real instrument and form part of the Primary 2 string orchestra. At the end of Primary 2 children are offered the opportunity to opt-in to the Big Noise after-school and holiday programme, In Primary 3, children no longer attend in-school provision but transfer to summer school and then after-school classes, which deliver four half-day sessions and three evening sessions per week respectively.

Big Noise Govanhill currently delivers its programme to around 800 children aged six months to nine years old. Around 20 families are currently engaged with Baby Noise. As toddlers progress to nursery, they attend the Big Noise in-school programme, which works with around 650 children from Nursery to Primary 2 (ages 3-6), twice a week, across Govanhill's four primary schools and nursery. Currently 125 children (Primary 3 and 4, aged 6-9 years) are engaged in after-school provision. Of those, up to 60 also attend Big Noise for four mornings per week during the summer, Easter and October holidays.

Sistema Scotland's plan is to increase after-school provision intake each year in Govanhill by around 60-80 children. Adult Noise, the orchestra for parents and carers in Govanhill, is, at the time of writing, in its very early stages of development with ten adults currently engaged.

The annual cost of Big Noise Govanhill for 2014/15 is just over £560,000, which is expected to increase to around £900,000 per annum by 2017/18, when an estimated 1,000 children will be engaged in the programme. At present, around 15% of programme funding for Big Noise Govanhill comes from Glasgow City Council, with the remainder from the Scottish Government, charities, trusts and private donations. By 2017/18, crude per child estimates would equate to a cost of around £200 per child per year for in-school delivery and just under £2,000 per child per year for after-school delivery.

Some key challenges to the delivery of Big Noise Govanhill are the language and cultural barriers evident within a community where at least 52 different nationalities reside[50]. The transience of Govanhill's population, particularly its Roma residents, also poses challenges in terms of engaging children and families in the programme. These are challenges that all local services in Govanhill face, both in terms of service delivery and monitoring progress and outcomes in the area[51].

Table 4 summarises a range of information about the children attending the Big Noise Govanhill after-school programme. It should be noted that the data items available in profiling Big Noise Govanhill engagement are slightly different to those of Big Noise Raploch. All of those children who are in Primary 3 or 4 and who either live in Govanhill or who attend one of the four Govanhill primary schools are eligible to attend the programme. When a child moves away from Govanhill or moves school they remain eligible for the programme as long as they remain engaged.

Table 4 shows information for: all Scottish pupils; pupils eligible to attend Big Noise; pupils currently attending Big Noise; and those who have, at some point since the programme's inception, attended the programme but no longer do so. This data describes 92% of current and former after-school participants, the shortfall being made up by those who live in Govanhill but do not attend a local school or who remain engaged with the programme despite having moved out of the area.

The majority of the data used in Table 4 was kindly provided by Glasgow City Council Education Services and relates to the academic year 2014-15. Where local data was not available, the Scottish Government kindly provided aggregated school data across the four schools in Govanhill for the academic year 2013-14. The national data relates to 2014-15, and was also provided by the Scottish Government.

Table 4. Socio-demographic analysis of Big Noise Govanhill after-school programme participation.

	All Scottish pupils	Pupils eligible for Big Noise	Big Noise attendees	Former Big Noise attendees	Observations
Pupil numbers	676,955	405	125	113	One third of eligible pupils attend, 28% have attended at some point and 41% have never attended.
Pupils living in most deprived Scottish Index of Multiple Deprivation decile	11%	25%	34%	16%	Pupils living in the most deprived postcodes are more likely to attend and less likely to stop attending.
Identify as any ethnicity other than 'White: Scottish' or 'White: British'	15%	87%	68%	92%	Pupils from ethnic minorities are less likely to attend and more likely to stop attending.
English is not the main language spoken in child's household	6%	77%	61%	86%	Pupils with English as an additional language are less likely to attend and more likely to stop attending.
Average school attendance	92%	91%	93%	92%	School attendance is higher among attendees and among former attendees.
Eligible for free school meals	19%	35%	ND	ND	Govanhill pupils have high eligibility for free school meals, although this is likely to underestimate the level of poverty due to a lack of access to welfare.
Children with additional support needs (ASN)*	20%	40%	39%	61%	Pupils with ASN are slightly less likely to attend and more likely to stop attending.

*'Additional support needs' refers to when the child or young person is, or is likely to be, unable to benefit from school education without the provision of additional support."

As well as having a high level of need compared with other children nationally, children living in Govanhill are more likely to require higher levels of support than children living across Glasgow City:

- 35% of children attending the four schools in Govanhill receive free school meals, compared with an average of 20% across Glasgow City primary schools.
- 39% of the children participating in Big Noise have additional support needs (ASN) compared with 27% of children across Glasgow City primary schools.
- 18% of children across Glasgow City primary schools have English as an additional language compared with three quarters of children in Govanhill.
- As described already in this chapter, SIMD may be an unreliable marker of socioeconomic circumstance for Govanhill and it may overstate the socioeconomic position of its residents.

This report will evaluate both the strengths and impacts of Big Noise Govanhill and the challenges encountered in establishing the programme. The evaluation will pay careful attention to the particular context of this diverse and dynamic neighbourhood, including the ways in which Sistema Scotland has effectively adapted to this, perhaps unique, environment. In so doing, this evaluation recognises the broader, tailored partnership service delivery in the area undertaken by a range of Glasgow City Council services including local schools, health services, Govanhill Housing Association, Police Scotland, Scottish Fire and Rescue, local churches, third sector organisations and community groups.

Chapter 4: Methods summary

This evaluation brings together a range of evaluation partners, professional perspectives and skills in common pursuit of understanding, assessing and learning from the Sistema Scotland Big Noise programme. The framework of the overall evaluation of Big Noise is available on the GCPH website. A more detailed description of the specific methods used to generate the evidence presented in this report is available in Appendix A.

Evaluation aims

There are two overarching aims for the evaluation. Aim one relates to assessing the outcomes and impacts of the programme at a variety of levels. Aim two concerns the process and related learning from the implementation of the programme in Raploch and Govanhill.

Evaluation aim 1. Assess, over the long term, the outcomes of the Big Noise programme in Raploch and Govanhill in terms of social and behavioural development, educational performance and attainment and future impacts on the lives, health and wellbeing of the children and young people participating in the programme. Additionally, the social impacts at the family and community levels will be assessed. The impacts of the programme at a societal level will be assessed through an economic study, which will trial the use of a cost-benefit analysis.

Evaluation aim 2. Gain insight into Sistema Scotland's ethos and vision and its approach to selecting programme sites, adapting programme delivery to local structures and requirements, local partnership working and the characteristics of the staff and implementation, which are critical to enhancing inclusion, engagement and retention and achieving positive outcomes for the participants, families and wider community.

A particular strength of this initial phase of evaluation has been the collaboration of three partners in three distinct components of the evaluation:

- **Evaluation component 1 Glasgow Centre for Population Health:** Sistema Scotland/Big Noise process learning and measuring programme impacts.
- **Evaluation component 2 Education Scotland:** assessing quality of Big Noise Raploch education and learning.
- **Evaluation component 3 Glasgow Caledonian University:** cost-benefit analysis of Big Noise Govanhill.

Evaluation component 1: Glasgow Centre for Population Health, process learning and measuring programme impacts

Component 1 comprises process learning from the delivery of Big Noise and measuring the impacts of the programme.

Two researchers carried out data collection using a range of methods (see Table 5 below). Children, parents, staff, and volunteers at Big Noise, as well as members of partner organisations, were asked to describe the impacts of the programme in their communities. These impacts were then mapped out, in the form of logic models (see Appendix A for a more detailed description of this process), which are presented in Chapter 5. Together with the analysis of quantitative data relating to levels of programme engagement, these methods addressed evaluation aim 1.

In order to meet evaluation aim 2, the researchers explored the key strengths and challenges of programme delivery with Sistema Scotland and Big Noise staff and volunteers. This enabled the identification of a number of key qualities of the organisation, and the challenges these present, which are outlined in Chapter 5 of this report. The range of methods used in evaluation component 1 are summarised in Table 5.

Table 5. Summary of methods used in evaluation component 1, Glasgow Centre for Population Health.

	Evaluation Component 1: GCPH, process learning and measuring programme impacts
Qualitative methods (process learning and short and medium-term impact assessment)	• Semi-structured interviews (126 staff, volunteers and partners). • Participant drawing exercise, Govanhill (110 children). • Participatory filmmaking exercise, Raploch (six young people). • Case studies (relating to one trip, one event and four participants; including interviews with participants, parents, musicians, school teachers). • Observation (1,500 hours). • Systematic literature reviews (three reviews and one summary synthesis). • Development of Big Noise logic models.
Quantitative methods (profiling engagement and long-term impact assessment)	• Health and wellbeing survey, Govanhill (533 residents surveyed, presented in Appendix B). • Profile of programme engagement (all participants in both Big Noise sites). • Life-course tracking of outcomes data (limited progress to date, data sharing requirements still to be agreed with partner organisations).

Evaluation component 2: Education Scotland, assessing quality of Big Noise Raploch education and learning

Education Scotland performed a week-long visit to Big Noise Raploch in late September 2014. The purpose of the visit was to assess the educational and learning quality of Big Noise delivery and assess the impacts of the programme on participants, families and the wider community. Three overarching questions underpinned the assessment, these were:

- How well do Big Noise Raploch participants learn and achieve?
- How well is Big Noise Raploch increasing the life chances, promoting and securing wellbeing for children, young people and their families?
- How well does Big Noise Raploch contribute to building a stronger more resilient community?

The visit involved six inspectors performing a range of primarily qualitative methods. More than a year of engagement between Education Scotland and Sistema Scotland preceded the visit in order to tailor and refine the assessment methods to be more suited to Big Noise delivery and the Raploch context. The basis for the assessment of the educational and learning quality of Big Noise lies in the professional experience, expertise and judgement of the inspectors involved in the visit. The methods involved in evaluation component 2 are detailed in Table 6.

Table 6. Summary of methods used in evaluation component 2, Education Scotland.

	Evaluation component 2: Education Scotland, assessing quality of Big Noise Raploch education and learning
Qualitative methods (assessing quality of education and learning)	• Observations of Baby Noise and nursery Big Noise sessions. • Observations of Big Noise tutor-led musicianship lessons with primary school and special school classes during the school day. • Observations of Big Noise after-school programme and the adult orchestra. • Observations of Big Noise participants working in secondary school classes across the curriculum. • Observation of a range of operational meetings. • Observation of 'Take a musician home for tea' session. • Focus groups of children and young people from P1-S4. • Focus group of participants' parents. • Informal discussions with parents as they arrived to collect children and with helpers and parents at Baby Noise. • Telephone conversations with the CEO of the National Youth Orchestra of Scotland and with members of Sistema Scotland Board. • Meeting with headteachers and other staff in each of the schools partnered with Big Noise. • Informal discussions with the manager of Playview after-school care who share the campus.

Evaluation component 3: Glasgow Caledonian University, cost-benefit analysis of Big Noise Govanhill

A cost-benefit analysis (CBA) methodology was used to consider whether the costs of Big Noise Govanhill would be greater or lesser in magnitude than the potential benefits that the project is predicted to deliver. This is consistent with the application of a CBA methodology to estimate the social impact of *El Sistema* in Venezuela, in 2007, by the Inter-American Development Bank.

The economic analysis drew upon several main sources as follows: a literature review of economic evaluations of arts-based programmes designed to improve health and wellbeing (see Appendix C for summary); financial data provided by Sistema Scotland about Big Noise Govanhill; and the Big Noise logic models developed by the GCPH (presented in evaluation component 1 Chapter 5) which captures the potential variables of interest (the anticipated outcomes) for participants and families and communities. Primary data was not collected for the study. Benefits were monetised using a benefits transfer approach. A range of assumptions underpin the CBA and these are detailed in Appendix A with an economic technical summary detailed in Appendix D.

The critical focus of CBA is on the net present value (NPV) of a project because this indicates the value of the investment: projects with a positive NPV increase net worth, while projects with a negative NPV do not increase net worth. Projects with NPV=0 leave net worth unchanged. NPV is estimated by setting out the stream of potential benefits of the project and considering these in light of the predicted costs. To this end, all predicted costs, including estimates of reductions in future 'reactive' social costs (for example, the cost of crime and justice) are netted out before being compared with the flows of the value of benefits. This can affect the benefit-cost ratio (BCR) – an indicator of overall value for money – particularly as a negative BCR can be misleading depending on whether the negative is a result of the numerator or the denominator. As such, although this study reports BCRs caution is noted in interpretation.

Table 7. Summary of methods used in evaluation component 3, Glasgow Caledonian University.

	Evaluation component 3: Glasgow Caledonian University, cost-benefit analysis of Big Noise Govanhill
Quantitative methods (cost-benefit analysis)	Cost-benefit analysis (CBA) underpinned by: • Literature review of economic evaluations of arts-based programmes designed to improve health and wellbeing. • Financial data provided by Sistema Scotland about Big Noise Govanhill. • Identification of anticipated outcomes from GCPH logic models. • CBA enables development of projected net present value (NPV) and benefit-cost ratio (BCR) at four time points from six years to 70 years of programme delivery.

Chapter 5: Results

Evaluation component 1: Glasgow Centre for Population Health

Part 1: Sistema Scotland and Big Noise process learning

Key messages

This section describes seven process learning themes which help describe important characteristics of Sistema Scotland and the delivery of the Big Noise programme.

These process learning themes are important because the ways in which Sistema Scotland works and Big Noise is delivered have a pivotal influence on a range of evidenced impacts which are outlined in the next section of this chapter (Measuring impacts of Big Noise). There are also challenges associated with maintaining the seven themes and in how they interact.

While these process learning themes are specific to Sistema Scotland and the Big Noise programme, they are easily generalisable to other social interventions and regeneration in a variety of contexts.

The depth and strength of Sistema Scotland's impacts are likely to lie in the fact that all seven of the themes are present in one organisation.

This section describes the themes that emerged from the qualitative data collected by the GCPH. Seven core qualities of Sistema Scotland emerged consistently across all methods of data collection. These qualities align very closely with Sistema Scotland's vision and values, demonstrating that the organisation's ethos is strong and consistent across all staff groups and is firmly embedded in the delivery of the Big Noise programme.

Under each heading there is a description of the ways in which these qualities play out in practice at Big Noise centres. This is followed by a description of some of the challenges that the pursuit of each of these strengths has presented for Sistema Scotland so far.

Qualities of Sistema Scotland and the Big Noise programme

- Inclusivity and accessibility
- Intensity and immersion
- Collective learning and teaching: the orchestral model
- Reputation and the pursuit of excellence
- Building relationships
- Innovation and flexibility
- Longevity and commitment

Inclusivity and accessibility

Sistema Scotland makes its programme universally available to children enrolled in schools within its intervention areas: there is no audition process and no fee for participation. Big Noise also fund trips and concerts, as well as working with other music education providers to provide free places for Big Noise children as they develop musically. Significant effort is made to raise the visibility of the Big Noise programme from the outset, most notably by way of community launch concerts. This, alongside Sistema Scotland's active approach to working with children and families with lower levels of engagement in its programme, removes many of the barriers children face in learning a musical instrument.

While in recent years steps have been taken to include more children from less wealthy backgrounds in music education, many children from disadvantaged areas still experience multiple exclusion that requires intensive support and resources to overcome. The design of the Big Noise programme encourages and supports participation, for example through its neighbourhood-based location and convenient timing after school, the provision of transport for those who require it and the provision of free after-school snacks for children.

However, inclusion for Sistema Scotland goes beyond these basic measures; Big Noise musicians described contacting children and families directly to encourage them to join the programme, to discuss reasons for absence from after-school or holiday programmes, as well as discussing with families what Big Noise staff might be able to do to support and encourage children to attend more consistently. Some examples include offering children a reduced timetable or focusing on one-to-one or small group tuition in the short term.

> *"I've been in a meeting with a child who had disengaged from many things, but also from Big Noise. One of the staff came to the staged intervention meeting to work out, 'what can we do to get this lad back in here?', to the point where they were prepared to go and change the session to a different time, to go into the school, to go to the home, to get his friend back involved."*
> (Educational psychologist)

This active approach to inclusion is essential to the success of the Big Noise programme. In both Govanhill and Raploch, some children's engagement in education is relatively low: while primary school attendance across Scotland is 95%, it is 89% and 91% for pupils who are eligible for Big Noise in Raploch and Govanhill respectively. School staff also reported that some children and families struggle to engage with education because their home life is complex or unstable, and others face learning difficulties, disabilities or emotional and behavioural difficulties. Within Govanhill there is the added complexity that over three quarters of children have English as a second language.

Participation

Despite these challenges, take-up among eligible children and young people is 49% in Raploch and 31% in Govanhill. Available data also suggests that Big Noise is able to engage with a large number of children in need of additional support for learning. For example, 77% of children eligible to attend Big Noise Govanhill have English as an additional language (EAL). However, some 86% of children who have left the programme and only 61% of current participants do so. Similarly, 92% of children who have left the programme are members of an ethnic minority, while this applies to 87% of eligible children and only 68% of children currently attending the programme. However, it is not possible to determine to what extent the high rates of EAL and ethnic minority identity among programme leavers might be driven by high population turnover within Govanhill.

The proportion of children with additional support needs (ASN) is also high among eligible populations in Govanhill and Raploch; 40% in both areas compared with 18% across Scotland as a whole[52]. However, the rate is slightly lower among Big Noise participants at 36% and 39% in Raploch and Govanhill respectively. Children who leave the programme are slightly more likely to have ASN: this applies to 47% and 61% of programme leavers in Raploch and Govanhill respectively. A similar trend is evident for pupils who have had staged interventions in Raploch, the rate of which is 56% among pupils who are eligible for Big Noise, 52% among current participants and 70% among former participants. (All data described here is summarised in Tables 3 and 5 within Chapters 2 and 3 respectively, please note that staged intervention data is available for Raploch only).

Care is needed in interpreting these data at this stage; there are potentially many influences at play which will be explored in this process learning theme. The reduced participation of children from ethnic minorities and those for whom English is a second language does suggest that there may be cultural and language challenges within Big Noise delivery in Govanhill. All Govanhill data, however, must be considered within the context that population turnover is high, the programme is new and that community engagement and service delivery in Govanhill are inherently complex and challenging; several partners interviewed describe the reported 31% after-school engagement in the area as impressive within the timescales.

The high proportions of former Big Noise participants with ASN in both Big Noise programme sites, compared with current participants, perhaps suggests that the intensive and immersive qualities (described in the next process learning theme) of the programme may be too demanding for some. The greater proportion of programme leavers who require staged intervention at school in Raploch, compared with current participants, again suggests that consistent engagement with the programme may be challenging for those in need of additional learning support. Equally, however, this data could be interpreted as indicating that participants in Big Noise have less need for staged intervention at school due to the positive impacts of Big Noise on their learning.

Young people's reasons for leaving Big Noise provide some insight. A focus group with non-participants outlined the pragmatic reason of individual choice; some young people had no interest in music and did not think they would enjoy the programme. Others cited alternative activities such as sport and dance as a preferred use of their free time. Others still mentioned being too tired and the pressures of school and exams as reasons why they left the programme.

The non-exclusion approach

Sistema Scotland's approach to teaching music, which focuses on "unlocking potential" instead of identifying and developing pre-existing abilities or "talents" (Sistema Scotland staff member), is intended to target support towards children who may face barriers or challenges in engaging with the programme. Musicians, support workers and volunteers described a strong focus on adapting to children's needs and nurturing them through their development. This approach includes a non-exclusion policy in which staff strive to manage additional support needs within the programme. This is described by staff as being particularly effective at reducing barriers for children with behavioural difficulties, so that those most at risk from being excluded from education and leisure activities are proactively included at Big Noise. Big Noise was therefore described as a fun and happy place for all children, by musicians and partners alike (and particularly school teachers), where children are supported and can feel secure.

> *"I love the way they speak to the children, I love the way they are with the children, the children love going. They are the most positive people."*
> (Depute headteacher, Govanhill)

While this degree of inclusion is a core strength of Big Noise delivery, it also means that teaching can, at times, be hindered by persistent disengaging and disruptive behaviour.

In order to support children to engage within this framework, Sistema Scotland employs support workers and volunteers to create high staff to child ratios (1:7) in a team-based teaching environment. Support workers are predominantly sourced from local schools to provide consistency with agreed behaviour management plans across school and Big Noise. These non-teaching staff concentrate on addressing children's individual needs, in order to support children effectively and keep disruption to a minimum. This allows musicians to focus on teaching the group as a whole. Those partners involved in delivering training for Sistema Scotland, and in particular those with expertise in behaviour management, praised the regular training that Big Noise staff are given, especially around the use of validated techniques and tools designed to manage challenging behaviour and support those with additional needs.

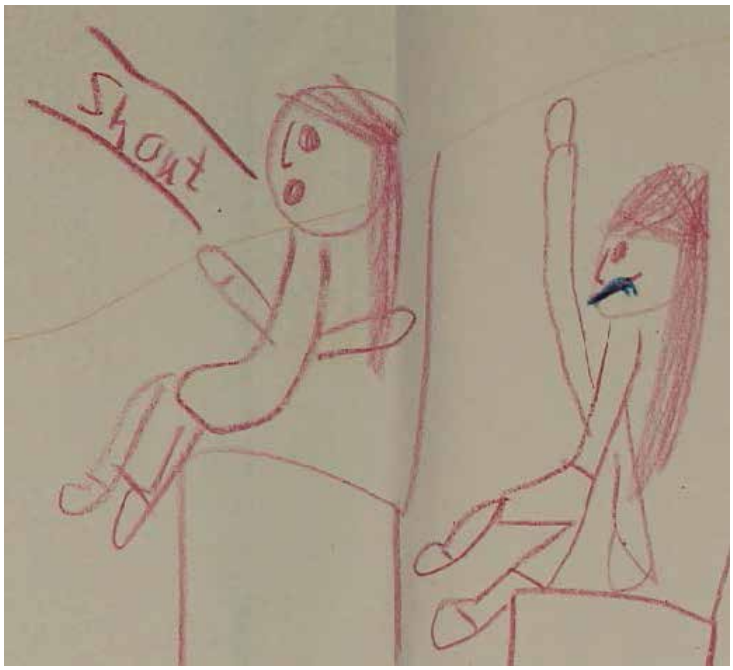
Nevertheless, musicians, support workers and volunteers described how the variety of needs among the children that attend Big Noise continues to challenge their ability to cope effectively in every session. In particular, the 'time out' system for managing behaviour used at Big Noise is understood among staff to have varying degrees of success from child to child and between different staff members.

> *"Sometimes if you have got three or four adults, who all have a different idea of what discipline is, then you can make more noise than the kids. I think we do need to deal with that and we need to come to some kind of agreement on where we stand with the challenging kids, because some people want them out and some people want to keep them in."*
> (Musician, Big Noise Raploch)

While standardised approaches to managing (and preventing) disengaging behaviour are not always appropriate, coping with this requires constant innovation and development. Although significant progress has been made over the past seven years, some staff still feel that they could and should push for even better engagement and behaviour going forward. Indeed, some Big Noise participants described, through the creative drawing exercise, how their least favourite part of Big Noise was experiencing disruptive behaviour.

> "I don't like me listening and someone else isn't." (Big Noise Govanhill child, age 8)

> Child A (age 7): "I don't like it…because we do 'Ahhhhhh'!"
> Researcher: "What's that?"
> Child A: (age 7) "Some people shouting, louder and louder."
> Child B (age 8): "And then the teacher will have a sore head. I have a sore head as well."



The general consensus across a range of perspectives engaged in this evaluation is that Big Noise generally manages disruptive behaviour well but that there is always scope to improve behaviour management.

> Researcher: *"Do you think (Sistema Scotland) manage that balance [between inclusion and disruptive behaviour] well at that moment?"*
>
> Educational psychologist: *"I think for the most part they do. …it's not a huge issue. But there are one or two children that I would have been saying to them, 'You need to be thinking about laying down a few markers here', in terms of what their behaviour is."*

Moreover, the depth of some children's needs and the extremes of behaviour that this can occasionally generate, means that some Big Noise staff feel that access to more specialist support or additional training may be of some benefit.

