

Noise Solution

External Evaluation Report

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Table of Contents

Executive Summary	3
The Need	5
About Noise Solution	5
Theory of Change	6
The Context	7
Approach	12
Methodology of Impact Assessment	12
Data Collection Process	14
Ethics	15
Impact	16
Overview	16
	17
KPI 1: Aggregate Achievement	17
KPI 2: Increase in confidence	19
KPI 3: Increase in self-determination	20
KPI 4: Achieve qualifications	21
KPI 5: Progression into confirmed/planned profession routes	22
Blogs Analysis	23
Conclusion	25
Limitations	25
Moving Forward	25



Executive Summary

Noise Solution is a social enterprise pairing marginalised people with professional musicians, building confidence, self-belief and aspirations in them by delivering one-to-one tutoring at home. This enables participants to capture, create and share their success through the digital documentation of a musical mentoring process.

In February 2016, Noise Solution was awarded the Cabinet Office's Impact Readiness Fund to appoint The Social Investment Consultancy¹ to measure its social impact. At the same time, Simon Glenister, Director of Noise Solution, has undertaken a research project titled, "Towards an Understanding and Theorising of Blogging Within the Practice of Noise Solution, Using Examples of 'Transformational Music Engagement'" as a post graduate of the University of Cambridge. This impact report is the culmination of the work from February to September 2016.

This report is structured into four sections – first exploring the need for Noise Solution and the context of its work, second detailing the methodology of impact evaluation, third exploring the findings of the evaluation focused on five Key Performance Indicators, finally concluding on the vision for Noise Solution in the future.

Noise Solution's theory of change seeks to unlock confidence and self-belief among marginalised people and to reengage them in positive activities. This rests on the premise that people can develop new positive identities around learning and work (a process sometimes described as resignification) through experiencing success and enjoyment in music-based learning. Noise Solution's model of sharing music and learnings through an interactive positive digital narrative (blog) allows for family members, carers and key workers to be part of the individual's journey, so as to ensure that the change is sustainable and that the individuals are integrated into the communities and social settings in which they need to be able to live, learn and work successfully.

The impact evaluation process is designed based on the central tenet of wellbeing, and a mix of quantitative and qualitative methods are used to ensure that the evaluation addresses both the breadth and depth of change. An internationally validated wellbeing scale, Warwick Edinburgh Mental Wellbeing Scale (WEMWBS)² is used to capture participants' perceptions of wellbeing. WEMWBS has been validated for use by people aged 13 or above, and it is therefore suitable for

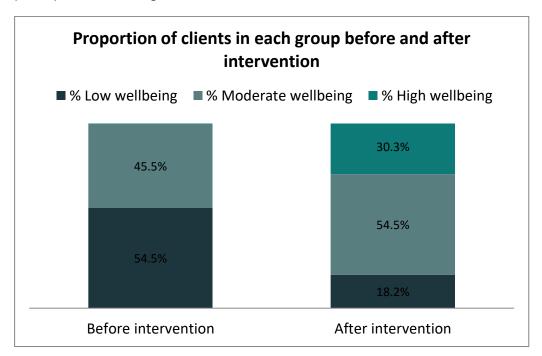
¹ The Social Investment Consultancy

² WEMWBS is a 14 item scale with 5 response categories, summed to provide a single score ranging from 14-70. WEMWBS was developed by researchers at the Universities of Warwick and Edinburgh, with funding provided by NHS Health Scotland, to enable the measurement of mental well-being, published and validated in 2006: http://www2.warwick.ac.uk/fac/med/research/platform/wemwbs/



Noise Solution's target beneficiaries³. The data analysed in this report is based on start, mid and end WEMWBS questionnaires completed by 34 participants, allowing comparative analysis of those perceptions. Additionally there is qualitative analysis of three randomly selected blogs and nine, hour-long interviews with participants, family members and professionals.

The results show that Noise Solution have extremely positive outcomes on individuals that go through the programme. Most compellingly, among the 89% of participants that complete the programme, they experience a 6.8 point increase in their wellbeing scores on average. The differences between the participants' WEMWBS scores before and after the Noise Solution programme are statistically significant. This means that the result of improved wellbeing of the participants is unlikely due to chance, but attributed to the Noise Solution programme. Given the small sample sizes (fewer than 50 users), it is typically hard to find statistical significance; but when we do find statistical significance with small sample sizes, the differences tend to be meaningful enough to warrant action⁴. The graph below encapsulates Noise Solution's positive impact on participants' wellbeing.