> *"People need to be [better] trained in how to deal with this behaviour and I think that it would be lovely to have a resident such as a child psychologist in a way, or just someone who has an office here who can come into the classes. It is such a luxury but they could observe and then help with any problem children. Someone to refer to …[and some]… training in how to deal with difficult children, how to handle certain situations and also, in a perfect world, a child behavioural therapist who could come in."*
> (Musician, Big Noise Govanhill)

A number of Big Noise musicians also feel that they would benefit from more consistent access to information held by schools regarding children's educational needs and home lives. Big Noise currently relies on families and classroom teachers to pass on information on an ad hoc basis that may be of relevance to children's attendance at and participation in Big Noise: there is no automatic or formalised process through which such information is acquired.

While operational staff described relationships and information sharing as developing steadily with families in Raploch, the picture in Govanhill is more complex. The relative newness of Big Noise as an organisation, the diversity of languages spoken in Govanhill, the sensitivity of some of the required information and the wariness of some sections of the community with regards to sharing personal information with services are all potential barriers. While a number of musicians and, in particular, volunteers felt that they were not always given enough information about individual children to handle their behaviour and learning to the best of their ability, others recognised the need for confidentiality.

> *"I know there's an issue with Big Noise being a separate organisation… but I think the schools' knowledge of what works with certain children really needs to be more cut and dry. You need to get that information from the schools, and you don't need to know specifics about the child they just need to say, we've found this with them, this works."*
> (Volunteer, Big Noise Govanhill)

Cultural relevance

While managing behaviour was the key challenge associated with inclusion identified by Big Noise staff and volunteers, Sistema Scotland's partners were predominantly concerned about the focus on orchestral instruments and "classical" music in the after-school and summer programme. Some questioned the cultural relevance of this for children in both Raploch and Govanhill, citing this as a possible barrier to engagement and inclusion. Despite these reservations, in Raploch take-up of Big Noise after school, now that the programme has been established for over seven years, is 70% across Primary 3-7. It was clear when speaking with young people engaged in Big Noise Raploch that orchestral music has become a common place and accepted part of their lives, as they have grown up through the programme. However, those not engaged in the programme identified the difficulty of

learning an instrument, boredom stemming from repetitious learning and the pressure generated by performances as reasons for disengagement. So, while the cultural relevance (or otherwise) of the music was not a core issue, the focus on orchestral playing was a more commonly identified drawback by a minority of young people and is considered further below.

In Govanhill, currently 30.9% of eligible primary school children (Primary 3-4) opt in to after-school provision. While this rate reflects the size of the neighbourhood and the fact that the programme is only in its second year, the issue of cultural relevance is, again, perhaps more complex. School staff described how Govanhill's broad range of nationalities and religious affiliations means that, for some families, music is a strong and lively part of their cultural background, and for others it is only permitted as part of religious worship, with many falling somewhere between these two positions. Alongside the diverse set of languages spoken in Govanhill, this array of cultural relationships with music creates challenges in helping families to understand what happens at Big Noise and the benefits that participation may bring their child.

In Raploch, some of the older and more advanced young musicians have begun their own ensembles with a non-classical focus. While such ventures only take up a small proportion of after-school timetabling, they demonstrate a degree of freedom within the orchestral model that can only enhance the inclusivity of Sistema Scotland's approach. Big Noise staff and partners alike identified further potential for the inclusion of music from a variety of cultures in the Big Noise Govanhill repertoire, as the children's music abilities develop.

Geographical boundaries

It is necessary to recognise that the catchment area of their Big Noise programme does have boundaries. The appeal of Big Noise provision, and the exclusion of those outwith their geographical catchment areas, has left some families and service providers outside of these areas feeling excluded. However, the Big Noise programme is specifically targeted at those neighbourhoods that are most in need of the benefits they bring. Sistema Scotland's approach is to target the needs of all children and families within the community in which they are working, no matter how challenging their barriers to participation.

The quantitative programme engagement and inclusion data presented in Chapters 2 and 3 and described in this section raise some important realities in the delivery of the Big Noise programme. Without question the profile of current Big Noise participants in both Govanhill and Raploch shows that both areas have high need and face a range of inequalities compared with local and national averages. However analysis does show that children who belong to an ethnic minority are underrepresented in Big Noise Govanhill and pupils with additional support needs and staged interventions and males are less likely to engage in Big Noise Raploch. Care must be taken in interpreting these data in isolation; language and cultural barriers to community engagement and service delivery have been evident in Govanhill for some time and the Big Noise programme is still new to this area. Furthermore some of the very process learning themes described as strengths in this section (such as intensive and immersion) may make programme engagement difficult for children and young people with additional needs and/or difficult home circumstances.

Intensity and immersion

Big Noise begin teaching children at preschool age and continue to school leaving age, which provides potential for engagement across the whole of childhood and adolescence. The after-school programme runs up to four sessions per week, during both term time and most school holidays. This immersion in Big Noise gives children access to an intensive music education. The universal access to Big Noise within an intervention area also immerses the wider community, and schools in particular, in Big Noise delivery.

Children in the in-school programme receive over 35 hours of tuition per year. Those opting in to the holiday and after-school programme can receive between 180 and 340 hours of tuition per year, as well as between 70 and 130 hours of break time in which to relax and socialise with their peers, depending on their level of advancement, engagement and the site they attend. This immersion provides a degree of structure and stability for children that complements and extends that which they receive at school; both school teachers and musicians described this as being of particular benefit for children whose home lives are unstructured or chaotic. Big Noise can provide a regular and stable "counterbalance" (educational psychologist) that children can use to feel safe and secure in their day-to-day lives.

Immersion in Big Noise also appears to reinforce children's strong sense of belonging to and identity within the orchestra. Young people in Raploch described the praise and consequent sense of pride they experience at Big Noise as having a deep impact on their childhood experiences and development. Musicians described how, in terms of their musical learning, Big Noise children also learn faster than they would if they were receiving only short, weekly individual instrument lessons, as is the standard approach for instrumental teaching. Section 2 of this chapter provides more detail on the specific impacts of this approach.

Despite its benefits, however, the intensive and immersive nature of Big Noise also generates a number of challenges. Primary among these is that children usually attend the programme after a full day at school and some children described feeling tired during sessions and wanting to go home.

> Researcher: *"So what is it that you don't like?"*
> Child A: *"I don't like it, it just makes me tired."*
> Child B: *"Sometimes you nearly fall asleep in orchestra."*
> Researcher: *"Why?"*
> Child B: *"I'm so tired."*
> Child C: *"I don't like it because you don't, like, get to go home early and see your parents…"*
> (Big Noise Govanhill participants, age 7-8)

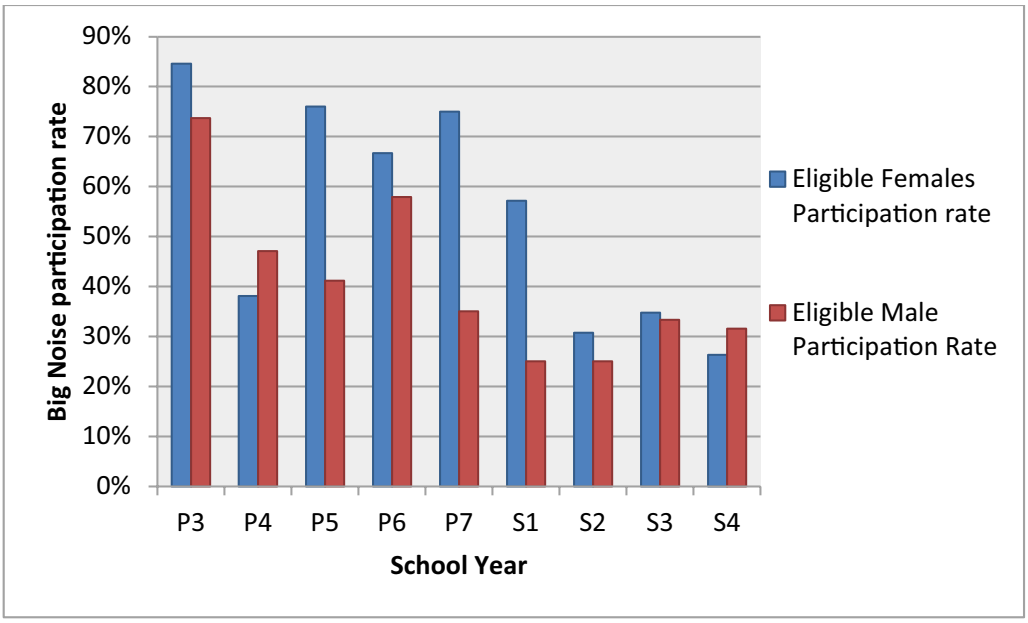
> *"Well some of it is quite dense, and it's a lot for them to take in, and I guess when you've been at school for six hours and then you come here, you're not probably in the right frame of mind to cram more stuff in. I think it's all given in a digestible format but, even so, when you're feeling tired and stuff they might find it hard to concentrate."*
> (Volunteer, Big Noise Govanhill)

A degree of concentration and hard work is therefore required from children in learning their instruments, and after a day at school this can be difficult, particularly for the youngest members of the orchestra. The musicians' warmth and skill in engaging the children and creating a fun, relaxed and enjoyable learning environment was recognised by partners as contributing to the success of the programme. Sistema Scotland staff described the enjoyment that children and young people experience at Big Noise as particularly important in ensuring that they continue to return to Big Noise throughout the school year and their school career.

At Big Noise Raploch, once participants enter secondary school they are less likely to be engaged in the orchestra programme. While 30% of Secondary 2-4 pupils (who make up the original cohort

introduced to the programme in 2008) engage with Big Noise, the rate among primary school children is 70%. Figure 2 details current programme engagement in Big Noise Raploch by gender and school year. What is striking from the chart is the lower rate of engagement among eligible males. The data used in Figure 2 was kindly provided by Stirling Council Education Services and relates to the school academic year 2014-15. Please note this data is unavailable for Big Noise Govanhill as the programme has only reached the end of its second year.

Figure 2: Big Noise Raploch: current programme engagement rates by school year and gender.



This lower rate of take-up may reflect the demands of secondary education on young people's time and energy. Big Noise musicians noted that there is a delicate balance to be struck between the Big Noise programme commitments and school work, particularly as young people progress towards their exams. Big Noise staff recognise the importance of other activities beyond music, including those offered by local schools and other organisations, and the Big Noise programme offers a flexible timetable where levels of attendance are agreed on an individual basis.

In Govanhill, the variety of cultural attitudes to formal education make this landscape all the more complex. For some families, time spent at home is more highly valued than activities outside of the home, particularly for younger children, as this school teacher describes:

> *"Some of the parents find it hard to begin with, to allow the children to come to school from nine until three [o'clock]. Some of them want [their children to come] not at all, or only in the morning, and want them to go home at lunchtime. So, for them to go from nine until three and then go to an afterschool club until quarter to five, that's a long time."*
> (Classroom teacher, Govanhill)

At the other end of this spectrum, some children already have after-school commitments, for example mosque school or sports clubs: such commitments are the second most common reason for children leaving the after-school programme in Govanhill. The most common reason given by families is that, logistically, travelling to the Big Noise centre after school to collect children can be onerous in combination with heavy childcare responsibilities, work commitments, health problems or a lack of transport. Big Noise correspondingly offer some children a reduced timetable or transport home, although this is not suitable for every family.

One theme common to many of Big Noise's successes in engaging with children and young people is being able to build a relationship with families and, in particular, getting 'buy-in' from parents or carers. Failing this, however, musicians in Raploch described how, if children can be effectively engaged in the Big Noise programme at a young age, they can become increasingly committed and motivated to attend the programme under their own steam as they grow older. It is in this way that early and effective intervention was identified by staff as promoting long-term engagement among those children with the least support to do so at home.

Finally, it should be recognised that the Big Noise programme is not only an intensive experience for children and families, but also for the staff and volunteers who work at Big Noise. Staff described long peaks of physically, emotionally and cognitively demanding work, particularly in the approach to public performances. Opportunities to share expertise, develop fresh approaches to delivery and reflect on challenges encountered and overcome were all identified as being core to high quality delivery at Big Noise that require dedicated time to be set aside. Sistema Scotland's core staff also experience this intensity, particularly as each has their own specialism for which they are responsible. Board members, too, described meetings as active and full, with many important issues to discuss.

Sistema Scotland is a charity and, although the organisation pushes for the highest quality staff, materials and service delivery, it also has a responsibility to operate as efficiently as possible. This was described by operational staff as a very delicate balance to strike, which perhaps most clearly comes to the surface in terms of the workload that its highly committed musicians and volunteers carry.

> *"Most people work through their lunch breaks, a lot of people come in and do extra work or at home, planning at home. I'd say most people are doing that on a regular basis …we joke about what if we all for one week actually took a full hour and left the premises, and how much stuff wouldn't happen. But I think just because of other circumstances, we are still working for a charity and they do pay us well and they give us benefits, they give us all these great things, and we have to be willing to do a little bit more sometimes. You have to be willing to do that, you obviously have to really care about the kids."*
> (Musician, Big Noise Raploch)

Collective learning and teaching: the orchestral model

Big Noise tuition takes place primarily in groups, so that children learn the basics of music and instrument skills as part of an ensemble or whole orchestra, from the beginning of their musical careers. This is understood to provide context for and meaning to their learning, as well as providing an environment in which they can develop a wide range of social and life skills. It is also an efficient, effective and inherently reflective teaching model.

Sistema Scotland uses the orchestra as a "unifying force" to build bonds and respect among children, as well as empathy and confidence in their own processes of failure and success. This environment encourages children and young people to bond with and learn from one another, while also providing them with strong adult role models, in the form of the Big Noise musicians. School staff described Big Noise as an opportunity for young people to develop team work and co-operation skills, a sense of responsibility and patience (see Section 2 of this chapter for further details). Children attending Big Noise after-school programme also receive a complement of one-to-one or two-to-one lessons, in order to consolidate their instrument skills.

Despite these strengths, which are central to the positive impacts of the programme on children and young people, this model presents a number of challenges in terms of service delivery. Sistema Scotland staff and school teachers reported that the group learning environment can be difficult for children who struggle with loud, busy or otherwise over-stimulating environments. Sistema Scotland has

put significant effort into exploring these issues and training staff on how to manage these barriers to engagement. As a result, the programme is designed to be as flexible as possible in accommodating children with additional support needs, for example in adjusting the layout of the rooms, allowing for reduced timetables or making use of support workers' skills in meeting additional needs.

Such needs are perhaps particularly prevalent among children in Govanhill, where a substantial minority have had limited engagement with formal schooling, as the case study below demonstrates.

Case study A: Child with additional support needs

This child has a relatively unstructured home life, very limited understanding of English and struggles to engage in many forms of education due to a lack of exposure to schooling over the child's early years. The child is usually uncomfortable in group teaching sessions and can only hold attention for very short periods.

It was clear that the child was often distracted and frustrated when attending the Big Noise programme, which resulted in difficult and disruptive behaviour on a regular basis. While some individual-level work was done to consolidate this child's limited musical progress, which stemmed from a lack of engagement, the child has since left the programme.

Going forward, the child's key musician at Big Noise feels that children with similar needs can benefit from smaller group teaching sessions that focus on very basic instrument skills in a calmer, quieter environment. One-to-one sessions that focus more on music therapy than teaching could also be beneficial; these options have been offered to the child's parents but as yet the child has not returned to the programme.

Please note that all case studies which describe the lives of children and young people are made anonymous. In some instances specific details have been changed to protect the identity of children, young people and families taking part. While some details may have been changed the overall case study is representative of the circumstances of the participants and the inputs from the Big Noise programme and other partners.

School teachers reported that these issues also present significant challenges for schools in Govanhill and continued expertise-sharing was described as being likely to be key in developing ways in which children with such needs might be supported to engage with and subsequently integrate into the Big Noise programme more fully. The children's complement of one-to-one sessions, while a significant draw on resources, are a central way in which musicians at the Big Noise programme can provide additional support for children who struggle in the group learning environment, as well as maintaining contact when children are not attending the after-school programme.

More broadly, the need for repetition, listening and quiet during group rehearsals was often described as presenting a challenge for children and young people. On one hand, these aspects of the Big Noise programme were identified by both staff and partners as offering young people significant opportunities to develop patience, understanding and empathy. In the process of that development, however, the repetition and patience required can also generate frustration for children, which can lead to a degeneration in behaviour. This is where support workers and volunteers, as well as the strength of the relationships between children and musicians, were identified as key.

> *"The people who are really important to us are the (support workers), they help us all the time. The volunteers, the helpers… without them we wouldn't be able to cope."*
> (Big Noise Raploch participant, age 14)

"You're asking the kids to come and have fun. It needs to be structured, but it's slightly tricky, because it needs to be not hard-structured. You can't be putting kids out if they're misbehaving. That's not really how it's going to work. …Building a relationship is very, very important in that. …You don't want them to be thinking they're going to come and get a row. Equally, there has to be some understanding of discipline and respect for each other."
(Educational psychologist)

A further challenge that emerges from this teaching model is the need to maintain the integrity of the orchestra while recognising that children develop at different paces. Musicians develop teaching materials for a range of abilities; children and young people are stratified into a number of more or less advanced orchestras, and one-to-one lessons consolidate skills. Sistema Scotland's predominantly group teaching model does mean that the pace of learning at the Big Noise programme is relatively relaxed, although this is counterbalanced somewhat by the amount of time that children spend in the programme. This was identified by Sistema Scotland staff as an intentional aspect of the teaching approach, which focuses on making learning enjoyable for children, while developing a breadth of skills and sustaining their interest in music throughout their lives.

Child: *"Can I draw [my Big Noise teacher] at the back?"*
Researcher: *"What do you like about [your teacher]?"*
Child: *"She always lets us do fun things"*
Researcher: *"Like what?"*
Child: *"She always lets us have a spare minute to play the cello".*
(Big Noise Govanhill participant, age 8)

"[Child's name] *has only been playing for four years, less than four years, probably. She's already playing music that it would take a kid, in another place that I teach with weekly lessons and that's it, it would take them six or seven years to get to that stage. …Every kid nearly in this programme accelerates really rapidly, because of the intensive nature of that. It's something that school systems and council systems can't offer."*
(Big Noise Musician, Raploch)

Finally, some musicians have argued that, once children and young people's musical skills are relatively well developed, they may benefit from greater opportunities to exercise their creative skills. As orchestra rehearsals and one-to-one tuition sessions focus on learning and perfecting playing techniques and practising performance pieces, such creative sessions require dedicated time to be set aside.

At Big Noise Raploch there has been some development of more creative music making (such as the formation of Dixie Band). This is seen as an area for development by some musicians teaching on the programme and the continued development of creative activities was described as offering additional benefits for children going forward.

"Especially with perhaps some of the more challenging kids that we have who find the honed motor skill element of playing the instruments difficult. There is a lot to be said about giving them free reign to improvise which strays into music therapy territory to some extent. …I think there is something missing because there are kids who can't access the higher end technical challenges of making music but everyone can contribute to creatively making sound and expressing themselves through sound."
(Big Noise Musician, Raploch)

The development of freer and more creative activities may be particularly helpful in reaching certain sections of the population in Govanhill, in particular those with a strong cultural heritage of music making.

Reputation and the pursuit of excellence

Sistema Scotland is a highly ambitious organisation, with its aim to "transform" the lives of children while operating as "a model charity" (Sistema Scotland Chair). It pursues excellence in every goal, and this includes musical excellence, which is supported by a rigorous recruitment process that seeks out highly skilled and motivated candidates, from musicians to Board members. It is this combination of ambition and ability that the organisation sees as vital to achieving its goals.

The pursuit of excellence is a key means through which children's aspirations, and their confidence to achieve substantial goals, are understood by staff and partners to be developed at the Big Noise programme. Not only are children expected to learn complex skills but they are encouraged to develop to outstanding levels. Musicians were clear that this was both challenging but also extremely rewarding when working with children who have little confidence in their abilities. This drive for excellence is role modelled by staff at the Big Noise programme and Sistema Scotland carefully manages its public profile in a way that highlights the achievements of the children while protecting them from the potential intrusion of the media in their lives. This profile, reputation and ambition helps to attract high-calibre staff, who are retained through the help of transparent, inspirational, committed and rigorous governance.

Case study B: the 'Big Trip' to Venezuela

In January 2014, 52 members of Big Noise Raploch orchestra and 24 staff (including three support workers and five school teachers) went on a ten-day trip to Venezuela in South America. The trip was funded entirely by Big Noise Raploch. The trip to the homeland of the *El Sistema* movement was designed to consolidate and reinforce the Sistema philosophy within the Raploch orchestra and to increase confidence, responsibility, ambition and maturity. Additionally the experience allowed the Big Noise programme participants to act as ambassadors for the programme and to participate in a high-quality and intensive cultural exchange. School teachers and Big Noise staff noted tangible increases in confidence, sense of responsibility and aspiration demonstrated by orchestra members upon returning from the 'Big Trip'. There were very few instances of disruptive behaviour on the trip and even then these were minor; positive and good behaviour was continuously reinforced on the trip. Many of the relationships forged between the Raploch and Venezuelan orchestra members have endured.

Case study C: International Sistema Teachers' Conference

Sistema Scotland delivered a four day international conference in Stirling during late October, 2014. The purpose of the conference was to bring together the Sistema international network and to share and reflect on programme delivery and practice as well as consideration of strategic issues affecting Sistema organisations. Sistema Scotland staff organised the conference to place themselves at the forefront of discussion, innovation and development in this field. The conference was organised around four central themes; Understanding and connecting with children; Building an inclusive curriculum; Reflecting on ourselves; and Gathering knowledge and feedback. Of 150 international delegates invited, 145 attended. The conference programme involved several international speakers; workshops included specific themes and discussions concerning best practice, for example, workshops included 'The impact of unregulated stress and trauma on young people' and 'Motivating all children – positive behaviour tools and techniques'. Feedback from the delegates was that the conference was extremely worthwhile and a positive experience which has equipped them new learning and insights which is likely to enhance their own Sistema programme delivery.

Setting the bar this high, however, also brings a number of challenges. The first relates to the assessment of skill development among the children participating in the Big Noise programme. The Big Noise programmes take a practice-based approach to learning that resists the process of formal assessment. Children are not put through either ABRSM[53] Grade exams or Scottish Qualifications Authority National Qualifications in music, although they may be supported to do so through school, if desired. Sistema Scotland staff describe musical learning and practice as a tool, or vehicle, through which a variety of other much broader skills are developed. The majority of these skills do not require excellent musical skill on the part of the child, only that each child is both challenged and supported to succeed to the best of their musical ability.

Nevertheless, participation in the Big Noise programme does provide significant opportunities for children to develop very strong musical skills. Indeed, within a few years of developing Big Noise Raploch, staff at Sistema Scotland became aware that the children were not achieving their musical potential as quickly as they might. As a result, they significantly enhanced their musical directorship and focused energy on achieving musical excellence. This pursuit of musical excellence is also reinforced by opportunities to watch, and to play alongside, highly skilled musicians and orchestras.

Children and young people attending the Big Noise programme are currently stratified into different orchestras of various levels of instrumental skill advancement. The relative development of individual children is therefore indicated by the orchestra they belong to and the progress of whole ensembles is also monitored informally on an annual basis. While parents are not provided with formal written updates (such as report cards), they are invited to regular performances in order to see their children's progress for themselves. An indication of the high level of skill development is indicated by the fact that, at the present time, 17 of the Big Noise children have gone on to join programmes at the National Youth Orchestra of Scotland (NYOS), 12 have joined the National Youth Choir of Scotland (NYCoS) and two have gained entry to the Royal Conservatoire of Scotland.

> *"I notice a progression every time I hear them. If children are now naturally and competitively getting in NYOS then it speaks for itself. [Sistema Scotland's director of music] is a first rate musician, a world class violinist, a very experienced teacher and it is a very strong curriculum. The people who are teaching on a regular basis are well qualified, excellent musicians. I have got no doubt they are passing on very strong musical skills."*
> (BBC Scottish Symphony Orchestra staff)

However, there are currently few measurable outcomes through which musical skill development among all the Big Noise programme children and young people might be more consistently assessed. While partners described the intuitive benefits of a programme like Big Noise as strong, many also raised questions about the lack of quantitative evidence of excellence and impact thus far. Music-related partners were keen to see music-related outcomes measured, while schools were keen to see education-related impacts quantified, and local authorities and other funders were concerned with a range of social- and health-related outcomes. Often, these demands were driven by the high level of investment that is currently being made in the Big Noise programme, which at the present time is being made on the basis of "good faith". In comparison with other, longer-standing services and organisations with narrower objectives and remits, the Big Noise programme has not yet had an opportunity to collect and provide quantitative evidence of its impacts.

It is clear that Sistema Scotland's drive and reputation for excellence will need to be bolstered by quantitative outcomes in the future, in order to convince partners and funders of its broad range of benefits. While this initial phase of the evaluation strives to fill this evidence gap to some extent, many other impacts may take a number of years to be borne out. The outcomes that Sistema Scotland decided to track going forward are likely to send a strong message, both internally and externally, about those areas in which excellence is being pursued and can be expected to be achieved.

Building relationships

Strong relationships are central to Sistema Scotland's success, at every level of the organisation. Musicians' relationships with children and families secure social and emotional development for children. Operational staff's relationships with partners on the ground are vital to the effective running of the Big Noise programme. Sistema Scotland's management's relationship with strategic partners, including local authorities, funders and music-related organisations, is key to the pursuit of the organisation's goals. The building and maintenance of these relationships requires significant resources, both from Sistema Scotland and its partners.

The relationships that children have with the Big Noise staff are described by musicians in terms of concentric circles. Generally speaking, the strongest bond is formed with the child's one-to-one instrument tutor, followed by their sectional musician(s) and then their orchestra leader(s). Early years musicianship in nursery and primary school, as well as field trips and events, are understood to strengthen these relationships.

> *"They're very much, for adults, getting very much engaged with the children, as an individual. They come to the door and you can see the rapport from the minute they open the door. I feel it's a very, very positive thing for the children, because of the relationship they have with the musicians."*
> (Classroom teacher, Govanhill)

Much of the strength of these relationships arises from the sense of fun and excitement that Big Noise programmes bring, as well as the amount of time that children spend in the programme; staff clearly have a close relationship with many of those children who have attended Big Noise after school consistently throughout their school career. In Raploch, the location of Big Noise sessions within the school campus building also appears to have consolidated relationships with children and families, as it allows for a high degree of informal contact on a day-to-day basis.

The Big Noise musicians provide children with a trusted adult who recognises their strengths and achievements, provides praise and support, is a positive role model, and offers a consistent, stable and secure relationship. Musicians and volunteers are perceived as "kind" (Big Noise Govanhill participant, age 7), "nice" (Big Noise Govanhill participant, age 8), "warm and friendly" (Nursery staff, Govanhill) and potential confidants. Musicians and school teachers described this as being of particular benefit for children who have few (or no) other relationships of this sort.

Children's relationships with musicians were described by both musicians and school teachers as having a quality distinct from that of most other adults. Musicians and volunteers are on a first name basis with children and, alongside the positive, inclusive approach to behaviour at the Big Noise programme, this creates a more informal environment than school. Relationships with parents and families are understood by staff to be important in reinforcing the positive impacts of the Big Noise programme on children: musicians recognised that if families understand the value of the Big Noise programme, their children will be encouraged to engage in the programme more effectively. As a result, Sistema Scotland works to build relationship with families as well as children and young people.

> *"They are just down to earth, just normal individuals just like ourselves. Easy, approachable, and always friendly, even on the street, if you walk past them on the street, they will stop and have a conversation and whatever. It's not really just 'The Big Noise', (they) walk past and have a conversation and that as well, so friendly and approachable."*
> (Parent, Big Noise Raploch)

One of the strengths of the Big Noise programme is that the range of staff, from musicians, to support workers, to volunteers, offers parents a variety of opportunities to build relationships.

Some musicians feel that the pace and intensity of growth at the Big Noise programme has meant that relationships with families and the wider community have been relatively slow to develop. This is particularly the case in Govanhill, where the programme is still in its early stages and language and population turnover present additional challenges. As with other service providers, the Big Noise programme has to work hard to gain the trust of families. Big Noise staff recognise that ways in which these relationships might be strengthened in future, particularly in terms of (re)engaging children who have moved away from or dropped out of the after-school programme, will be key to the success of the Big Noise programme in reaching the whole community.

The Big Noise centres do not currently include members of the community within their management structure and, although schools and local authorities play an integral part in the setting up of new Big Noise centres, neighbourhood residents have not been directly or substantially involved. The Big Noise intervention areas are identified through consultation with local authorities, schools and other organisations, such as housing associations, and not with residents themselves. Sistema Scotland staff therefore put significant energy into introducing themselves and the Big Noise programme to communities from the outset, by working closely with schools to disperse information to parents and by putting on public performances.

Big Noise staff were clear that building trust and obtaining buy-in from the wider community is likely to take many years. Across both sites, school staff and other local community partners identified these relationships as having the greatest potential to be strengthened going forward.

> *"The organisation did really well in its initial development phase, that kind of fostering links into the community as well and raising awareness of what it's doing, and then it's been pretty quiet since then. So I think that connection, not just with us but with the wider community, needs to be built on."*
> (Local partner, Govanhill)

> *"To us, the kids are central to Big Noise and always will be. That secondary layer, the families, and I know there is adult Big Noise as well, [but] the families need to progress as well and that is through referral mechanisms for us. It is that secondary layer that should be referred into other projects. Big Noise, to me, is hitting the right indicators with self-esteem, ambition and all the things we want to happen. It is hitting those for people and that is absolutely wonderful, but they need the backup of parents and carers knowing how to sustain that. They will only sustain that if they are in a good place themselves. They won't get in a good place until they are economically active. Not always, but nine times out of ten".*
> (Local partner, Raploch)

> *"I think it could go one step further. The question is, because it's in a developmental phase probably throughout Scotland, that would require additional support, additional funding. It takes away from the core business, if you like. And I can understand maybe why that's not wanted. But I do think that it would be great to have almost maybe a parental board of some kind, you know, people whose kids are involved in it. …I think it would be very healthy to develop that a bit more."*
> (Local partner, Govanhill)

In Govanhill, partners, and in particular school staff, described how engagement in the after-school and holiday programmes could potentially be increased by more intensive engagement with families, including greater awareness-raising within the wider community. Parents of children engaged in Raploch's much longer-standing programme show not only awareness and support, but are also beginning to demonstrate a degree of ownership over Big Noise. Big Noise is therefore exploring the

ways in which parents or other community members might become integrated into the management or leadership of the programme, without compromising its strong and successful commitment to core principles.

At an operational and strategic level, some of Sistema Scotland's partners, including a number of services working on the ground in Raploch and Govanhill, were also not always completely clear on the socially-orientated aims and objectives of the Big Noise programme. Others felt that their partnership working with the Big Noise centres could be more fully developed in future, so that the positive impacts of both their services and of Big Noise can be mutually strengthened. They described potential for greater information, resource or expertise sharing.

Innovation and flexibility

While the *El Sistema* movement is orientated around strong guiding principles, it also insists that "there is no manual" (Jesus Moran, *El Sistema*): approaches to delivery should be keenly tailored to local needs and resources. Such a bespoke approach, alongside the ambition of Sistema Scotland's aims, gives rise to a high degree of reflection on and innovation in the design and day-to-day delivery of the Big Noise programme. Sistema Scotland therefore operates what the Chair of its Management Board describes as "institutional jazz", that ensures high quality, bespoke delivery that is constantly being improved.

The *El Sistema* curriculum has been developed by drawing on a wide variety of pedagogical approaches, tools, techniques and materials from an international forum. The high quality, broad range of experience and deep commitment of teaching staff generates an environment of constant innovation in programme delivery. Sistema Scotland staff regularly engage in both self-reflection and peer-to-peer reflection and there is a strong culture of seeking critical feedback in order to improve teaching and programme delivery.

> *"They're quite interested in taking opportunities to find out what's there, and then developing and listening to what other people have to say, and taking on people's opinions, and trying their best to solve any issues and difficulties that arise. Listening, really, I think, to what people are saying. From that aspect, I think it's quite good. …It always feels very positive and proactive."*
> (Educational psychologist)

This highly creative and reflective approach is reinforced by necessity, given the challenges that continually arise during Sistema Scotland's ambitious programme delivery. This is perhaps particularly the case at Big Noise Govanhill, which is still in the first few years of embedding its programme in the local community. The rapid development of the Big Noise programme during its first years, alongside the longer-term demands of engagement, complex rehearsal schedules and the large numbers of children and families involved, requires significant flexibility.

The Big Noise volunteers contribute significantly to this flexibility and responsiveness to day-to-day challenges. Volunteers work alongside musicians and support workers in session delivery, as well as carrying out much of the background work that keeps the programme running, including distributing snacks, setting up furniture and instruments and maintaining stocks of equipment. This need for flexibility means that volunteers, particularly in the first years of programme delivery, described taking on a wide variety of tasks, which were constantly shifting and evolving. They identified a need to be responsive, innovative and confident in dealing with emerging needs. While many volunteers relished these challenges, they also described their roles as quite demanding. They described their role as being best suited to those who are already fairly confident in the workplace and to those who already possess a degree of good organisational and communication skills.

Volunteers described helping out at Big Noise as a stimulating and satisfying occupation, with Sistema Scotland providing high quality training. However, although Big Noise has provided a small number of volunteers (particularly college and university leavers) with work experience relevant to future employment, the organisation's resources do not stretch to providing the support required by volunteers with very limited employability skills. As a result, volunteers are often attracted to the Big Noise programme because they have a special interest in or experience working with children or in music or education and wish to contribute their time, experience and expertise to the running of the programme. This means that volunteers are often from outside the community in which the Big Noise programme is working.

As the programme becomes more deeply embedded in communities and the Big Noise participants become young adults, Sistema Scotland staff expect that opportunities for local residents to become volunteers will grow.

> *"I would love it if we had children who came back and worked for us. So I'd really like to see that element of our work evolve, that we start to employ community members in the programme as well. So long, long term I would love if actually our staffing from external [sources] started to reduce or be redeployed in different areas. And we got to a point, long term, that a percentage of our staff were external professionals that we're bringing in, but a percentage was people from the community. Some of them volunteers, and some of them trained and employed by the organisation."*
> (CEO, Sistema Scotland)

In the meantime, however, some staff, volunteers and partners expressed disappointment that more local residents have not become involved in volunteering at the Big Noise programme in the shorter term.

The Big Noise programme has complex and demanding schedules, which involve just under 500 children covered by just under 30 paid staff in Raploch and around 800 children covered by just under 20 paid staff in Govanhill. In Govanhill there are currently two orchestras, in Raploch there are three, each made up of up to eight sections. At any one time in Raploch there can be up to 18 sessions running in parallel in the after-school programme.

The Big Noise musicians are encouraged to take time to develop and maintain their careers as performers in their own right and the vast majority are therefore part-time employees of Sistema Scotland. This means that, against a background of highly complex schedules, the allocation of staff time is regularly in flux. Cover musicians are used to minimise disruption due to absences, while keeping overhead costs down. This creates a tension, between ensuring that children have a consistent experience and regular contact with at least one member of staff, and ensuring flexibility.

> *"Personally, I find it easier when I've got great consistency, so the same children see the same people because you can set up certain routines. …I think because of the way that we don't have school holidays, so we take holidays as and when, and it is not like an office where you can just leave the desk empty. So there's a constant filling in for people if they're ill or filling in for people if they are on holiday*
> *"*(Musician, Big Noise Govanhill)

Both musicians and young people described how this tension has been added to when existing staff have been used to seed new Big Noise programme sites, for example when Big Noise Raploch staff were used to seed staff at the newly opened Big Noise Govanhill 2013.

> *"They're making a Big Noise [in Glasgow]… and they're taking all our teachers when they should go and find their own."*
> (Big Noise Raploch participant, age 14)

Seeding is a core means through which the strong vision and direction of each Big Noise site remains steady. However, this evidently has the potential to erode young people's consistency of contact with musicians. Moreover, some parents of children engaged in Big Noise Raploch described how, primarily in the early years of the programme, their child experienced regular changes in their key musician. While this is perhaps an inevitable function of necessary programme growth that will stabilise over time, it also has the potential to limit the positive benefits that children are able to derive from the programme.

This consistency is important because, although behaviour protocols are clearly defined and well adhered to at the Big Noise programme, musicians described relying, to an extent, on their professional judgement and their relationships with individual children to assess appropriate responses to behaviour. A lack of consistency has the potential to compromise this delicate dynamic and some children have struggled not only to deal with a change of musician, but also a shift in the ways in which behaviour is managed within the group. While musicians recognised the need to balance cost-effective provision, flexibility, new sites and consistently, some musicians, parents and young people, particularly in Raploch, also welcomed greater stability going forward.

Longevity and commitment

Once Sistema Scotland opens a Big Noise site, the staff are committed to delivering the programme over the very long term in the belief that only consistent year-on-year work with children from nursery age to young adulthood can create the kind of generational, positive, social change that they seek to achieve. Sistema Scotland's commitment to communities was cited by partners as one of the organisation's core strengths.

Sistema Scotland is also committed to retaining its staff over the long term and musicians described a number of benefits from working at Big Noise. Significant investment in training and skill development was primary among these, as were permanent contracts (a rarity in the fields of music education and social intervention alike) and flexibility around career development outside of Sistema Scotland. The development of new layers in the organisational structure of the Big Noise programme, which are introduced as the programme grows, also offer opportunities for career progression with Big Noise. For these reasons, staff reported feeling secure and valued within their roles.

These commitments, however, also present a heavy weight of responsibility. Sistema Scotland's operational staff described how significant organisational resources are expended in seeking, reviewing and renewing funding. Where funding is derived from local or national government, Sistema Scotland must compete with other third sector organisations, as well as statutory services, which themselves operate under budgets with reviews every two to three years. Local authority partners described how prioritising funding had become particularly challenging in the context of public spending austerity, and initial steep growth in both the size and the cost of the Big Noise programme further contribute to these pressures.

Sistema Scotland's commitment to working in communities in the very long term also prompted partners to raise questions around how the Big Noise programmes' management and development might involve members of the community in the future.

"I think people expected it to be like every other project that's come in. It will be here for a while, they are talking about Govanhill, they are talking about Aberdeen, if the money runs out for Raploch they will disappear. That's, I think, for the folk of Raploch, that's how they see it... It's not theirs; it's still an outside organisation coming in. They are grateful for them doing what they are doing, but they aren't fully expecting them to stay. …I certainly think local involvement would make a huge amount of difference. And not necessarily folks who have got kids in the Big Noise, so that you are spreading it out further than the usual suspects, if you see what I mean."
(Local partner, Raploch)

Sistema Scotland anticipates that, in the long term, those who have grown up through the Big Noise programme will take on an increasing level of ownership over their own Big Noise centre. The extent to which communities as a whole may be willing or able to take on these responsibilities will depend to a large extent on the degree of belief in and commitment to the programme aims. This is one of the reasons why securing community-wide buy-in, at this early stage, was cited by partners as key to the longer-term success of the Big Noise programme.

Finally, Sistema Scotland's commitment to longevity creates a tension, between the resources (in terms of funding, expertise and energy) required to maintain the existing programme and that needed to expand to new sites. Sistema Scotland's reputation for its high quality Big Noise programme has generated a degree of demand for new sites. Sistema Scotland performs a large amount of scoping work before they enter a new site, including identifying potential partners and establishing what impacts they might be able to have within a prospective area. The organisation then works to establish robust networks and relationships before beginning a programme. Growing new Big Noise programme sites therefore places increasing demands on management resources at Sistema Scotland and logistics become increasingly complex as the distances between sites increase. Board members and Sistema Scotland staff therefore highlighted the need to achieve a balance between new and existing sites going forward.

Conclusion

This section has described seven process learning themes relating to Sistema Scotland and the delivery of the Big Noise programme within Raploch and Govanhill. These process learning themes add significant insight not only into how Sistema Scotland operates and how the Big Noise programme is delivered but to wider understanding of the characteristics of social interventions which are likely to yield greatest life-course impact. Current evidence alludes to little more than the broad characteristics of quality, sustained and intensive early years social interventions or programmes as having the potential for long-term impact on participants. These characteristics are evident within the Big Noise programme delivery but the programme appears to go further. Sistema Scotland aspires for excellence, not just *quality*; the programme makes an indefinite commitment to communities in which they operate instead of being *sustained*; the Big Noise programme is *intensive* in its delivery but is also immersive enabling participants to benefit from a consistent programme and a range of related experiences from six months of age right through to early adulthood.

Sistema Scotland's enduring organisational focus on programme inclusion and accessibility are enhanced by innovative and flexible Big Noise programme delivery to meet individual participant circumstances and needs. The collective learning achieved through the orchestral model is particularly suited to the acquisition of a range of social and life skills and is where the relationship between musician and participant is nurtured and developed.

While it is acknowledged that many other organisations display one or more of these seven qualities, the depth and strength of Sistema Scotland's impacts are likely to lie in the fact that all seven are present in one organisation. While context is vitally important in the delivery of social interventions or regeneration, it is anticipated that these process learning themes are generalisable to a range of programmes and settings.

The process learning themes described in this section illuminate the types of programme delivery required to embed deep, positive social change within prioritised communities. But what is also communicated clearly in these themes are the significant challenges involved in programme delivery based on them. The Big Noise staff invest considerable time and energy in ensuring the programme is delivered according to these themes. This requires strong and consistent motivation and determination among programme staff and an organisational culture of continuous improvement and reflection.

Part 2: Measuring impacts of the Big Noise programme

Key messages

The evaluation has identified seven pathways through which the Big Noise programme can positively impact on participants' lives in the short, medium and long-term.

The short- and medium-term impacts evidenced in these pathways include impacts on participants' social and emotional wellbeing, their musical and non-musical learning and their social and life skills, all of which could potentially contribute to some important benefits for health and wellbeing in the long term.

There are also clear but less wide-ranging impacts on families and the community as a whole, including raised aspirations, feelings of ambition, raised pride and hope for the future.

The scale and types of impact will depend on an individual's own experiences and needs. Consistent and long-term engagement with the programme is likely to encourage better outcomes.

Sistema Scotland's focus on areas of Scotland where deprivation is concentrated enables the programme's impacts to be achieved where need is high. All things being equal, if the impacts of the Big Noise programme are large enough to compensate for other drivers of inequality, social and health inequalities may be reduced in the long term.

> *"I have never seen a piece of work come into an area, target so many people and have such an impact in such a short period of time."*
> (NHS Manager, Glasgow)

Please note, this section of the report should be read alongside Appendices E and F.

The GCPH employed a range of qualitative approaches (summarised in Chapter 4, presented in detail in Appendix A) to develop an understanding of the Big Noise programme and to assess the impacts and outcomes of the programme on participants, families and the wider community. In this section we have categorised this evidence into a series of 'logic models' which each represent distinct Big Noise outcome pathways. The pathways elucidate and build from elements and outputs of the Big Noise programme, showing how these link to and potentially influence a range of outcomes spanning the life-course of the participants involved.

One overall logic model has been developed for the Big Noise participants and is presented in Appendix F. From this overall logic model, seven more concise logic models have been developed which detail the Big Noise outcome pathways for participants (Appendix E). These outcome pathways are listed below (a to g). A final logic model summarises the outcome pathways for families of the Big Noise participants and the wider community.

Big Noise logic models

1. Big Noise participants

a. Boosting engagement with learning and education
b. Developing and building life skills
c. Securing emotional wellbeing
d. Building social skills and networks
e. Respite and protection
f. Developing as a musician
g. Encouraging healthy behaviours

2. Families and the wider community

Each logic model presents outcomes which may be evident at the following time points:

- Short term (outcomes within five years).
- Medium term (outcomes within ten years).
- Long term (outcomes after ten years).

Big Noise Raploch has been in operation for almost eight years, while Big Noise Govanhill is approaching the end of its second year. This has enabled the programme elements, programme outputs, and 'outcomes within five years' detailed in each logic model to be based on the evidence gathered by the GCPH team across both Raploch and Govanhill; whereas the 'outcomes within ten years' are based on the evidence gathered at Big Noise Raploch only. Evidence gathered through this evaluation is depicted within solid line boxes within the logic models.

The outcomes described as long term within the logic models are projected into the future and are thus *theorised*, not based on the Big Noise evaluation evidence. The theorised future outcomes of the Big Noise programme, including improved health and wellbeing, are depicted within dashed line boxes and linked to medium-term outcomes by dashed lines.

The logic models depict theorised positive impacts on health outcomes in the long term. The theorised impacts are based on wider public health evidence and are referenced accordingly. All other things being equal, the theorised improvements in the health of populations participating in the Big Noise programme imply a consequential reduction in health inequalities, as these populations achieve outcomes closer to those of more affluent sections of society. This would only be realised if the impacts of the Big Noise programme are large enough to compensate for other drivers of inequality.

The achievement of these outcomes in both the short and long term is dependent on and influenced by a range of contextual factors affecting the lives of the Big Noise participants now and in the future. Big Noise plays into this context and the programme's effectiveness will be influenced by this context. Recognising these wider contextual influences, including individual needs, the outcomes described in the logic models in this section are neither fixed in nature or scale, nor guaranteed.

Furthermore there are intrinsic assumptions on which the logic models are based. Primary among these is the assumption that participants have a consistent and long-term exposure to the programme elements. The level of participation and consistency of engagement with the programme will affect whether these outcomes are achieved and to what level.

Where the narrative in this section refers specifically to components within the logic model, this text is in *italics*. Table 8 summarises the type and source of the data used in developing the logic models.

Table 8. Big Noise logic models, timeline, evidence type and source and depiction within models.

Logic model components	Evidence type	Evidence source	Depicted in logic model as
Programme elements	Qualitative evidence gathered through this evaluation	Big Noise Raploch and Govanhill	Solid line boxes
Programme outputs	Qualitative evidence gathered through this evaluation	Big Noise Raploch and Govanhill	Solid line boxes
Short-term outcomes (within five years)	Qualitative evidence gathered through this evaluation	Big Noise Raploch and Govanhill	Solid line boxes
Medium-term outcomes (within ten years)	Qualitative evidence gathered through this evaluation	Big Noise Raploch only	Solid line boxes
Long-term outcomes (after ten years)	Theorised evidence, both quantitative and qualitative	Wider evidence base, published research from a variety of fields	Dotted line boxes

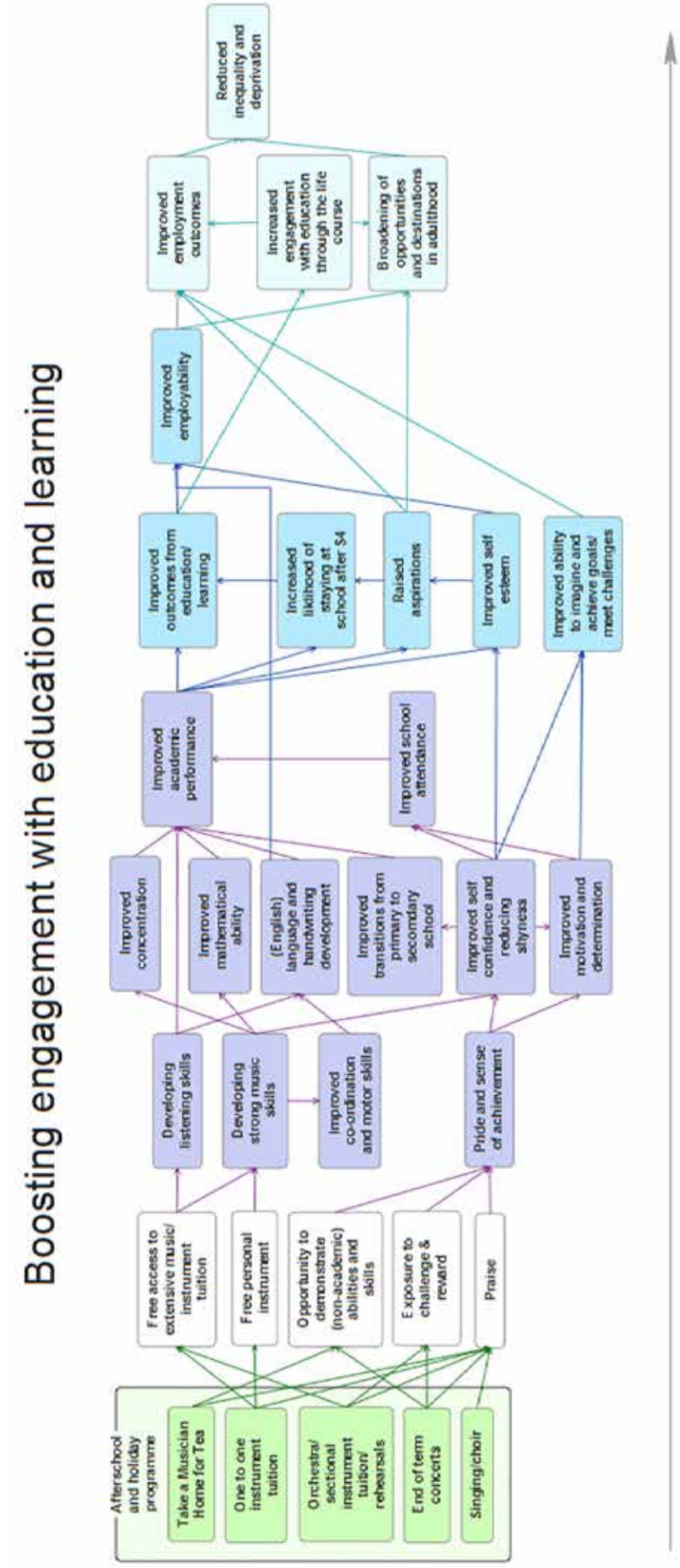
Going forward, the GCPH plans to undertake quantitative data linkage to compare the outcomes of the Big Noise participants with those of a control group. This approach will enable assessment as to whether the long-term theorised outcomes of the programme are being realised and to what extent. Details of this planned data linkage can be found within the 'Evaluating Sistema Scotland' evaluation plan available on the GCPH website[43].

Logic model 1a: Boosting engagement with learning and education

This pathway maps the impacts of Big Noise participation on education and learning. There are established links between participation in musical learning and enhanced wider academic achievement[34]. Children who participate in the Big Noise orchestra demonstrate *improved language* and other skills, as well as higher levels of *confidence and pride* in the short term. It is theorised that, *improved levels of attendance* and *academic performance*, *aspiration* and *post-school destinations* for Big Noise participants, will lead to *improved employability* and *employment outcomes* which may potentially improve participants' health and wellbeing in the long term.

In Scotland there is a strong correlation between school attendance rates and area deprivation. In 2012/13 attendance at secondary schools in Scotland's most deprived SIMD quintile was 88.9%, which compared with 94.5% in the least deprived quintile (5.6 percentage points higher). Attendance at primary schools in Scotland's most deprived SIMD quintile was 93.2%,and this compared with 96.5% in the least deprived quintile (a 3.3 percentage point difference)[54].

Within our study areas, the reported higher school attendance among the Big Noise participants compared with the eligible target population is striking. In Raploch, school attendance was 93.2% among Big Noise participants – exactly 4 percentage points higher than the eligible population. Govanhill data show attendance among Big Noise participants to be 92.9% –1.7 percentage points higher than the eligible population. There are many possible explanations for the higher attendance rates among Big Noise participants, not all directly relating to characteristics of the programme. However the following quote is illustrative of a range of views alluding to a broad, positive change in attitude among school children who attend Big Noise:


Boosting engagement with education and learning
Programme elements
Programme outputs
Outcomes within 5 years
Outcomes within 10 years
Outcomes 10+ years
Afterschool and holiday programme
Take a Musician Home for Tea
One to one instrument tuition
Orchestra/ sectional instrument tuition/ rehearsals
End of term concerts
Singing/choir
Free access to extensive music/ instrument tuition
Free personal instrument
Opportunity to demonstrate (non-academic) abilities and skills
Exposure to challenge & reward
Praise
Developing listening skills
Developing strong music skills
Improved co-ordination and motor skills
Pride and sense of achievement
Improved concentration
Improved mathematical ability
(English) language and handwriting development
Improved transitions from primary to secondary school
Improved self confidence and reducing shyness
Improved motivation and determination
Improved academic performance
Improved school attendance
Improved outcomes from education/ learning
Increased likelihood of staying at school after S4
Raised aspirations
Improved self esteem
Improved ability to imagine and achieve goals/ meet challenges
Improved employability
Improved employment outcomes
Increased engagement with education through the life course
Broadening of opportunities and destinations in adulthood
Reduced inequality and deprivation

"Big Noise children reflect a positive ethos from Big Noise; a high standard of uniform, better attendance, far more disciplined and engaged – opening up avenues of other areas. Far fewer issues on behaviour – Big Noise provides more discipline which they may not have got out of school otherwise."
(High School staff member, Raploch)

In terms of academic development outcomes within five years, classroom teachers reported a marked improvement in *(English) language development and handwriting* among a number of the children attending the orchestral programme in Govanhill. The *co-ordination and motor skills* refined as part of *developing strong instrument skills* were identified as key to improvements in handwriting, while the intensive and immersive aspects of the Big Noise programme were understood to contribute to English language development in the short term.

"I've got a new arrival [pupil] that came in [12 months ago], started Big Noise [after-school programme, nine months ago] and then did the summer school, and she came at the same time as her cousin. There's nothing to suggest that her cousin would progress academically differently, nothing different in their background, came at the same time, one of them goes to Big Noise the other one doesn't. The one that goes to Big Noise has progressed academically far quicker than her cousin, she's integrated back into the mainstream class, she's performing, whereas her cousin is still with her additional language teacher. So, she's coping, she's obviously still got development issues with her English language but she's coping back in a mainstream class and functioning within a group, whereas her cousin isn't and where a lot of her peers aren't."
(Headteacher, Govanhill)

Literacy can be particularly challenging for children when English is not spoken at home and when parents are not able to provide support to develop reading and writing skills. Within Govanhill 77% of the children eligible for the Big Noise programme speak English as a second language. It is through greater exposure to the English language, as well as the literacy skills developed by learning to read music, that engagement in the Big Noise after-school programme and in the holiday orchestra is reported as beginning to impact upon children's *academic performance* in Govanhill.

In Raploch, these kinds of impacts on *academic performance* have been more difficult for primary school staff to identify. This is partly because such a high proportion of children take part in the Big Noise programme and partly because the programme has now been running for almost eight years, which is as long as many teachers have been working with children and young people in the community. School and nursery staff point to the difficulties of tracking the progress of a child in terms of outcomes generated from the Big Noise programme, especially when they don't have specialist music knowledge. However, nursery staff in Raploch spoke of the young children enjoying the time they participated in the Big Noise programme which provided a social time with group work. During these sessions, the nursery staff identified that the children were developing co-ordination and motor skills through playing instruments, encouraging language development through singing and communicating with others within the group, and raising confidence and aspirations of the children through praise and encouragement from the Big Noise staff.

High school staff recognised the input the Big Noise programme has in terms of academic engagement, as illustrated by the following quote:

"There are a number of significant outcomes that can be identified, including ability to concentrate, drive to succeed, ambition, raising aspirations, social skills strengthening and ability to learn may all be affected. The normality of a challenging environment, with high expectations and requiring commitment are all outcomes which are obvious in the programme." (High School staff member, Raploch)

Teachers reported that participation in the Big Noise programme also impacts on other attributes in the short term, such as *listening, concentration, motivation and determination* and *self-confidence*. Classroom teachers described both the in-school and the after-school programme as contributing, alongside work done in school, to the development of these skills.

> *"I think with my class, they're much more aware of rhythm and beat and all this sort of thing. There's one boy who's very, very quiet and he's coming out of his shell. You can see him. He's really listening and trying to follow the beat through. That's concentration. It's listening. It's wonderful."*
> (Classroom teacher, Govanhill)

> *"Basically, the children come in and they find it very hard to settle and concentrate in a classroom. They don't have the eye contact, the listening skills and obviously they don't have the language. And for all Big Noise are doing simple tasks, they're tuning the children into listening, which is the first thing, at that stage, that's what we need to do. So I think what Big Noise are doing is really helping what we're trying to achieve with children. I think they do. It's related. They're helping us. There is a kind of cyclic thing."*
> (Classroom teacher, Govanhill)

Improved self-confidence and reduced shyness were regularly cited outcomes observed within five years by a wide range of interviewees, including teachers and partners. The pride and sense of achievement experienced by children and young people when practising their instrument and when taking part in performances were central in the short term.

> *"You get a buzz when you're doing it [practising instrument]."*
> *"Doing a concert... it made you feel proud."*
> (Big Noise participants, Raploch)

Schools also talked about the profile given to Big Noise participants' successes. More children from Raploch are performing at school events and being recognised with school prizes than ever before. Teachers see this as a significant change in attitude of the children towards that of celebrating success and achievement.

The *motivation and determination* this provides many children and young people has led to *an improved ability to imagine and achieve goals and meet challenges* in the medium term as observed in Raploch. The following quote from a Raploch orchestra member is illustrative of evidence gathered in the Big Noise Raploch:

> *"The music, how we hear music, how we get involved, build up your communication, build up your confidence. Coming to Big Noise, you've got people you know and people you don't know. You've got music behind your back, pushing you. So it's like somebody pushing you to do something but it's music and it's pushing you to make good things like building your confidence. When I started Big Noise I was shy, look at me now. Anyone can achieve any goals they want."*
> (Big Noise Raploch participant)

Whether Sistema Scotland is contributing to *improved outcomes from education* in the medium term, for example in terms of exam results, remains to be seen, as the oldest full cohort of participants in Raploch is currently only aged 14 to 15 (in S4). What is clear is that, among the very few young people in S5 (aged 15 to 16) in the Big Noise programme, there is some evidence that the programme is helping to *raise aspirations* and support *staying at school after S4*.

Case study D: Participant staying on in school and pursuing higher education

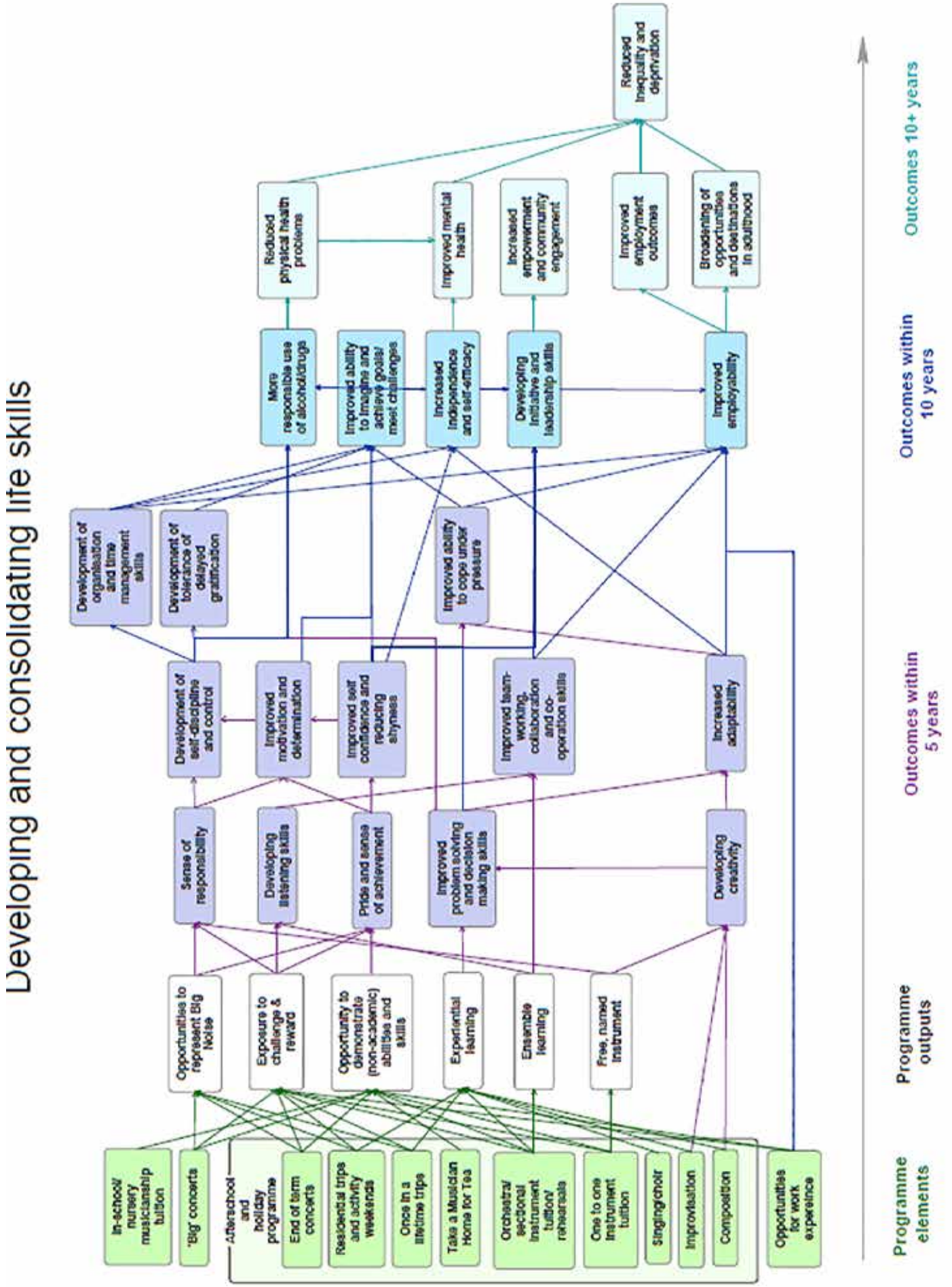
One particular Big Noise participant is currently in secondary education and although is some years from leaving school, has been consistently encouraged by their school teacher and the Big Noise staff to pursue a university course in a field which interests them. The participant would be the first person in their immediate and extended family to attend school beyond 16 years of age, let alone engage in higher education. The participant has demonstrated a range of positive improvements from consistently taking part in the Big Noise programme: most notably the Big Noise staff describe a gradual raising of aspiration and the desire to make the most of life.

The individual has required a lot of encouragement and reassurance from the Big Noise staff and school staff that they would be able to learn at university level. These discussions about university relate immediately to the discipline and hard work required to achieve the grades at Higher level to enter the course. The participant's progress within the Big Noise, specifically the musical skills acquired, serve to reassure the participant that they are capable of achieving well in life when they work hard.

Please note that all case studies which describe the lives of children and young people are made anonymous. In some instances specific details have been changed to protect the identity of children, young people and families taking part. While some details may have been changed the overall case study is representative of the circumstances of the participants and the inputs from the Big Noise programme and other partners.

For this young person, the mentoring offered by school teachers and musicians and other staff at the Big Noise programme has been important in supporting the decision to stay on at school. The desire to stay on in school and to achieve good levels of educational attainment has a significant bearing on a range of potential long-term outcomes, including *engagement with education* in adulthood, *employability* and *employment outcomes*. These outcomes and others may contribute to *improved health and wellbeing* among the Big Noise programme participants.

The link between access to education and educational attainment (in adolescence and in adulthood) and health is long-established[55]. Those who achieve well in education are less likely to develop chronic disease and to live longer than those who do not[56]. Indeed a 2011 study concluded that educational attainment is a more accurate predictor of biological ageing than aggregate measures of socioeconomic status. Those with lower educational attainment demonstrated faster biological ageing and increased susceptibility to chronic disease[57]. The influence of educational attainment on employment outcomes and the psychosocial quality of work is important here also[58]. Good levels of educational attainment are associated with higher quality employment which is associated with improved health and life expectancy[59].


Developing and consolidating life skills
Programme elements
Programme outputs
Outcomes within 5 years
Outcomes within 10 years
Outcomes 10+ years
In-school/ nursery musicianship tuition
'Big' concerts
After-school and holiday programme
End of term concerts
Residential trips and activity weekends
Once in a lifetime trips
Take a Musician Home for Tea
Orchestra/ sectional instrument tuition/ rehearsals
One to one instrument tuition
Singing/choir
Improvisation
Composition
Opportunities for work experience
Opportunities to represent Big Noise
Exposure to challenge & reward
Opportunity to demonstrate (non-academic) abilities and skills
Experiential learning
Ensemble learning
Free, named instrument
Sense of responsibility
Developing listening skills
Pride and sense of achievement
Improved problem solving and decision making skills
Developing creativity
Development of self-discipline and control
Improved motivation and determination
Improved self confidence and reducing shyness
Improved team-working, collaboration and co-operation skills
Increased adaptability
Development of organisation and time management skills
Development of tolerance of delayed gratification
Improved ability to cope under pressure
More responsible use of alcohol/drugs
Improved ability to imagine and achieve goals/ meet challenges
Increased independence and self-efficacy
Developing initiative and leadership skills
Improved employability
Reduced physical health problems
Improved mental health
Increased empowerment and community engagement
Improved employment outcomes
Broadening of opportunities and destinations in adulthood
Reduced inequality and deprivation

Logic model 1b: Developing and consolidating life skills

This pathway describes the life skills that children and young people are supported to develop through engagement with the Big Noise programme. Many of these skills stem from the programme outputs: *experiential and ensemble learning* that children and young people engage in at the Big Noise programme and the *exposure to challenges and reward* that learning an instrument and taking part in performances provide. In terms of short-term outcomes, this set of experiences develops participants' *creativity*, *adaptability*, *problem-solving* and *decision-making skills*, *team working, collaboration and co-operation skills* and their *self-discipline and control*. In the medium term, this will support young people's ability to *cope under pressure*, along with the development of *initiative and leadership skills*. Over the long term, *increased empowerment and community engagement*, as well as *improved employability* and *employment outcomes* may lead to *improved health and wellbeing* among the Big Noise participants.

In the short term, playing in the orchestra provides participants with a safe and secure platform from which they can derive *pride*, and develop their *self-confidence*, as this seven-year-old child from Govanhill describes in relation to their drawing:

Researcher: *"What are you playing in this drawing?"*
Child: *"Viola."*
Researcher: *"What does it make you feel like when you're playing it?"*
Child: *"It makes me feel proud."*

This is not just the case in relation to the regular public performances that Big Noise organise, but also in terms of daily teaching and learning, which involves significant positive reinforcement, as this classroom teacher from Govanhill explains:

> *"[Participant's name] can be hard to manage when he's in my class. But the difference when [Big Noise musician's name] came in! Because it was something he could do, you could just see in his eyes. …Being taught on the violin, he was just so proud of what he could do. That's a child that stands out in my head for the impact there can be, on a child who's very hard to reach, in many ways."*
> (Classroom teacher, Govanhill)

Learning to play an instrument provides young people with the opportunity to demonstrate their musical skills and abilities to their peers, their families and other adults. When asked how playing in concerts makes participants feel, one focus group participant responded:

> *"It* [performing in a concert] *made me feel awesome... it made my family proud."*
> (Big Noise Raploch former participant)

It appears that this may be particularly beneficial for children who struggle academically.

Learning to play within the orchestra also enables children and young people to *develop their team-working*, *collaboration and co-operation skills* in the medium term. Regular performances support the development of *self-discipline* and a *sense of responsibility* about practising and developing at the pace required to meet performance deadlines.

> *"I do think that [playing in an orchestra] teaches you a lot… about your own self-awareness, about managing your own behaviour, about being able to listen to what other people around you are doing, and moderate your behaviour accordingly. It's that self-regulation kind of thing, which is actually quite difficult to teach. It's tricky to learn as well. But being in that sort of environment, I think you get the chance to practise it."*
> (Educational psychologist)

The responsibility and discipline required to participate in Big Noise was particularly highlighted by musicians and Sistema Scotland staff as a core function of the orchestral programme, and was cited by children and young people as one of its most challenging aspects. The balance that is struck between discipline and enjoyment is therefore key to supporting young people to engage with the programme and develop these skills. Some of the older children at Big Noise regularly support and advise younger children on musical technique, and many of the older children are now in mentoring positions at school and are happy to lead music sessions with their peers. School teachers talk of a gradual change in the children's behaviour, as they adopt leadership roles within the school.

While the orchestra does expose young people to significant challenges, it also provides them with a degree of freedom to practise *self-discipline and control* in a rewarding environment, thereby instilling *motivation and determination* at a young age, as this Big Noise Raploch musician explains:

> *"School has a place in society and I think it does command a certain amount of respect and teachers command a certain amount of respect. And we are musicians, we don't have that. …The kids know they can push us and we will still try and keep them [in the programme], so they will continue to push, I think, sometimes, and they know that it is very hard for them to be sent home. I think that is the thing though, it is all well and good being able to behave within this really established framework [at school], but can you behave whenever that is not there? How do you encourage that and how do you make [children] care enough that they want to do it for themselves?"*
> (Musician, Big Noise Raploch)

The expectation, from both school and the Big Noise staff, is that, together, the development of these skills will contribute to young people's development of *problem-solving and decision-making skills*, as well as enhancing their *adaptability* and *ability to cope under pressure*, in the short to medium term. As more Big Noise participants become young adults it is theorised that participation in the programme, and the *self-confidence* and *adaptability* this appears to bring, might enhance young people's *independence and self-efficacy* and their *initiative and leadership skills*.

In the long term, these skills may potentially increase *employability* and reduce the risk of unemployment. As importantly, they will support young people to make more confident and beneficial life decisions throughout adulthood. This might include decisions that impact on health behaviours, such as *alcohol or drug use*. They may also enable young adults to feel (and to be) more *empowered and involved in community engagement*, which, together with other long-term impacts in the pathway, have the potential to *improve health and wellbeing* in a variety of ways. All of these potential outcomes (employment, healthier behaviours, empowerment and engagement) are associated with positive health and wellbeing[60-64].

There are, however, a number of challenges involved in identifying the impact of the Big Noise programme on life skills, even in the short and medium term. These are skills that are built up as an inherent part of young people's growth and development, which is embedded in a wide variety of other influences, including school, family life, and other opportunities and experiences available to them. As Big Noise works with young people from preschool age, it becomes challenging to isolate the influence of the Big Noise programme. The following quote highlights the difficulties involved in identifying the contribution Big Noise makes to a child's progress:

> *"Some of the learning is obvious, there is progress to be identified. Other learning is subconscious – the social learning, the softer skills – are harder to identify, let alone understand how far you have travelled. Also people close by may find it hard to chart progress. Mother and child analogy – it's difficult to remember what a child was like and to determine a change when it is so gradual and sporadic. Changes don't happen overnight – it's generational change."*
> (High School staff member, Raploch)

Nevertheless, the qualitative evidence currently available makes it clear that a significant number of children have developed particularly strong skills, in some areas, as a result of attending the Big Noise programme.

Logic model 1c: Securing emotional wellbeing

The impact of the Big Noise programme on participants' emotional wellbeing was regularly cited by participants, the Big Noise staff and a range of partners we interviewed. In the very short term, these impacts stem from the *happiness and enjoyment* of playing and being exposed to music, in a *safe, warm and positive environment*. Over the medium term, playing their instrument may also develop into an *emotional outlet* for children and young people. The Big Noise environment offers a *sense of security* and of *belonging*, which over the medium term is anticipated to underpin the development of *mutual support networks* and *resilience* among participants, while the focus on ensemble learning and the collective aspects of the orchestra all contribute towards the *development of emotional intelligence*. Over the long term, all of these factors are likely to have a protective effect and *improve health and wellbeing*.

Big Noise offers those who take part in its orchestral programme a strong sense of identity and *belonging*, even in the short term, through the use of strong *branding* (e.g. Big Noise t-shirts for participants) and a *named instrument* for every child and young person. In both Raploch and Govanhill these factors are recognised as being connected to the confidence of the children and have had a positive impact on their personal lives.

> *"The Big Noise has given a strong sense of identity, a role and confidence that comes from that. They engage with others in their year group whilst there is a sense of aspiration that is much higher than it would be. Focus is a key strength for some of these children".*
> (High School staff member, Raploch)

The importance of this was reinforced by children at Big Noise Govanhill, who often identified having their own, *named instrument* as their favourite thing about the programme.

> *"For a lot of our children, they don't have a lot that's theirs. The fact that they've got this one thing [their instrument] for which they're responsible, it's just their special thing, means a huge amount."*
> (Classroom teacher, Govanhill)

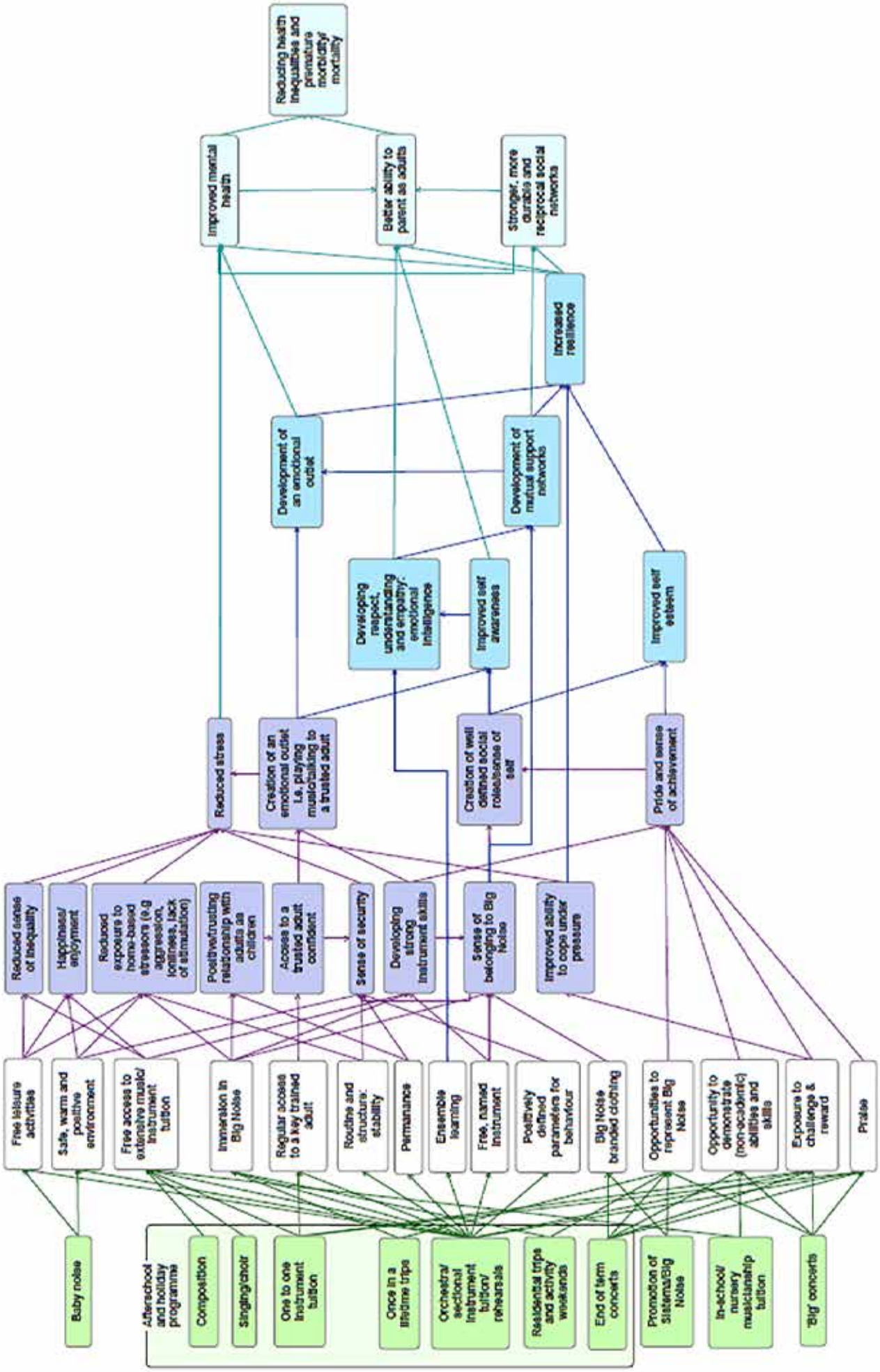
The children and young people's *sense of belonging to Big Noise* and *increased sense of equality* are further strengthened by the inclusive and immersive aspects of the orchestral programme, enhancing the *stability* and *sense of security* that Big Noise can offer children and young people. The music itself, whether as part of the orchestral programme, the in-school programme or Baby Noise, was identified by children, young people and adults as a source of great happiness.

> *"I believe that music is actually one of the things that touches your soul. It is good for your self-esteem and your mood, if you're feeling down, or if you're feeling low, music can cheer you up, it can take you to another place. …You feel it."*
> (Headteacher, Govanhill)

That participation in the Big Noise programme brings happiness and impacts on children's emotional wellbeing in the short term is particularly beneficial for those children who are struggling emotionally with one or more aspects of their lives.

> *"So a child has come in [to therapy] who is really, really upset about what's gone on in their life or having really bad dreams about what's gone on in their life. And then, getting to the point of telling me about things when life is good, when they don't feel like that, "when I am playing the cello", "when I am singing". And those are the moments that Big Noise have come in to [therapy sessions], I suppose, and children are, it's part of their resilience of the world."*
> (Play therapist, Govanhill)

Securing emotional wellbeing



The *development of strong instrument skills*, the free provision of an instrument that can be taken home, and opportunities to develop improvisation and composition skills, all allow Big Noise participants to use the playing of music as an *emotional outlet*. Over the short to medium term, this has the potential to build (or reinforce) participants' *sense of security*, and help them to release, and to develop ways to cope effectively with stress. In combination with access to a *trusted adult confidante*, the Big Noise programme provides children and young people with significant opportunities to process and reduce the detrimental impacts of negative emotions.

In the medium term, participation in the orchestral programme is understood to support the young people's development of a *sense of self* and *self-awareness* and their *emotional intelligence*. The distinct, but collective role that each member of the orchestra has is important for this, as is the *ensemble learning* process, through which children and young people are able to observe their peers' challenges and successes and support them through this process. Skills development also fosters a strong *sense of pride and achievement* and accompanying *self-esteem*, particularly given the hosting of regular concerts and the difficulty and complexity of the musical skills children and young people develop as part of the orchestral programme. In Raploch, Big Noise children talk of how proud they feel about being involved in such a programme, and children no longer attending Big Noise talk of how proud they feel of their friends and siblings who attend.

In the long term the expectation is that these short- and medium-term impacts on emotional wellbeing, as well as the sustained *exposure to challenge and reward* that the programme offers, will cumulatively deepen young people's *resilience* and, as they become young adults, their future *mental health*. In particular, it is hoped that such long-term impacts will have an effect in a cyclical manner, on Raploch and Govanhill's next generation of children, by supporting today's children and young people to develop into more resilient and better supported potential parents in the future. These theorised impacts can potentially *improve health and wellbeing* in the long term.

Self-esteem is pivotally important in adolescence and can profoundly shape later life prospects, including health. Low self-esteem in adolescence predicts poor health, criminal behaviour and limited economic prospects during adulthood[65]. Resilience is an emerging area of study but generally refers to the ability of people, places and populations to withstand stress and challenge[66]. It is recognised within a range of fields that resilience is important to social capital and health and wellbeing[67].

Logic model 1d: Impacts on children: building social skills and networks

Participating in the Big Noise holiday and after-school orchestral programme, as well as Baby Noise, offers children and young people substantial and sustained opportunities to build on and develop their social skills. It also offers opportunities for children and families to mix socially with others from within and outwith their communities. It is hoped that this *increased social interaction and social mixing* will lead to *increased cultural tolerance and understanding* as well as a *broadening of friendship and peer groups* among the Big Noise participants. In the medium term, impacts in this pathway include the *development of mutual support networks* and *increased engagement with school-, community-based and other activities*. It is anticipated that, in the long term, this would lead to *improved social cohesion* and *stronger, more durable and reciprocal social networks*, which in turn may potentially *improve health and wellbeing*.

The intensive and immersive nature of the orchestral programme means they are significant contributors to the *development of social skills*. In Govanhill, this social development is closely related to English language development. Across both sites the development of social skills serves to support participants' *self-confidence* in social situations. In particular, the *ensemble learning*, the *positive role modelling* of social interaction by the musicians, as well as the time given over for breaks and social time, provide opportunities for the development of such skills, as the following child behaviour specialist explained at interview:

> *"The kids are socialised into being part of something, and being part of Sistema. But they're socialised in a very acceptable way. They are becoming, I believe, more personally skilled in their own social interactions than they would if this did not exist. I think this is extremely beneficial for the children involved."*
> (Child behaviour specialist, Glasgow)

Big Noise also offers children significant opportunities for greater social mixing, as the intensive and immersive aspect of the after-school programme, in particular, makes Big Noise a significant contributor to participants' social context. Big Noise gives participants the time and space to build relationships with others from within their community, across age groups and religious and ethnic groups. In Raploch, this takes the form of enhanced social mixing between those children who attend different schools in Raploch. This builds upon the short-term *social mixing* and *raised cultural awareness* enabled by the relocation of both schools into a single, new campus in 2008, which was constructed as part of Raploch's physical regeneration.

The Big Noise participants who attended a focus group highlighted what they liked about the Big Noise programme. Figure 3 illustrates a number of social aspects to the programme recognised by the young people including their positive relationships with staff as well as other children.

Developing social networks and supports

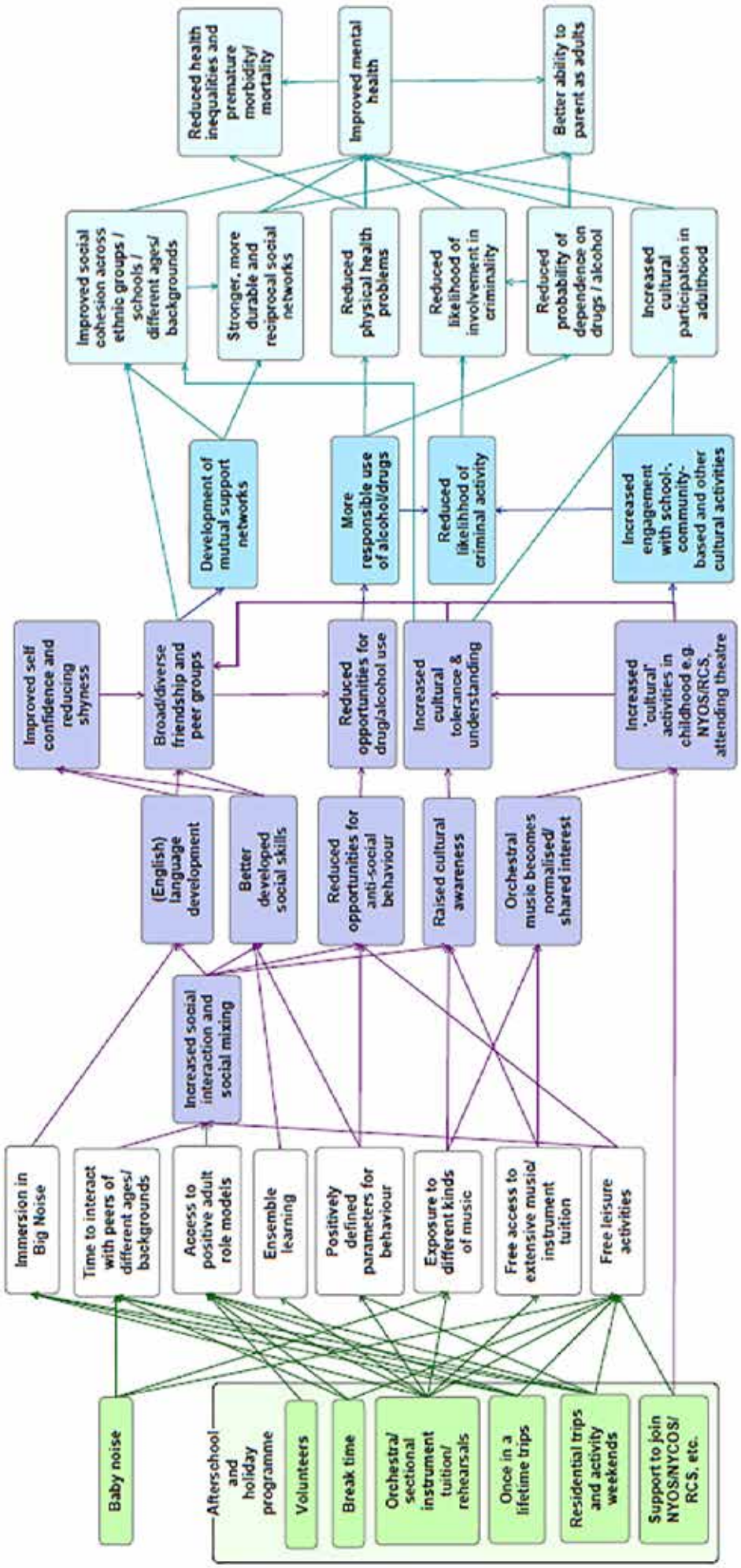
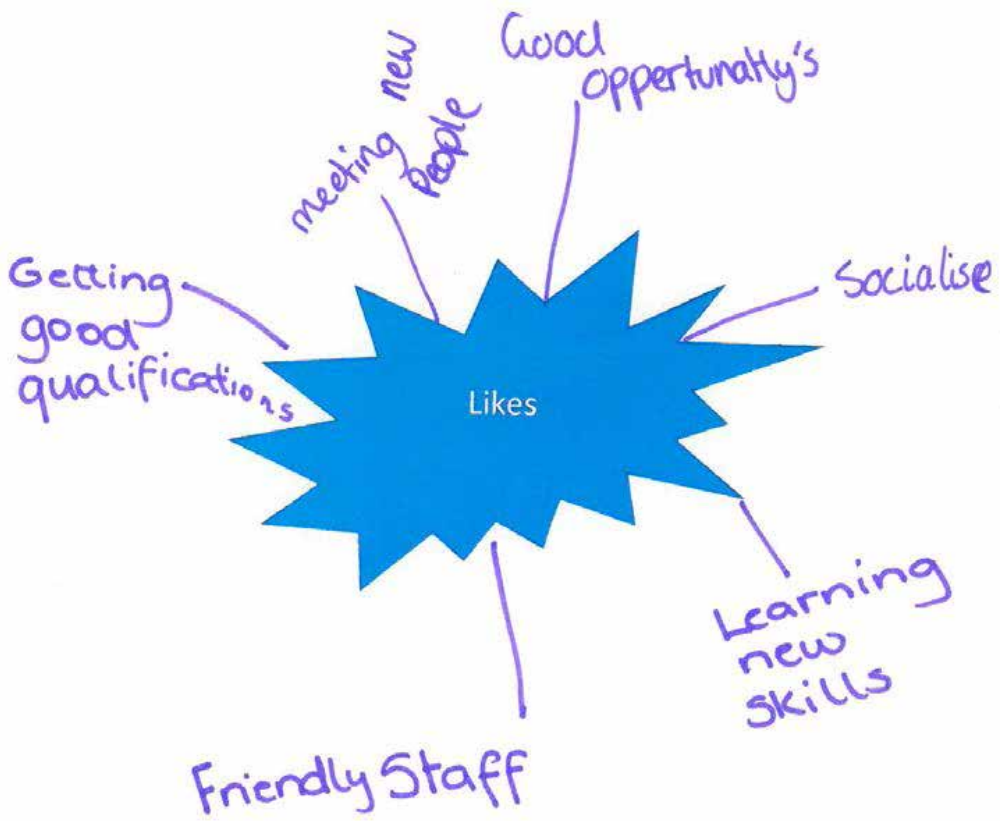


Figure 3: Extract from focus group; Big Noise Raploch participants' views of programme 'likes'.



Interviews with school staff also highlighted the clear social impact the Big Noise programme has had at school. A school staff member described their own experience:

> *"Pupils often tend to associate themselves, initially, with just their community and stay within their own groups... Raploch kids tended to stay within their own groups – who were from Raploch. They are now confident with mixing with social peers."*
> (High school staff member, Raploch)

In Govanhill, the Big Noise programme contributes to *social mixing* and, therefore, *raised cultural awareness* across religious, as well as ethnic- and language-based social groups. Govanhill's large population and diversity means that the neighbourhood's four primary schools are tailored to specific ethnic profiles. This approach enables the schools to teach and manage cultural and language barriers more effectively. Around three-quarters of the children enrolled in one school are from Govanhill's Roma community, while in a second school, the majority of children come from Central and South Asian backgrounds. The remaining two schools comprise children from Scottish-Asian and White Scottish/ British backgrounds. The Big Noise programme brings the children from these diverse but separate school populations together, and provides them with *orchestral music as a shared interest*.

> *"Children are wonderful because they don't always have the barriers that adults have. I think the more we can support children, not just in school but through other programmes, I think that can only add value to their life. That's why I think Sistema is fantastic, because it has allowed children to come in from all backgrounds and different age groups and begin to share and connect in a way that might be a bit more difficult through formal structures."*
> (NHS manager, Glasgow)

Furthermore, Sistema Scotland offers those who participate in the orchestral programme both the financial and practical support to audition for, and, if successful, attend other youth orchestras and choirs, such as National Youth Orchestras of Scotland (NYOS), National Youth Choir of Scotland (NYCoS) and the Royal Conservatoire of Scotland (RCS). While these opportunities are currently only applicable to young people participating in Big Noise Raploch (due to their age), such opportunities to engage in other cultural activities enable participants to socialise with other young people from across Scotland.

The expectation is that these impacts will lead to *increased cultural tolerance and understanding* as well as a *broadening and diversification of friendship and peer groups* in the short to medium term. International social mixing has already been recognised as a specific outcome derived from the Venezulan trip; Big Noise Raploch participants who built strong relationships with participants from *El Sistema*'s Caracas programme are maintaining contact. Now many of the children from Big Noise Raploch have international friends, are learning Spanish as a second language and have interest in the culture of their counterparts.

In the long term, it is anticipated that this would lead to *improved social cohesion*, and *stronger, more durable social networks*, not just within communities but also between participants and those outside of Raploch and Govanhill. In theory these and other outcomes may translate into *improved health and wellbeing* in the long term. Positive and supportive peers in childhood and adolescence are crucial to helping young people develop to their full potential and attain the best health in the transition to adulthood[55].

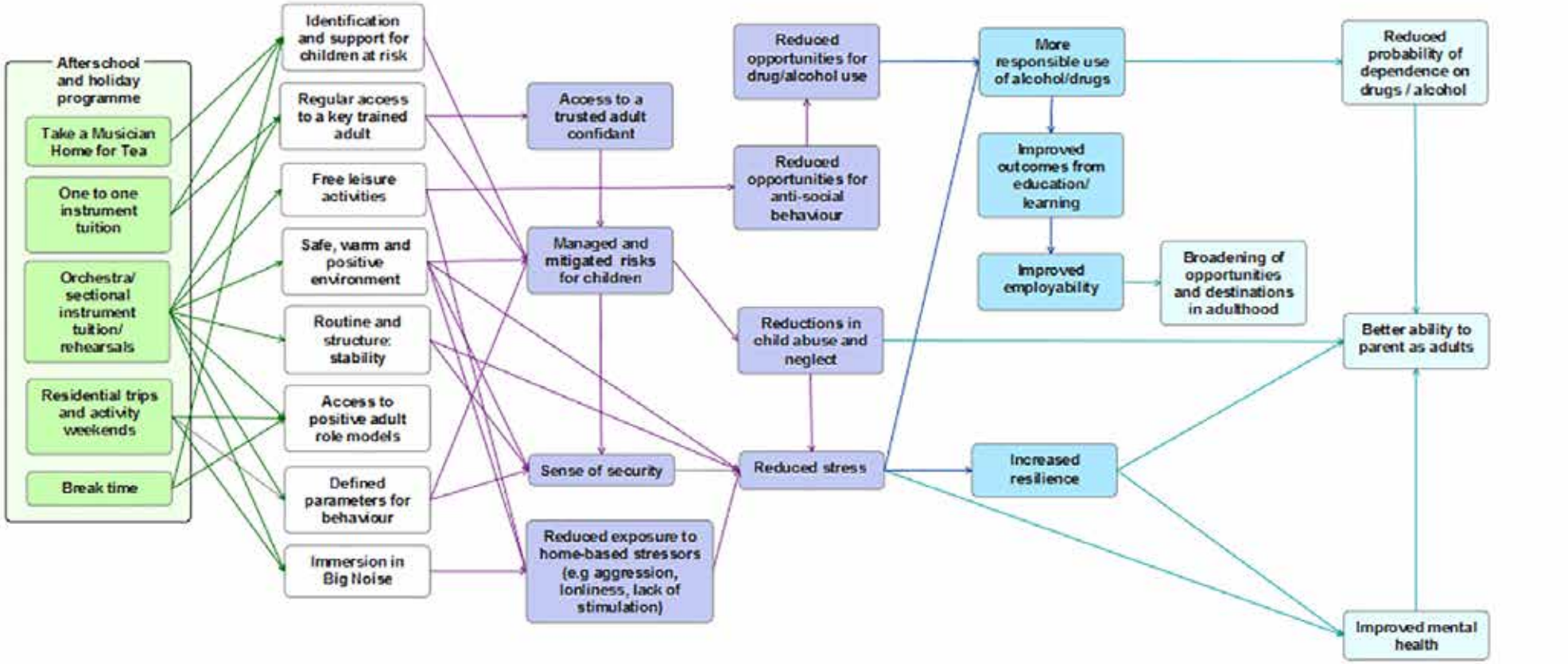
Logic model 1e: Respite and protection

This pathway maps out the role of the Big Noise programme in two key dimensions: (a) protection of children and young people from stress in their home, school or other environments and (b) the diversion of young people from activities, such as alcohol and drug use and antisocial behaviour. The intensive and immersive aspects of the Big Noise orchestra, and in particular the relationships that participants are able to build with Big Noise musicians, as well as the programme's free and inclusive quality, are the foundation of this pathway. In the long term it is anticipated that, through these pathways, Big Noise may contribute towards *improved health and wellbeing*, a *broadening of destinations in adulthood* and more *positive parenting* as participants become adults.

This logic model depicts an outcome pathway which is concerned with the reduction of personal-, home- or school-related stress among programme participants and also with negative behaviours resulting from stress. Stress in the home environment is known to have significant detrimental impacts on children's emotional, social and educational development, as well as their mental health in later life[68]. This stress can be generated by any (or a combination) of: poor housing conditions; a lack of (social and/or emotional) stimulation; physical neglect; exposure to aggression and/or violence; or parental/familial drug or alcohol misuse. Such conditions and behaviours are more prevalent in disadvantaged areas; it is estimated that around a third of children in Govanhill live in poverty, while 27% live in overcrowded conditions[49]. Income deprivation in Raploch affects 39% of the population and more than half of the children attending the Big Noise programme require support from social work services[69].

In the short term the programme elements depicted within the Big Noise after-school and holiday programme provide respite to children who experience stress outside of Big Noise. The programme outputs *Immersion in the Big Noise* and *Safe, warm and positive environment* mean significant time away from home in a positive environment. Interlinked with these is the programme output *Routine and structure: stability*. As a headteacher of a Govanhill primary school describes, these programme elements are central to a range of positive outcomes and impacts:

Respite and protection



> *"They've got the respite of being out of the home during the holidays. They've got the respite during the week. …When I was a student my first headteacher said school should always be a haven because you don't know where the children are coming from. I think Big Noise enhances that and is another haven for children, so that's good. I can think of a few children that fall into that bracket, where it's very protective for them to have it as somewhere for them to go and somewhere consistent to go."*
> (Headteacher, Govanhill)

This was a view shared by a number of school and Big Noise staff we interviewed, as well as a number of partners. It is in this way that Big Noise contributes to *Reduced exposure to home-based stressors*; a short-term outcome evidenced in this evaluation. Sistema Scotland's inclusion policy is pivotal in enabling children experiencing significant stress in their lives to access the programme. Due to disruptive or aggressive behaviours resulting from home-based stress, these children and young people are perhaps most at risk of exclusion from other places of respite.

In addition to respite, the relationships that musicians are able to build with children as part of the orchestral programme and their one-to-one instrument tuition provides participants with *regular access to a key trained adult*, other than school staff, in whom they trust and can confide; sharing their worries. This point is described by the Big Noise musicians in both Raploch and Govanhill:

> *"[Big Noise participant's name, age 7] has told me stuff about his life. …I think he feels extremely comfortable about confiding in staff. Yeah, he'll tell me little details of his life quite happily. He won't struggle. …He's come over in very much of the vein of, 'ah, I can say this to you, I can tell you this', not like a struggle, should I or shouldn't I? …I've been able to say to him, 'how are you feeling about it?'"*
> (Musician, Big Noise Raploch)

> *"I've never been in the position of getting to know a bunch of kids in the same way [as Big Noise enables] by teaching, in any other existence of teaching. You get to know things about them and they'll confide in you. I have had kids confide all sorts of things. Just by sitting down and being with them at snack time, just chatting: just making yourself available. That is, being a listening ear for a kid who wants to unburden something that's bothering them."*
> (Musician, Big Noise Govanhill)

The intensive and immersive nature of the Big Noise programme allows musicians significant scope to monitor participants' progress and development and identify any issues as they arise, described as *Manage and mitigate risks for children*, a key outcome within five years. A number of Big Noise team meetings were observed in which musicians and managers shared information and concerns about children which led to various actions being taken in response. This offers children and young people a significant source of protection from child abuse and neglect, should they require it. *Immersion in Big Noise* also enhances the significance and impact of the programmes' *positively-defined parameters for behaviour* and musicians' influence as *positive adult role models* on participants. In the short term the Big Noise programme provides children and young people with a *sense of security* which may be missing from their home lives.

Case study E demonstrates the role the Big Noise programme can play, alongside other services, in providing respite and protection for vulnerable children and young people. Importantly the programme can be adaptive to the specific needs of vulnerable participants.

Case study E: The role of Big Noise in providing respite and protection

One particular Big Noise participant has had a chaotic and troubled home life. Big Noise has been involved in discussions with social services for several months. All involved with the child value the role of Big Noise in the participant's life, describing the programme as providing stability and connections within the community. The participant was identified as highly vulnerable with a defensive nature which became problematic within the orchestral group environment. Big Noise has implemented plans, in discussion with the team around the child to encourage the child's continued participation, including:

- some additional support involving one-to-one tuition and behaviour management
- additional support to manage antagonistic situations as they arise
- a dedicated Big Noise staff member who consistently links with other services and accompanies

the child in Big Noise lessons. The child describes the staff member as trusted, and supportive relationships between the participant, the carer and Big Noise staff have strengthened as they work together to keep the participant engaged in the programme. The participant continues to attend Big Noise and is slowly building positive relationships with peers.

Please note that all case studies which describe the lives of children and young people are made anonymous. In some instances specific details have been changed to protect the identity of children, young people and families taking part. While some details may have been changed the overall case study is representative of the circumstances of the participants and the inputs from Big Noise and other partners.

More generally, an important programme output is that Big Noise is a *free leisure activity* and provides a positive diversionary activity from other potentially damaging pursuits. Therefore the programme has the potential to *reduce opportunities for antisocial behaviour* and *opportunities for drug or alcohol use*. The consumption of alcohol and drugs is well established as a cause of a variety of detrimental impacts on physical and mental health; both in the short and long term[70].These damaging behaviours are more prevalent in disadvantaged areas and are related to home-based stressors for young people. At a national level, just under a fifth of 15 year olds in Scotland report drinking alcohol[71] and a similar proportion report having used drugs[72]. By contrast, young people who have a consistent hobby, including playing a musical instrument, are much less likely to report having used drugs or consumed alcohol.

While Big Noise clearly offers young people a *free leisure activity* in a *safe, warm and positive environment*, it is also probable that young people's ability to make good choices about how free time is spent, particularly after leaving school and/or Big Noise, is key to the future influence of the Big Noise programme on levels of alcohol and drug use and antisocial behaviour. It is in this way that the impacts in this pathway are heavily interlinked with those around the life skills, emotional wellbeing and engagement with education that the Big Noise programme supports. As described later in this chapter, Big Noise's impact on other outcome pathways such as *boosting engagement with education and learning*, *securing emotional wellbeing* and *building social skills and networks* are, alongside the diversionary aspect of the programme, likely to support *positive behaviours in relation to alcohol and drugs* and *reduced involvement in antisocial behaviour and criminality* in the medium term.

It is anticipated that, in the medium term (outcomes within ten years) to long term (outcomes after ten years) reductions in these sorts of behaviours will contribute to *improved outcomes from education and learning* and, therefore, *improved employability* and a *broadening of opportunities and destinations in*

adulthood for Big Noise participants. In tandem with the reduced stress in childhood and adolescence and, in the medium term, *increased resilience*, offered by the protective aspects of the Big Noise programme, it is anticipated that participants may demonstrate *improved mental health* over the long term. In particular, it is expected that Big Noise may contribute towards breaking the cycle of damaging behaviours, such as *child abuse and neglect* and *alcohol and drug dependence*, thereby supporting today's young people to be *positive parents as adults*. Together, it is theorised that these pathways have the potential to contribute towards *improved health and wellbeing*[62,63,66,68].

Logic model 1f: Developing as a musician

This pathway maps out the impacts associated with the development of children and young people's musical knowledge, skills and abilities. The high quality and intensive nature of provision in place at Big Noise, including the broad range of group and individual learning formats and the programmes' links with other high quality music organisations, are central to this pathway. Participants' resultant musical skills and interest in music in the short term, may develop, over the medium term, into *musical career aspirations* and, ultimately, stronger *employability* and *employment outcomes*. This is enhanced by Sistema Scotland's financial and practical support for young people wishing to take part in other cultural activities. Together and in the long term, these factors have the potential to *increase cultural participation*, *broaden opportunities and destinations in adulthood*, and ultimately *improve health and wellbeing* throughout the life-course.

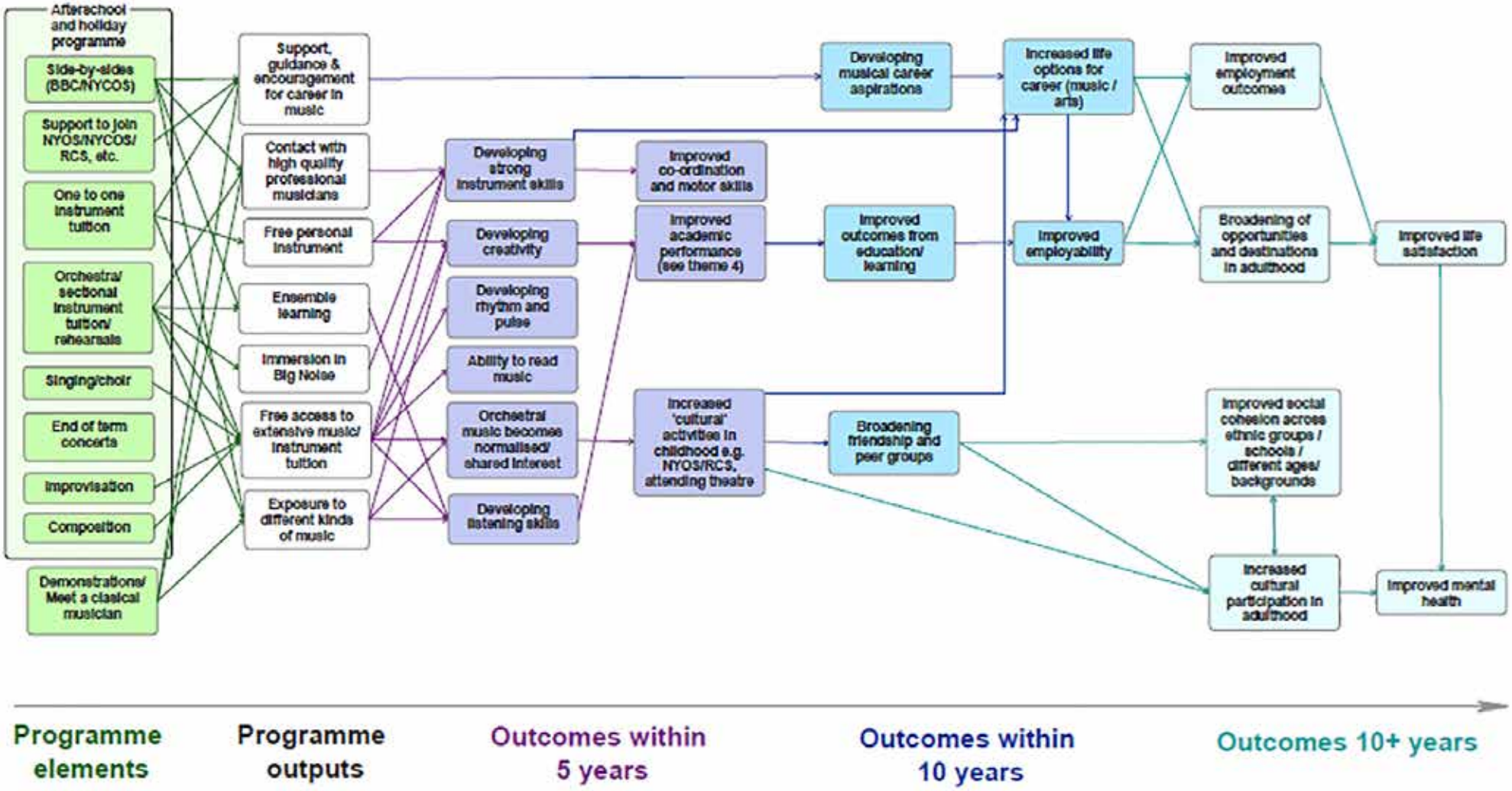
This logic model depicts an outcome pathway which is concerned with the direct and wider life-course benefits of acquiring musical skills. The cost of musical tuition is reported as a significant barrier for children learning to play: with children from the highest social grade having greater access to instrumental lessons, compared with children of a lower social grade. In Scotland, over two-fifths of children have never had an instrumental lesson and, of those who have, the vast majority report learning non-orchestral instruments, such as recorder, piano and guitar[73].

The Big Noise orchestral programme currently provides around 175 children and young people in Raploch and around 125 children in Govanhill access to a high quality, intensive orchestral instrument tuition that they would be unlikely to otherwise be able to undertake. Key outcomes within five years include developing *strong instrument skills*, *creativity*, *rhythm and pulse*, and the *ability to read music* to a much greater extent than would have been possible without the Big Noise programme. These skills have strong and established links to *academic performance*[34].The potential for *improved employability* and *employment outcomes* through this pathway in the medium to long term (outcomes within ten years, outcomes after ten years) are reinforced by the *musical career aspirations* and subsequent *additional career options* that open up through the development of musical skills in childhood and adolescence. This young person from Raploch explains this point:

> *"I used to be just totally manic about sport and not want to do anything else. Career wise, tennis or anything like that; I just wanted to do this, set plan, playing football or whatever. Playing football, mad about football. But I kind of came off the subject once I started doing Big Noise, I went into looking into other career options and things, looking into what I want for my education and Highers [qualifications] and stuff this year. Just kind of maybe, in a way, I'm not wanting to go just the one path, it opened up different options."*
> (Big Noise Raploch participant, age 15)

This widening of aspirations and options for future careers was a point often introduced by the young people we spoke to at Big Noise Raploch. For Raploch's older participants, this was clearly being enhanced by *support, guidance and encouragement for a career in music* by the Big Noise musicians. When asked about their future career ambitions, within a focus group of Big Noise participants, four out

Developing as a musician



of the seven responses involved music directly, while another two expressed an interest in the creative arts industry. This growing interest in music as a career choice has been recognised at the High School in Raploch where specific plans are now in place to provide advice to pupils on music qualifications.

Developing strong musical skills, alongside financial support from Sistema Scotland, has also permitted a number of young people from Big Noise Raploch to join other orchestras, ensembles and choirs, such as the National Youth Orchestra of Scotland (NYOS), the National Youth Choir of Scotland (NYCoS) and the Royal Conservatoire of Scotland (RCS). Together, those who have gone on to join such organisations represent around one fifth of the children that attend Big Noise Raploch, from Primary 4 upwards. While this by no means encompasses all Big Noise participants, for those participants who are *increasing their participation in 'cultural activities'* in the short term, there is potential for significant impact on *broadening their friendship and peer groups* in the medium term.

> *"You wouldn't get kids from Raploch interacting with kids from Morningside [affluent neighbourhood in Edinburgh], you only get that when it comes to playing a Beethoven symphony that they speak exactly the same language and they can relate to each other."*
> (Musician, Big Noise Raploch)

> *"I know that Sistema is about regeneration and integration. The children integrating more with children from more diverse backgrounds and giving them a broader outlook on life and people's hopes and dreams can only be a good thing. That works the other way as well. Some children don't understand what hardships are out there, what people are facing and the challenges that youngsters have to go through."*
> (Sistema Scotland partner)

Whether this will translate into more durable social relationships across social groups and, therefore, *improved social cohesion* as Big Noise participants become adults, will take a number of years to evidence. Case study F demonstrates a number of benefits described resulting from development as a musician.

Case study F: Benefits of developing as a musician: improved confidence

This child was a quiet and diligent learner before they began attending the Big Noise orchestra. The child's parents are very supportive of them attending Big Noise and this child has always engaged well and worked hard. The child has always been very shy and reserved. At first, this made it difficult for them to engage fully in Big Noise group learning sessions, as they often lacked the courage to stand up and perform in front of their peers.

Big Noise has provided a safe, positive and encouraging environment, in which the child has been able to grow in confidence. After 18 months of attending the orchestra this child is now not afraid to offer a contribution in a group setting and this includes having the courage to sing in front of a large and noisy group of peers. Big Noise has provided this child not only with strong musical skills, but also with a great sense of pride in their musical achievements. This has built on their already solid engagement with learning and education to provide a level of outward confidence they did not demonstrate before.

Please note that all case studies which describe the lives of children and young people are made anonymous. In some instances specific details have been changed to protect the identity of children, young people and families taking part. While some details may have been changed the overall case study is representative of the circumstances of the participants and the inputs from Big Noise and other partners.

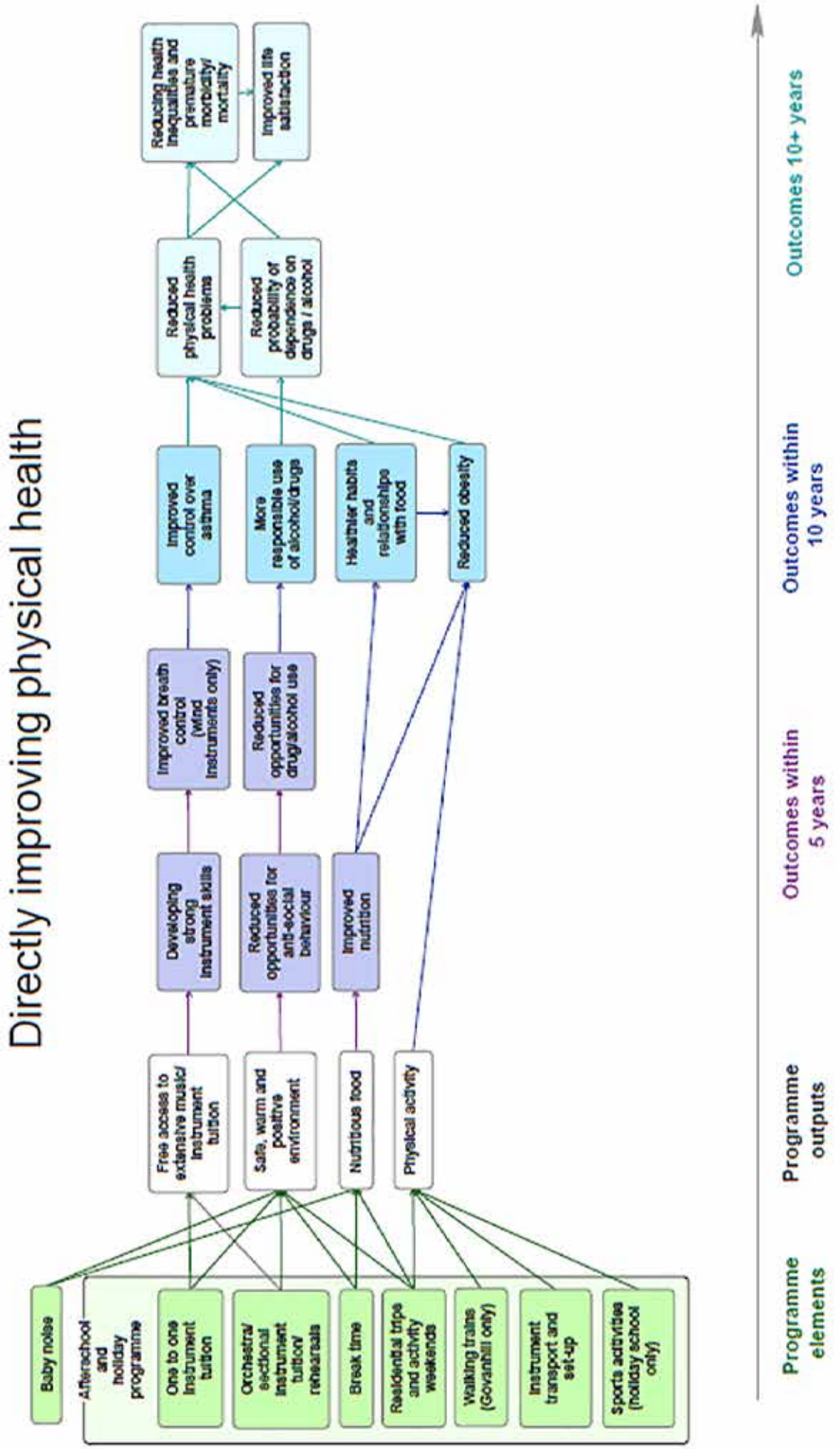
More broadly, participants' *exposure to different kinds of music* from an early age converts orchestral performances, which could otherwise be seen as a relatively inaccessible form of 'high' culture, into an ordinary part of everyday life, a *normalised or shared interest*, that participants can share with others, both within and outwith their local community. This too has the potential to *increase participation in cultural activities*, such as attendance at classical concerts and theatre performances, in the medium to long term which may impact on future health. Those who consistently engage in the arts throughout their lives are less likely to suffer from poor mental health in adulthood[33] and to live longer compared with those who rarely engage[74].

Logic model 1g: Encouraging healthy behaviours

This evaluation found some areas in which participation in the Big Noise orchestral programme has the potential to encourage healthy behaviours around diet and exercise and mitigate against the uptake of damaging behaviours; both of which may endure into adulthood. If the impacts of these improved behaviours are enough to compensate for the other influences on health and wellbeing over the life-course then this may lead to improvements in health and wellbeing.

It is estimated that poor diet is related to 30% of life years lost in early death and disability in the UK and this affects those who live in poverty to a greater extent than those who do not[75]. Across Scotland's 20% most deprived postcodes, it is estimated that around a quarter of children are at risk of being overweight and obese. Obesity and sedentary behaviour in childhood can lead to health problems in adult life, including heart disease, diabetes, osteoarthritis, back pain, certain cancers, low self-esteem and depression[76]. In 2010 just over one third of young people in Scotland consistently ate fruit and vegetables on a daily basis, and the likelihood of doing so declined between the ages of 11 and 15[77].

In both Raploch's and Govanhill's orchestral programme, children are provided with a healthy snack of sandwiches, fruit and fruit juice each day they attend after school, with a healthy hot lunch for those who attend summer school. In Govanhill, children are currently transported from their school to the Big Noise centre after school on foot via *walking trains*, and across both sites *physical activities* such as basketball and cricket are provided as part of holiday provision. Due to the intensive nature of children's participation in the Big Noise programme, these outputs have the potential to become life habits in both Govanhill and Raploch, by providing children with regular nutrition and exercise. A healthy diet and regular exercise are fundamental determinants of health[78]. If the impacts of these improved behaviours are enough to compensate for the other influences on health over the life-course then this may lead to *improved health and wellbeing*.


Directly improving physical health
Programme elements
Programme outputs
Outcomes within 5 years
Outcomes within 10 years
Outcomes 10+ years
Baby noise
Afterschool and holiday programme
One to one instrument tuition
Orchestra/ sectional instrument tuition/ rehearsals
Break time
Residential trips and activity weekends
Walking trains (Govanhill only)
Instrument transport and set-up
Sports activities (holiday school only)
Free access to extensive music instrument tuition
Safe, warm and positive environment
Nutritious food
Physical activity
Developing strong instrument skills
Reduced opportunities for anti-social behaviour
Improved nutrition
Improved breath control (Wind instruments only)
Reduced opportunities for drug/alcohol use
Improved control over asthma
More responsible use of alcohol/drugs
Healthier habits and relationships with food
Reduced obesity
Reduced physical health problems
Reduced probability of dependence on drugs / alcohol
Reducing health inequalities and premature morbidity/ mortality
Improved life satisfaction

Impacts on wider community

This evaluation found evidence that Big Noise is having an impact on families and other adults in the areas in which the Big Noise programme operates. The impacts were however, less widespread in these groups than in the programme participants themselves. Big Noise is impacting upon many fewer adults than it is children. An important impact on families and the wider community relates to *financial savings* resulting from *free after-school and leisure activities* and holiday provision and the potential for these to impact on employability and earnings. Other impacts relate to social mixing within the community and the benefits of engaging with music and the arts through concerts and other programme elements. This evaluation identified ways in which impacts on adults could be strengthened, which will be outlined in Chapter 6.

One of the key ways in which the Big Noise orchestral programme impacts upon families is through free provision of its services. In the short term, this offers families the potential for significant *financial savings*, not only in terms of the *free after-school and leisure activities* it offers (up to four days per week), but also in the provision of *free instrument tuition*, and *free food*. This local partner in Govanhill describes the benefits that this has brought to one family, particularly in terms of the *child-free time for employment* that Big Noise offers:

> *"[Big Noise participant's name] has actually got a real talent for the double-bass and she's made new friends. And it's really been a big help for her mum, because it's enabled her to get more work and things like that, because she knows that [participant] is taken care of. So, at a practical level, at a personal and emotional level, it's just benefited them so much."*
> (Local partner, Glasgow)

These aspects of the programme have the potential to *reduce financial stress* on families in the short and medium term, as well as supporting *improved employability* and, therefore, *employment outcomes* in the long term.

The *free access to music performances*, as well as *opportunities to build relationships with Big Noise staff* that are offered to the families of children who engage with the orchestral programme also provide opportunities for *increased social mixing* and, therefore the *broadening and strengthening of social networks*. This school teacher from Govanhill describes the effect of these impacts on the community, even in the short term:

> *"I've certainly seen concerts down here, where all the communities are mixing together. The Arab community, the Eastern Europe community, the indigenous Asian community, the indigenous White community, they're all mixing together. The attendance at the concerts is phenomenal. They're packed, absolutely packed. It's great. Sometimes the families, when the children are not directly in front, you see them creeping up closer and closer to the stage and just being totally mesmerised. I think it's a great unifier."*
> (Classroom teacher, Govanhill)

Not only do concerts provide a forum in which families can meet one another, but they also provide an opportunity for families to forge a shared *pride and respect for the Big Noise children*. As this headteacher from Govanhill describes, it is anticipated that this will lead to *increased cultural awareness and reduced prejudice* and, in time, the *development of friendships and social supports*:

> *"The one thing that coming to watch performances is that parents are sharing a pride in their children's achievements. The more social things like that they're going to, the more they start to recognise each other, the more they can nod and acknowledge and they can see that they actually are the same. They can see the commonalities rather than the differences. It's meaningful purposeful integration not just for children but also for the adults so that they're actually coming together as a community rather than coming together in the community in the mosque, the community in the church, the community and pals in the park or whatever. So they're actually coming together as the Govanhill community, I think that matters."*
> (Headteacher, Govanhill)

Indeed, in Raploch, Big Noise has provided an opportunity for those new to the area to mix with the area's longer-standing residents, which has been particularly pivotal in supporting the community to adjust to the process of physical regeneration that the area has undergone in recent years.

> *"There's has been loads of changes, not just the Big Noise. Obviously, the regeneration programme and all the houses, there is all different people in the community that haven't been here for years and I think it's brought everybody more together. And people that you wouldn't have spoke to years ago. So I don't think I could pass them in the street, they're not that, like, different."*
> (Parent of Big Noise Raploch participant)

As well as supporting the formation of social ties within communities, the Big Noise programme also provides families with an opportunity to *build relationships with Big Noise staff*, owing to the regular and frequent contact that the orchestral programme provides. This is enhanced by the provision of field trips and *concerts*, which necessarily involve working with parents and carers and becoming more involved in the lives of families. A programme of home-based performances, called *'Take a Musician Home for Tea'*, where musicians perform alongside children for their families in their homes, significantly enhances these opportunities, as this musician from Big Noise Govanhill describes:

> *"It was take a musician home for tea day, as in a cup of tea, but his mum had made us this amazing lunch. And she was so proud of him and to have his viola in the house and him play to her and to have us there. She said, "I'm so happy to have you in my house" and I think they felt like a friendship between us. I don't know if they necessarily get that from the community if they have only just moved here and they don't know anyone."*
> (Musician, Big Noise Govanhill)

In addition for the potential for these social ties to enhance families' *sense of belonging* and *sense of security* within their wider community in the medium term, the pride and respect for Big Noise children generated at performances also has the potential to support stronger relationships within the family, leading to *better functioning families* in the medium term.

Performances also provide families with a source of *happiness and enjoyment* in the short term. While this *enjoyment* has the potential to impact more generally upon adults who live in Raploch and Govanhill and attend performances, the most widespread impact that this evaluation found on adults outwith the families of Big Noise children was through potential *improved internal and external perceptions* of these two areas. While there is strong evidence that Big Noise has contributed towards *positive media coverage* of both Govanhill and Raploch, the medium- to long-term implications of this, on any widespread scale, are, as yet, unclear.

Finally, opportunities to volunteer in the programme and to take part in the Big Noise adult orchestra, generate perhaps the deepest impacts of the programme on adults in Raploch and Govanhill. Volunteers described receiving a range of benefits, including work experience, training and skills development, as well as a sense of purpose and fulfilment, all of which are common to many other forms of volunteering, and are therefore, perhaps not unique to the Big Noise programme. However, a proportion of volunteers across both sites do not reside in the areas in which Big Noise operates. That is, whatever the impacts of volunteering at Big Noise, these are not solely accrued to adults who live in Govanhill and Raploch.

While Adult Noise in Raploch certainly has a higher rate of take-up from within the community, there are still a large proportion of members who work but do not live within the area. In Govanhill, at the time of writing, Adult Noise is in the very early stages of its formation, but there has been significant effort made to involve the parents of participating children, before all others. While those who do participate experience many of the same benefits as children and young people engaged in Big Noise, the programme is much less intensive; running once per week in Raploch.

Chapter 6 includes a discussion of some of the challenges around promoting wider engagement within the community and how the volunteering programme might be enhanced to support this.

Conclusion

To conclude, there is strong evidence that the Big Noise programme is having a wide range of impacts on participants in the short term, which build upon the positive influences of school, family life and other activities and initiatives available to children and young people in Raploch and Govanhill. As Big Noise Raploch is a longer-established programme, this site also provides emerging evidence of some medium-term impacts, including those that are anticipated as young people enter secondary school. These short- and medium-term impacts and outcomes are the basis from which long-term outcomes are theorised. A key theorised outcome here is improved health and wellbeing of programme participants; here wider published evidence is used to substantiate these theories.

It is also clear, even at this early stage, that the impacts of Big Noise Raploch and Big Noise Govanhill are likely to be different to a degree, owing to the very different contexts, needs and pre-existing assets of these two neighbourhoods. Indeed, given the wide range of outcomes presented in this section, evidenced and theorised, the specific benefits for individual participants will reflect their own needs, access to other resources and processes of development. Going forward, outcomes may therefore vary significantly, in both scale and nature, from child to child and across the Big Noise centres. Tracking impacts across the Big Noise cohorts and sites into the future is planned as part of the ongoing GCPH evaluation of Sistema Scotland and will therefore be vital in evidencing, measuring and mapping out these medium- to long-term impacts.

It should be noted that many of the long-term outcomes identified here rely heavily on the cumulative impacts of a number of short- and medium-term impacts. These impacts may be across different pathways, and will be strongest when programme engagement is consistent and high. It should further be borne in mind that the Big Noise programme does not take effect on communities in a vacuum, but within the context of several other services, processes, influences and circumstances that take place at the local, regional and national level. These might include the positive impact of school-based programmes and interventions on children and young people, or the negative impacts of economic recession on employment among young adults.

Evaluation component 2: Education Scotland

Assessing quality of Big Noise Raploch education and learning

Below is the feedback letter summarising the findings of the September 2014 Education Scotland visit of Big Noise Raploch. For statutory reasons this letter was published in January 2015.

Dear Parent/Carer, Participants and Partners of Big Noise

Big Noise, Raploch

Sistema Scotland and Stirling Council

Recently, as you may know, my colleagues and I carried out a review of the Big Noise programme at Raploch. During our visit, we talked to parents, partners and participants and worked closely with the Big Noise senior team and staff. We wanted to find out how well participants are learning and achieving and how well they are supported to improve their life chances. We also wanted to know how Big Noise contributes to the community of Raploch. The senior team shared with us the programme's successes and priorities for improvement. We looked at some particular aspects of the programme, including the musicianship programme delivered in the nursery and primary school classes, the quality of learning and teaching in the after-school sessions and partnership working with others serving the community of Raploch. This letter sets out what we found.

How well do children and young people learn and achieve at Big Noise?

A significant number of children and young people achieve exceptionally well through the Big Noise programme in Raploch. From nursery to P7, all children educated on the Raploch campus experience high quality musicianship lessons delivered during the school day by Big Noise tutors. In addition, from P3 to S4, a significant number of children and young people are increasing their skills playing a musical instrument through involvement in the after-school orchestra programme and individual specialist tuition. As a result of these opportunities, almost all children and young people demonstrate a very strong musical awareness. Children in the nursery are increasingly aware of musical sounds. They are starting to relate these to particular instruments. They enjoy singing and clapping out rhythms. Children with additional support needs who attend Castleview School are developing their awareness of different types of music and a few are beginning to learn a musical instrument.

From P3 most children and young people who attend the after-school sessions are making very good progress on their chosen instruments and developing a firm understanding of music concepts. Children and young people demonstrate an appreciation of a range of classical and other music during discussions with their peers and with staff and visitors. A few children and young people can talk at length about the music and the other skills they are achieving through Big Noise, however most need more support to help them articulate this with confidence. Big Noise tutors provide helpful ongoing oral feedback and use praise well to motivate children and young people during lessons. Practice diaries are well used to record next steps for those learning an instrument. However, more formal assessment and recording of progress would support all children and young people and their parents to be clearer about what they have achieved and what their next steps are.

Around half of children at P3 to P7 and an increasing number at S1 to S4 attend after-school music sessions with Big Noise. They demonstrate high levels of commitment to the programme through their consistently high levels of attendance, concentration and teamwork. They are developing well a range of important skills for life and work such as self-discipline, time management and organisation. From P7 most young people are applying themselves well. A few are extending their achievements learning

a second musical instrument or as part of a choir. In addition, young people are developing their competence in leading others, acting as conductors or supporting each other to succeed.

Children and young people are increasing their confidence and self-esteem as they learn and perform together in small ensembles and when they come together in one of the Big Noise orchestras. They are developing a strong sense of belonging and understand that others rely on them to do their best. Most respond well to the rewards schemes which staff have introduced and work hard to improve. Over time and with careful planning by staff, most children develop the necessary resilience to concentrate during the practise sessions after a full day at school. However in each of the Big Noise groups, a few children and young people find it difficult to concentrate for the expected length of time. A broader range of teaching and learning approaches giving children and young people more choices and more responsibility for aspects of their learning would help to address this. Big Noise staff have recognised that children and young people can and should contribute more to decisions about the development of the programme and this is being taken forward through the planned Youth Board. We have asked that they ensure all children and young people are able to engage with this.

As a result of their engagement with Big Noise many children and young people from Raploch achieve tremendous success performing locally, nationally and internationally. They proudly represented their community performing at for example, the Commonwealth Games, at Stirling Castle for the Ryder Cup guests and during a recent visit to Venezuela. Young people are able to reflect on how this trip increased their knowledge of the wider world and supported them to develop independence and resilience through being away from home and experiencing a different language and culture. Young people at secondary school have continued to show an interest in Spanish to communicate further with the friends they made in Venezuela. Through their engagement in Big Noise, children and young people are increasingly confident. They feel safe, cared for, included and respected. They experience positive role models within the Big Noise staff team.

How well is Big Noise increasing the life chances and promoting and securing wellbeing for children, young people and their families?

Children, young people and their families enjoy being part of Big Noise. They feel challenged to learn and experience new things and consequently Big Noise has become an important part of the lives of many families in the community. Many parents spoke with pride about their children's increasing achievements with Big Noise. They enjoy their children's performances. Some spoke also of their increasing understanding of the importance of encouraging commitment and perseverance for children and young people's learning through Big Noise and in school. Parents and children who attend Baby Noise benefit from well-planned, relaxed and enjoyable sessions which promote early learning and health and wellbeing. Big Noise provides valuable opportunities for socialising with others in a new and unique context. A few adults in the community are also learning new skills and developing their musical awareness through participating in The Noise adult orchestra.

Children and young people attending Big Noise have high levels of school attendance, high standards of personal appearance and increasing self-pride. They feel that Big Noise staff encourage them to have high aspirations and to live healthy lives. Young people and their parents would like more information about how their engagement with Big Noise might influence future career prospects. We have suggested that the Big Noise senior team further collaborate with the secondary schools and other partners in Stirling Council to ensure young people can maximise their future prospects and build on the wide range of skills they achieve through Big Noise. As more young people move up through Big Noise into the senior years of secondary school, it will be important to ensure their curriculum remains relevant to their interests and aspirations as well as further developing their skills.

Through concerts within the local community Big Noise participants of all ages have promoted a wider appreciation of music and the performing arts. Relationships between Big Noise staff and children and young people and their families are positive and mutually respectful. Parents find the Big Noise staff team approachable, caring and consistent in the support and encouragement they offer the children and young people particularly during times of challenge and disruption to family life. Big Noise staff are developing effective partnerships with staff in schools, social work and educational psychology. As a result, they have a sound understanding of the varied social and emotional needs of the children and young people in their care. Staff demonstrate high levels of commitment to professional learning which supports them well in working with the most vulnerable children and families. There is scope to enhance this work further through greater partnership working with schools and other organisations in the local community to continue to strengthen approaches to community safety and health and wellbeing for all families in the area.

How well does Big Noise contribute to building a stronger and more resilient community?

Big Noise has demonstrated a long-term commitment to the community of Raploch which has led to increased participation from the community over time. The majority of children and young people living in the community now participate in the after-school programme and as a result are engaged in positive activities outside of school and during the holiday periods. All staff and volunteers working in their various roles across the organisation demonstrate high levels of professionalism and commitment to the overall aim of transforming lives through music.

With support from the parent organisation Sistema Scotland, the Big Noise senior team have developed a range of approaches which ensure all staff continually reflect on their work and that the organisation is continually adapting and improving. However, there is scope to improve how they use data for example, about attendance and retention rates, gender and improvements in literacy and numeracy to gain a better overall understanding of the impact of the programme over time as part of their ongoing self-evaluation. Sistema Scotland has begun to address this through a long-term research project in partnership with the Glasgow Centre for Population Health. Over time this should support further self-evaluation. Since it started in 2008, the organisation has strengthened recruitment and arrangements for continuing to develop staff's skills in working with children, young people and their families. Staff feel very well led, enjoy their work and feel confident and supported to lead aspects of the programme.

The Big Noise programme is underpinned by a strong vision of long-term, sustainable, social change and improved life chances for children and young people. To achieve this staff work hard to get to know the families who engage with Big Noise and to develop the confidence and abilities of these families to respond to challenging situations. Working with a small number of partners directly engaged with the children and young people they work with, Big Noise has inspired many children, young people and their families to do more and achieve more in their lives. Through increased partnership working with other local organisations there is scope for staff to deepen their understanding of the wider community, to share information and through this to contribute to further strengthening positive outcomes for the Raploch community.

During this review we found the following key strengths:

- High levels of participation and commitment from children and young people who are proud to be part of Big Noise.
- Significant numbers of children and young people who achieve exceptionally well in music.
- Children, young people and families are increasingly confident and ambitious as a result of their involvement with Big Noise.
- The professionalism and passion of a staff team committed to transforming lives through music.
- Effective leadership which has supported the continued growth of the organisation.

As a result of this review we have the following key recommendations to support further improvement, in partnership with Stirling Council:

- Work with school staff to continue to develop approaches to learning and teaching to give children and young people more responsibility for aspects of their learning.
- Improve approaches to planning, assessing and reporting children and young people's achievements in music and in relation to other skills for life and work and ensure young people continue to build on these at all stages of their learning.
- Engage more fully with other community partners to share information, improve networking and strengthen the collective efforts to building a stronger more resilient community.

What happens next?

We are satisfied with the overall quality of provision. We are confident that Big Noise self-evaluation processes are leading to improvements and that, with support from Stirling Council, Big Noise can take forward the key recommendations of this report. We will make no further evaluative visits in connection with this review. During our visit, we identified the musicianship being delivered in the primary classes as innovative practice which we would like to explore further. We shall work with Big Noise and Stirling Council to record the innovative practice and share it more widely.

Patricia Watson
HM Inspector

Evaluation component 3: Glasgow Caledonian University

Cost-benefit analysis of Big Noise Govanhill

The economic evaluation of Big Noise Govanhill sought to weigh up all the impacts of the Sistema Scotland Big Noise Govanhill initiative on society in order to assist a judgement about how worthwhile such programmes are. The results of the cost-benefit analysis (CBA) indicate that the project has the potential to deliver positive social economic benefits over time.

Appraisal results

Standard cost-benefit analysis appraisal indicators were calculated in Excel. Appraisal results for baseline scenario, at varying time horizons are shown in Table 9. It is clear that predicted benefits are greater than costs (at baseline scenario, assumptions as stated). Indeed, present value (PV) costs are negative because the predicted 'avoided costs' that could be realised for social work (C8) are greater in magnitude from year 7 on than the forecast financial costs of the project (<£1m per year). Benefits for 'education' are small due to the underlying assumption that only participants involved until end S6 would gain an improved post-school destination. This was explored further in sensitivity analysis. Again, it should be noted that although these are monetised values it does not follow that they are financial cash or potentially cash releasing.

Table 9. Appraisal results adjusted for time horizon.

	Baseline	SA1	SA2	SA3
	£m	£m	£m	£m
PV costs	-2.70	0.76	-0.03	-9.47
PV benefits	26.21	9.94	15.54	79.89
NPV	28.91	9.18	15.57	89.37
BCR	-9.70	13.06	-608.93	-8.43
Participation (in-school)	600	600	600	600
Participation (after)	686	410	570	686
Timescale	0-15y	0-6y	0-9y	0-70y

The CBA results indicate that the project delivers more social benefit than resources used, from a social perspective at baseline scenario, yielding an overall net present value (NPV) of £28.91 million and a BCR of -9.70 (negative due to the denominator). The overall assessment at baseline scenario indicates that, from a social perspective, the social benefits of Big Noise Govanhill are greater than the economic costs and so the project is worthwhile (NPV>0). Testing the timescale for the appraisal period demonstrated that NPV remains positive (range 9.18 to 89.37) reflecting the increasing number of participants in the short term and the impact of emerging benefits in the medium to long term, plus increasing 'reactive resource' savings over time (demonstrated in negative PV cost values).

Sensitivity analysis

Given the impacts of the intervention are uncertain, sensitivity analysis was conducted to explore the impact of different assumptions about future intervention effects. Key parameters such as participation rates were tested, as well as variation in assumptions and choices of benefit transfer valuations, as follows:

SA4: Participation assumptions
SA5: Programme costs
SA6: Direct school costs
SA7: Education – positive destination
SA8: Benefit threshold assumption (affecting education & health and wellbeing)
SA9: Society – social work costs
SA10: Society – avoided cost of offending
SA11: Health and wellbeing – atrophy of effect

For SA4-SA11 the impact on project NPV and BCR at each of the four timescales (baseline 0-15y, 0-6y (SA1), 0-9y (SA2) and 0-70y (SA3)) was observed. Details for each sensitivity analysis, the results and discussion can be found in Appendix D. All the variations tested left the NPV positive (see Table 10), suggesting that the project has the potential to deliver social welfare.

Table 10. Sensitivity analysis of costs and benefits – NPV results.

	0-15y	SA1 (0-6y)	SA2 (0-9y)	SA3 (0-70y)
SA4	16.35 - 37.55	7.39 - 9.83	10.70 - 17.93	36.74 - 141.50
SA5	28.09	9.09	15.22	86.24
SA6	28.66	9.07	15.41	88.78
Baseline	28.91	9.18	15.57	89.37
SA11	28.91	9.18	15.57	80.36
SA7	28.97	9.18	15.57	90.01
SA8	28.98	9.18	15.59	94.26
SA10	29.35	9.34	15.83	90.50
SA9	62.07	23.03	36.56	169.50

In summary, sensitivity analysis of the costs and benefits indicated that the assumptions underlying participation rates had the most influence upon project NPV. SA4 showed that attrition of participants has a large impact upon NPV for the project. As the project matures and it is possible to assess historic data about participation and costs (financial and economic) there will be a better basis to provide an indication of average and marginal costs per participant to inform discussion and decisions about whether more or less of the intervention is desirable given the opportunity cost. Testing the values under sensitivity analyses SA5, SA6, SA7 and SA11 had little or no effect on project NPV. This is possibly a result of the conservative decisions made about predicted costs to explore. SA8 had limited effect at short- and medium-term horizons, but did increase project NPV at the 0-70y appraisal period indicating both the impact of threshold assumptions and the challenge that public health projects have in measuring impacts that may emerge over a lifetime and potentially indicate inter-generational benefits. SA9 had the largest effect on project NPV resulting in the highest NPV at baseline ($NPV_{SA9}=62.07$) and predicting an $NPV_{SA9@70}=169.50$ when the project appraisal period of 0-70y was considered. It should be recognised that the inflation of these values are due to the magnitude of the reduction in costs for social work services that it is being suggested may be achieved, relative to counterfactual, if Govanhill demand for services was to move more in line with Glasgow. Testing the values under sensitivity analysis SA10 had a limited effect on project NPV.

It should be noted that movements in NPV are likely to be partly an artefact of Sistema Scotland's deliberate choice of areas with acute deprivation to operate in, and this is reflected in the measurement of the benefit of closing the gap between Govanhill and Scotland averages on a range of indicators. A more affluent area (relative to Govanhill) would have a smaller gap which would push values of benefits down.

Conclusions

Sistema Scotland believes that what makes its programme stand apart from other musicianship opportunities is its emphasis on "quality, intensity, duration". This is in line with the findings of large-scale studies such as the High/Scope Perry Preschool which suggested that intensity and quality were the keys to high returns[79]. However it is important to note that potential negative impacts of involvement in Big Noise Govanhill, such as reduction in time for other educational activities such as homework (impacting upon B2 – Education) or reduction in time spent with family (impacting upon B4 – Health and wellbeing), were not included in value estimates due to lack of available data or comparable studies. It is also not apparent if there are critical thresholds of involvement and/or critical elements of the intervention – for example, it may be that the 'active ingredient' is learning an instrument *per se*, or it could be a combination of learning an instrument plus the experience of performance or some other combination.

There is a potential signalling impact (Reeves (2002) refers to this as 'social profitability'[80]) of Big Noise Govanhill. For the community, this would deliver a positive benefit by improving the perception of the community's ability and creating positive interest in Govanhill (for example, Big Noise Govanhill children were involved in the opening ceremony for the 2014 Commonwealth Games in Glasgow). It could be that participating is mostly effective as a signal to future opportunities (such as further and higher education selection boards or employers) and this helps individuals to develop human capital that they can build upon and use to access more positive destinations than would be possible in the absence of participation in Big Noise Govanhill.

In conclusion, economic evaluation using a CBA approach indicates that Big Noise Govanhill delivers more social benefit than the cost of resources consumed, from a social perspective. As such we can conclude that it delivers economic benefit for society relative to counterfactual and is worth achieving given the fundamental value of health for individuals and the spillover effects for a healthy society.

Chapter 6: Discussion

Introduction

The GCPH, Education Scotland and Glasgow Caledonian University have collectively generated evidence across the three evaluation components detailed in this report. At this early stage we have found that Big Noise is a high-quality programme providing a challenging and rewarding learning experience, representing value for money, and having the potential to positively impact on the health, wellbeing and life prospects of participants through a variety of identified pathways.

This evaluation has brought together different professional perspectives in the common pursuit of understanding, assessing and learning from Sistema Scotland's Big Noise programme. To the credit of Sistema Scotland and the Big Noise programme we have found the organisation to be transparent and accountable and the staff to be open and co-operative with this evaluation and with the respective evaluation partners. Both the organisation and staff have been critically reflective of their work in the spirit of continuous improvement.

It is important to recognise the contributions of the Big Noise delivery partners, especially the schools involved in both Raploch and Govanhill. The schools have demonstrated commitment, flexibility and innovation in working with Big Noise towards delivering a high-quality programme. The positive work undertaken by Sistema Scotland, the schools involved and wider partners must also be contextualised in what are challenging times. Local authority services and other partners involved in delivering the Big Noise programme do so amid increased service demand and reduced resource. The populations engaged with Big Noise in Raploch and Govanhill experience multiple deprivation and significant numbers within both geographies are affected by unemployment, austerity measures and welfare reforms.

What this evaluation adds

This evaluation adds to a limited evidence base concerning the targeted use of the arts in addressing social, health and other inequalities. Through the evidence generated in this evaluation, a variety of impact pathways have been identified. These pathways have already served to underpin the economic component of this evaluation and to refine the data required in the life-course tracking of participant outcomes. The long-term quantitative tracking will ultimately test the validity of these pathways. However at this juncture, the pathways represent theories concerning the impacts of the arts.

The evidence generated in this evaluation now and in the future is also relevant to the limited evidence base concerning the delivery and impacts of community-based social interventions or regeneration. The process learning themes presented in this report elucidate what is required to embed long-term, deep, social change within disadvantaged communities. Indeed the learning themes are central to a range of positive impacts on programme participants which have been observed in this evaluation. The themes described are directly translatable as principles for effective social regeneration in a variety of contexts.

The findings of the evaluation highlight several challenges in relation to embedding services which promote positive and deep social change within disadvantaged communities and which could potentially reduce social and health inequalities. These challenges are discussed and implications for policy and practice, and future research and evaluation are summarised at the end of this chapter.

High-level synthesis of findings

All three authors within this evaluation report positive findings which underpin the key messages. The GCPH process learning themes describe the strengths of Sistema Scotland and the Big Noise approach. These strengths are challenging to deliver – such as the group learning which is central to the orchestral model and tries to include participants who demonstrate difficult and disruptive behaviour. Managing such behaviour within orchestral practice requires constant review from the musician as well as flexible and innovative teaching approaches. Education Scotland's favourable assessment of the educational and learning quality of the programme suggests that this behavioural challenge (and others) are being well managed and effectively reviewed by Big Noise staff on a day-to-day basis.

The GCPH findings indicate that Big Noise participants in Raploch and in Govanhill have higher school attendance when compared with the eligible population. Qualitative evidence suggests that this may be due to the influence of the programme on children and young people. This is an important finding, highlighting the potential for positive spillover from Big Noise engagement to wider education, which is consistent with wider evidence in this field[34]. This and other evidence generated by the GCPH and Education Scotland form the foundations of the logic models from which potential future impacts on life prospects, health and wellbeing are described across a range of pathways.

While the theorised programme pathways are expansive over the life-course of participants, the short-term impacts and outcomes reported by the GCPH are in line with Education Scotland's assessment of educational and learning quality. Education Scotland reported that a significant number of participants are 'achieving exceptionally well' and found consistent evidence of participants' "boosting of confidence and self-esteem". In addition, the musicians' role in raising aspirations and encouragement to "live healthy lives" was also highlighted as was the acquisition of "a wide range of skills for life and work such as self-discipline, time management and organisation".

The economic component of the evaluation is based on conservative estimates of selected programme impacts identified within the GCPH logic models. The cost-benefit analysis projects that Big Noise Govanhill will deliver more social benefit than the resources used to deliver the programme. At each time horizon considered, and for all scenarios analysed, the net present value of Big Noise Govanhill remained positive, indicating that the project has the potential to increase net worth for society over its lifetime. These projections underline firstly that Big Noise Govanhill represents a worthwhile investment, and secondly that the short-term benefits of the programme observed and reported by the GCPH and Education Scotland, based on the modelling, have the potential to translate favourably in economic terms as early as year six of programme delivery.

There is also consistency between the GCPH and Education Scotland recommendations for enhancing the impacts of the Big Noise programme. These are detailed in the 'Opportunities' section of this chapter.

Reflections, sustainability and future challenges

People change lives

A recurring theme throughout this evaluation is Sistema Scotland's emphasis on the quality of the relationship between musician and participant. It is this quality of relationship that is so important to the theorised impact pathways. Indeed many of the strengths of the Big Noise programme delivery are designed to enable opportunities for this relationship to flourish. Consistent with other social regeneration evidence and narrative, Sistema Scotland's vision could be described as 'people change lives' not services or programmes nor music[81]. At a societal level a challenging set of questions remain as to how this quality of relationship is conceptualised within policy, is represented and prioritised within funding criteria and structures and is planned for and implemented locally. Prioritising the quality of relationship between service provider and recipient may also be an uncomfortable concept within risk-averse organisational cultures held to account for delivering outcomes rather than processes.

Finally, how can the quality of a relationship be satisfactorily measured or evaluated – and is this needed?

The unique contribution of excellence

Evidence generated in this evaluation indicates that Sistema Scotland pursues excellence in the organisation and delivery of the Big Noise programme. Sistema Scotland places importance on its teaching staff being professional musicians and encourages them to maintain their musical career outwith Big Noise. This evaluation suggests that excellence may be an important ingredient within the delivery of social interventions. Excellence appears to mean more than 'high quality'. Where 'high quality' may lead to participant satisfaction, continued engagement and better outcomes, 'excellence' also inspires, raises aspiration and contributes significantly to the quality of relationship fostered between musician and participant. When the Big Noise musicians teach programme participants they regularly demonstrate and play alongside participants as part of the teaching, learning and performing process. Regular exposure to excellence in this way allows participants immediately to conceptualise what the end goal of their efforts is and to understand the dedication, motivation and work ethic required to achieve the level of skill which underpins musical excellence. The musical excellence of the Big Noise musicians further enhances their status as positive role models for the programme participants.

Co-ordination and leadership within social intervention

A clear strength of Sistema Scotland's approach is its ability to adapt the Big Noise programme to the specific requirements of the community in which the organisation operates. This has been particularly evident from the development of the Big Noise Govanhill programme. It is apparent that Sistema Scotland did not view the development of the Govanhill programme as a replication of Big Noise Raploch. Rather, the underpinning Sistema Scotland philosophy of an intensive, immersive and sustained quality programme is the basis from which a bespoke Big Noise programme is developed. The central focus for the development of a Big Noise programme is always the participants; the children and young people – ensuring a quality and enjoyable programme with as few barriers to sustained inclusion as possible. The specifics of the programme are then developed in wider collaboration with key delivery partners and insights from the community. This process includes strategic considerations as well as logistical and practical ones.

The GoWell study has previously described the scale of the challenge involved in co-ordinating the various components required for neighbourhood regeneration and highlighted a lack of clarity as to who is best placed to deliver the social regeneration component[82]. The GCPH has also made clear the qualities of 'community anchor organisations' – the majority of whom are likely to be third sector organisations[83]. Community anchor organisations have been described as agile and flexible, and particularly suited to delivering services specific to the needs and aspirations of communities and individual community members. Community anchor organisations also provide a hub and a focus for partnership working with agencies, services and others, provide democratic community representation and facilitate community enterprise. Sistema Scotland demonstrates some of these characteristics, but not all.

Because of their ways of working, third sector community anchor organisations are well placed to deliver social interventions. To maximise their potential contribution, it is important that their role in regeneration is strategically elevated. This would mean being equal partners alongside the public and private sector in area regeneration planning from the outset. This would serve to enhance the collective delivery of the physical, economic and social dimensions of holistic regeneration. Crucially, anchor organisations can contribute towards facilitating the community's voice within area regeneration planning, potentially across all three dimensions of holistic regeneration.

Long-term change, preventative spend and cost

The 2014-15 Programme for Government emphasises the Scottish Government's commitment to building a fairer Scotland and addressing inequalities[37]. Our evaluation makes clear that this requires a long-term perspective in terms of communities, services and interventions and indeed measuring outcomes. The deep social change that Sistema Scotland aspires to achieve within disadvantaged communities is predicated on being a permanent, visible and stable part of community life over the long term. This long-term perspective is at odds with political terms and funding structures within Scotland particularly those for third sector organisations. The question as to whether the conditions can be created where long-term interventions like Big Noise can flourish despite political and funding timelines requires consideration.

The economic component of this evaluation indicates that investment in the Big Noise programme is an example of preventative spend. Sistema Scotland encounters much of the same resistance as other areas of preventive spend in times of economic constraint. A key barrier here is the long-term nature of the impacts and outcomes most likely to convince funders of the value of investment in preventative approaches. Preventative approaches are also seen as competing for the resources required to sustain 'normal' vital services, with the consequence that cuts may be required to enable preventative approaches to take place.

Perceptions of organisational purpose are important here. In the case of the NHS many professionals and the public alike would argue that health services should care for ill patients; investment in preventative approaches within healthy populations appearing to be a lesser priority. Similarly, Big Noise may be perceived as merely 'a costly music programme' rather than a long-term, quality social intervention. This evaluation indicates the limitations of that perception; upstream investment in healthy populations involving quality interventions has the potential to reduce adverse consequences in the longer term.

The perceived cost of the Big Noise programme delivery is important within the preventative spend discussion. As described, the Big Noise programme is sustained, inclusive, intensive, immersive and flexible, employs highly regarded professional musicians, provides free instruments to participants, delivers after-school and holiday provision, performing concerts, international learning events and trips. Such a programme is bound to incur higher delivery costs than smaller-scale interventions. However these programme characteristics collectively enable Big Noise to achieve positive, deep social impacts which may lead to economic savings and improved outcomes.

Links to policy context

The outcomes of Sistema Scotland's Big Noise programme potentially contribute to a range of current policy objectives. A key focus of the Scottish Government's social and economic policy is to support the development of healthier and more cohesive communities. This is at the heart of the government's purpose "to focus government and public services on creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth." Attention is also being paid to how policy is delivered. At the core of Scotland's approach to public service reform is a drive for more open and participative services which build upon the nation's assets.

Table 11 describes Sistema Scotland's contributions to the 2014-15 Programme for Government[37]. The programme makes clear the Scottish Government's commitments in the context of the long-term priorities of sustainable economic growth, addressing inequalities and empowering Scottish communities through service reform.

Table 11. Sistema Scotland contributions towards Scottish Government Programme for Government 2014-15.

Programme for Government 2014-15	Sistema Scotland contributions Evidence source Depicted in logic model as
Creating more, better paid jobs in a strong, sustainable economy	Sistema Scotland employs 59 people and offers good employment terms and conditions, training opportunities and progression routes. The organisation is expanding creating new skilled jobs and employment opportunities. At the core of Sistema Scotland's work is a commitment to provide the opportunity for programme participants to acquire a range of skills which, in the long term, will make them more likely to live happier, healthier lives and make positive contributions to society including the economy. Big Noise offers after-school and school holiday provision in a safe, positive environment; offering parents and guardians free childcare, potentially reducing barriers to employment for some parents and guardians. The economic component of this evaluation makes clear that the economic benefits accrued to society, in both the short and long term, from investment in Big Noise significantly outweigh the economic costs of the programme.
Building a fairer Scotland and tackling inequality	Sistema Scotland's core vision is a long-term approach to tackle inequality and disadvantage. This evaluation indicates that the Big Noise programme has the potential to do so through a variety of identified pathways. The Big Noise programme targets disadvantaged communities, delivering a sustained, immersive and inclusive programme which aspires for excellence in its delivery. It has the potential to improve a range of outcomes over the participants' life-course, raising these outcomes to be more in line with the rest of society. This evaluation has found higher school attendance among Big Noise participants compared with other children in the area. This suggests increased educational engagement, occurring alongside the enhanced development of a range of life skills. If sustained, these benefits may enable participants to achieve better educational and employment outcomes and to lead fuller, healthier lives. Even when working with large numbers of participants within disadvantaged communities, a pivotal consideration in delivering the Big Noise programme is the removing of barriers to participation for children and young people with complex needs or from troubled home lives. This way some of the 'hardest to reach' children and young people within a disadvantaged community can still engage and benefit from the programme.
Passing power to people and communities	The Big Noise programme is empowering; enabling children and young people to see that their future is not predetermined and that with the right attitude and work ethic their goals can be achieved. This evaluation has demonstrated that participants display increased confidence, self-esteem, raised aspiration and enhanced ability to visualise goals. These (and other) positive benefits of the programme may contribute to a range of life skills which make it more likely for participants to meaningfully engage with service providers, community issues and political processes. The Big Noise programme actively enables parents and guardians to socialise and to interact with the Big Noise staff and other professionals. This may encourage wider participation in the community for some parents and guardians. There is crossover here with the economic benefits of the Big Noise programme delivery where free after-school and holiday childcare may enable some parents and guardians to increase working hours or to get a job.

Established social policy frameworks in Scotland include Equally Well[38] (to tackle health inequalities), the Early Years Framework[39] and Achieving Our Potential[32] (to tackle poverty and income inequality). These three social policy frameworks recognise that a child's start in life, cycles of poverty and poor health are interlinked. They also recognise the complexity of these problems, requiring co-ordinated service involvement for individuals, and a long-term approach. The frameworks strongly advocate early intervention, moving from crisis management to prevention and breaking cycles of poor outcomes in people's lives. Similarly the Commission on the Future Delivery of Public Services (the 'Christie Commission')[41], which reported in 2011, advocated – as one of its four principles for reform – that priority be given to expenditure which prevents negative outcomes from arising. The findings from all parts of this evaluation indicate that the work of Sistema Scotland illustrates how these policy recommendations can be delivered through a targeted, arts-based community intervention. As noted above, the Scottish Government is also committed to looking at *how* policy is delivered, so that it builds on the assets within communities and involves local people in the development and delivery of services. Sistema Scotland's approaches could be described as asset-based in that, through the Big Noise programme and related concerts, the organisation makes visible values and enhances the skills, knowledge, connections and potential within communities[84]. The Big Noise programme promotes and enhances community capacity, connectedness and social capital.

Reflecting on the relationship of Sistema Scotland's work to the policy context in Scotland, however, throws issues of priority and community aspirations into the spotlight. It is unlikely that, if asked about priorities for investment, disadvantaged communities would identify having a children's orchestra programme as being a priority, whether there is an understanding of its social benefits or not. The case has had to be made by a small group of enthusiasts with a vision. In this regard the decision to implement the Big Noise programme within communities is based on a top-down understanding of community deficits as opposed to a collaborative consultation alongside communities to identify and enhance assets. What is clear however is that once in place, communities do value the Big Noise programme which grows, and makes visible, individual, social and physical assets within an area.

Opportunities

Education Scotland's work has highlighted the importance of strong linkages and more effective information-sharing with schools and other community partners. Its findings indicate that this would enhance the quality of the Big Noise programme and strengthen collective efforts to build a stronger, more resilient community. The GCPH evaluation endorses these findings, recognising more consistent sharing of information with schools as an important area for development, potentially requiring the development of an information-sharing protocol. Similar opportunities for improvement in terms of engaging families and the wider community also exist.

Sistema Scotland emphasises its commitment to children and young people first and foremost and engages with families and communities primarily to amplify the benefits of the programme for participants. The aim is for generational change, with a reliance on the children they are currently reaching to continue to engage with the programme as adults and as parents, thereby extending the positive impact of the programme from generation to generation.

Evidence shows however that one consequence of effective social regeneration is enhanced social mobility[85]. It may be that the current programme recipients will wish to 'move out and move on' from the community they grew up in as they become adults and develop the social and economic means to do so. Unless the work of Sistema Scotland becomes more universal, this means that they are unlikely to reside in a Big Noise community as adults, to act as an advocate for the programme, to continue their engagement and to promote engagement with their own children and the wider community.

It may prove beneficial therefore for Sistema Scotland to develop further engagement with current parents and guardians and the wider community in the short term. The expansion of 'The Noise' (adult music programme) and the volunteering programme are two ways in which this might be achieved. If elements of the volunteering programme could be underpinned by the aim of enhancing volunteer employability this would strengthen the wider impacts of the programme and may attract additional funding. The organisation would need to consider its capacity to extend its aims in this way. Resource is an issue: if enhanced engagement with parents, guardians and the wider community is pursued it would require additional funding.

Beyond the specifics of this point it would be beneficial for the Big Noise centres to forge stronger links in the coming years with volunteering, work placement, education and training organisations particularly as orchestra members begin to leave school and the Big Noise programme.

There is also scope to enhance the level of community, parent or guardian participation in the governance of the Big Noise programme – for example through the establishment of parent- and guardian-led decision-making groups. However, running the Big Noise programme requires significant professional ability and experience, a mix of skills which may not currently be present or available within communities. To move away from the current model of programme delivery and organisational governance may compromise the vision, ethos and values of the organisation and the quality of the programme, all of which are fit for purpose and are presently working very well. The possibilities open to Sistema Scotland in terms of community-led management therefore pose a number of complex questions that may need to be addressed on a site-by-site basis.

Moving forward the Big Noise programme should actively and consistently review the profile of programme engagement. Our findings show that the majority of current Big Noise programme participants come from disadvantaged households and that a large proportion of children and young people engaging with the Big Noise programme are children who sometimes struggle to engage with learning and education in other contexts. However, there is scope for Sistema Scotland to further increase engagement among those who require additional support for learning. Self-monitoring and self-evaluation are essential to increasing these levels of engagement. As part of the ongoing evaluation of Sistema Scotland, the GCPH will lead on some of the analysis required to review programme engagement.

In summary, opportunities to enhance the Big Noise programme delivery include:

- developing stronger linkages and more effective information-sharing with schools and other community partners.
- developing further engagement with current parents and guardians and the wider community in the short term.
- considering expansion of 'The Noise' (adult music programme) and the volunteering programme.
- forging stronger links in the coming years with volunteering, work placement, education and training organisations.
- enhancing the level of community, parent or guardian participation in the governance of Big Noise centres.
- consistently reviewing the profile of programme participation; to potentially further tailor engagement efforts and programme delivery to promote uptake among underrepresented groups.

Implications for policy and practice

- Scotland's policy landscape endorses long-term approaches to addressing social and health inequalities yet there remain significant barriers to delivering social interventions in a sustained way and to making long-term delivery commitments to prioritised disadvantaged communities. Much of this resistance relates to short-term political and funding timelines. The challenge remains, therefore, to create the conditions where long-term interventions of quality can flourish. This would require strong leadership and new forms of cross-party and cross-organisational dialogue, consultation and support.
- Scotland's social policies recognise that sustained, quality early interventions are most likely to yield positive social and health outcomes in later life. This evaluation highlights a range of specific characteristics which can potentially enhance the outcomes of such interventions. Crucially the focus on developing quality relationships with individual participants, the role of excellence, the innovation and flexibility required to promote inclusion and collective, intensive and immersive programme designs are all important policy and practice considerations.
- It would be helpful to have clearer guidance on the nature of the organisations or sectors that are most suited to delivering social regeneration, and to have greater value placed on these contributions. As illustrated by Sistema Scotland, third sector community anchor organisations appear to be particularly well placed to deliver the social elements of holistic regeneration. Where there is confidence in a third sector community anchor organisation to deliver social regeneration, then the organisation's strategic elevation as an equal partner alongside the public and private sectors is important. Evaluation in this field has lacked resource, meaning there is not much evidence of improved outcomes for communities, but this does not mean those outcomes are absent. All interested partners need to commit to generating evidence about effective practice in this arena.
- Like other organisations focused on prevention, Sistema Scotland encounters a degree of resistance concerning its funding. Investment in preventative spend does mean shifting resource from already stretched service budgets. By their very nature the benefits of some preventative interventions are less obvious than those of 'normal' service delivery. Having identified prevention as a priority, there is an urgency now to ensure that preventative spend approaches are resourced and that there is clarity about where accountability for preventative investment and delivery lies. New, longer-term measures of performance improvement and monitoring also need to be developed for preventative approaches.
- A key strength of Sistema Scotland's approach is to ensure that each Big Noise centre is tailored to the specific needs of the community and target population within each site. Service delivery is underpinned by a clear organisational philosophy and vision but each Big Noise centre and its programme is unique. Furthermore there is significant scope within programme delivery to be flexible and innovative to accommodate specific individual needs, particularly in terms of promoting inclusion for those with complex needs. All of this is difficult and time consuming; placing significant demands on staff. Notions of programme replication are absent from Sistema Scotland's dialogue and philosophy; instead the Big Noise programme is uniquely tailored to the community in which they operate and has the flexibility to meet the needs of individual participants.
- Those delivering social interventions might consider the characteristics of the Big Noise programme as detailed in the process learning themes in Chapter 5. Although contexts of programme delivery can vary substantially, the process learning themes are generalisable across social interventions. Practitioners are also encouraged to map out the key elements and outputs of their programme and the anticipated timeline of outcomes. The Big Noise logic models presented in the impacts section of Chapter 4 illustrate how this can be done. This is a useful process for internal discussions concerning programme development and is also of value for funding applications, monitoring requirements and self-evaluation.

Implications for future research and evaluation

- Community-based social interventions are regularly funded yet there remains a lack of evidence concerning their outcomes and theory of impacts. Evaluation in this field has been relatively poorly resourced and is extremely challenging. More research, evaluation and evidence are needed. Evaluations in this field should value different forms of evidence and adopt methods (recognising their strengths and weaknesses) that capture a range of perspectives. The positive human experience and emotion resulting from participation in a social intervention or from the development of a valuable relationship is central to the impacts and outcomes that are delivered, but less quantifiable. Methodological innovation is needed, within long-term studies, to provide robust evidence about the processes and impacts delivered.
- This evaluation demonstrates the contributions that can be made by non-academic or research professionals to the research and evaluation process. The GCPH has developed an evaluation framework which addresses the methodological weaknesses seen in other studies within this field. However this evaluation has benefited considerably from the professional expertise, experience and perspectives of both Education Scotland and Audit Scotland working collaboratively alongside colleagues from the GCPH and Glasgow Caledonian University.
- This evaluation has generated important initial learning and has developed a range of potential impact pathways. Future work needs to develop an understanding of the specific ways in which the Big Noise programme 'cause' the range of 'effects' outlined in this evaluation. For example it would be beneficial to understand if the boosted educational attendance reported in this evaluation is directly attributed to the Big Noise programme and if so what programme characteristics are important in achieving this. This will require the exploration and application of a range of psychological, social, political, economic and other social science theories.
- Routinely gathered (administrative) data are underutilised in tracking the outcomes of service and intervention delivery. Routinely gathered data are also particularly suited to life-course studies, incur no cost to researchers in terms of data collection and have a high degree of reliability and completeness. Researchers and evaluators should consider the use of administrative data in measuring the long-term outcomes of social, and other, interventions.
- Scotland's demographics are changing. The diverse nature of Govanhill's community presented a number of cultural and language barriers to this evaluation. This raised important issues in relation to participants' informed consent and the research methods adopted. Questionnaires proved unsuccessful with non-English speaking residents and migrant populations even when translated into their native language and in the presence of translators. Creative methodologies were adopted in Govanhill primarily as an age-appropriate tool for younger participants, but were also effective in overcoming language and cultural barriers to participation in the research. Researchers and evaluators must ensure that methods keep pace with the nation's changing demographics and are tailored to promote participation among migrant, ethnic and non-English speaking populations.

Chapter 7: Conclusion

This report documents the findings of an initial phase of evaluation assessing the delivery and impacts of the Sistema Scotland's Big Noise programme. A key strength of this initial report has been the collaboration established between a range of partners; offering and contributing complementary professional expertise, perspectives and experience in the common pursuit of learning from Sistema Scotland's work. Moving forward from this initial phase, the GCPH will continue to lead the evaluation and will begin linking a range of quantitative outcomes to measure the long-term impacts of the Big Noise programme. A range of other approaches may also be used to investigate specific programme cause-effect relationships.

At this early stage in Big Noise participants' lives and in the anticipated timeline of programme outcomes the scope of what can be reported is limited to short- and medium-term impacts. This evaluation strongly endorses Sistema Scotland's approaches to delivery: the impacts of the programme evidenced at this stage of the evaluation are clear. What is also certain is that Sistema Scotland's Big Noise programme has the potential to significantly enhance participants' lives, prospects, health and wellbeing through a variety of identified pathways in the long term. Any endorsement of Sistema Scotland is also an endorsement of a range of local partners who contribute to the delivery of Big Noise; the schools in both Raploch and Govanhill deserve considerable recognition for their commitment.

This evaluation also raises important considerations relating to the society Scotland aspires to be. It is important to consider whether conditions are conducive to embedding long-term social programmes within prioritised communities. If preventative spend is to be an enduring approach in creating a stronger, fairer economy, to reducing inequality and empowering individuals and communities then clarity as to how it is resourced amid constrained finances and already stretched services is essential. Learning from Sistema Scotland's approaches, it is also important to consider how the delivery of excellence and the quality of relationship between provider and participant within social interventions can be conceptualised and emphasised at a societal level.

History suggests that the achievement of better prospects for disadvantaged communities and fairer outcomes within Scotland as a whole, will not be achieved through continuing with established approaches. Innovation, sustained commitment and more person-centred ways of working will be needed. Sistema Scotland offers a model which encompasses all of these. It is essential that, as a society, we learn from Sistema Scotland's approach and evaluate the impacts of the Big Noise programme over time.

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