Apart from the compelling improvement in wellbeing, 50% of participants register an increase in confidence with an average increase of 30%. This is echoed by their family members or carers, with 85% noting in the end questionnaire that the participant was more confident than when they started with Noise Solution. Moreover, 54% of participants registered an increase in self-determination, with 29% of average increase.

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³ BMC Public Health 2011, Warwick-Edinburgh Mental Well-being Scale (WEMWBS): Validated for teenage school students in England and Scotland. A mixed methods assessment

⁴ Sauro, J (2014), "What Does Statistically Significant Mean?" from http://www.measuringu.com/blog/statistically-significant.php



Noise Solution looks forward to discussing these learnings with potential commissioners and partners in order to positively influence the health and social care sectors, grow the reach of the organisation and therefore its impact..

The Need

About Noise Solution

Since 2009, Noise Solution has been using a mixture of music technology and social media to engage and motivate people (predominantly within the 14 to 25 year old age range) facing a variety of challenging circumstances – defined as anyone experiencing barriers of a social, cultural, personal, economic, emotional, health or ability context⁵. Their beneficiaries are mostly young people Not in Education, Employment or Training (NEET), those involved with mental health services, offending services and education. Their objectives are to deliver this mission through learner-centred activities which

- encourage participation in positive activities (both internal to Noise Solution and others)
- provide a holistic approach, adapting their interventions and delivery model through working with key stakeholders to identify the client's needs.

Noise Solution pairs marginalised people with professional musicians, who deliver one-to-one tutoring initially at home, then at commercial studios, enabling clients to create music, record what they have created and then share the music that is authentic to them. During the tutoring sessions (typically over a 10-week period, 2 hours each), Noise Solution captures what is created and the reactions to success using a blogging platform to create a positive digital narrative, using video reflections, photos, quotes and music. Participants' blogs are co-created with family and

⁵ Dean et al., (2015). Power of Equality 2, p.14. Available: http://network.youthmusic.org.uk/learning/research/power-equality-2-final-evaluation-youth-musics-musical-inclusion-programme-2012-20. Last accessed 15/02/16.



Wk 6 Sessions move to a commercial recording studio Wk 5 Progression route is identified and discussed with Wk 6 Wk7 family and professionals Wk 5 Wk8 Wk 4 tsaward **Participant** Arts Award Level 1 & 2 qualification can be evidenced via the blog The initial sessions are outreach, with sessions held at the participants home Wk 2 Benchmark and Key follow up Family Worker A synopsis of assessments Weekly session reports are taken in Wk impacts is fed emailed to Key Worker back to the 1 and Wk 1 0 A weekly Blog is shared, via email, referrer with family and professionals. Wk1

professionals, all of whom are encouraged to co-create the narrative by commenting on the blog.

Figure 1. Noise Solution's work

Commissioned by mental health organisations, education organisations and other statutory organisations, Noise Solution has organically established a reputation across the county of Suffolk and beyond of delivering high quality outreach work that works with people that statutory organisations feel they cannot engage with. Among the 40 organisations which have commissioned Noise Solution's work between 2009 to 2015, 92% have re-commissioned. The high re-commissioning rate shows how commissioners value the work of Noise Solution.

"We have seen an incredible turn around in many of these service users. Working with Noise Solution is really positive and recovery-focussed, and instils real hope in them while helping channel their emotions. Encouraging service users to engage in this way can stop people from spiralling into crisis, while reading their blogs can also help us understand the way they are feeling, in turn helping inform our care plans. In other cases, attending sessions with Noise Solution has helped people to recover faster, in turn allowing us to discharge them from our care." - Mike Seaman, Acute Service Manager from Norfolk and Suffolk Mental Health Trust

Theory of Change

The diagram below summarises Noise Solution's Theory of Change:



Activities	Outputs	Outcomes	Impact
Conducting needs assessment Running first 5 sessions at client's home Running last 5 sessions at studio Client music-making and recording Client blogging with help from tutor and contribution from families and professionals Identifying client progression routes Tutor reporting weekly	1.Client needs assessment 2.Progression route for client 3.Client blog 4.Client music 5.Weekly reports	Programme: Participants gain confidence Participants articulate feelings Participants self-reflect Participants improve decision-making ability Participants learn in a safe, non-hierarchial environment Participants have an "education" experience that removes testing Participants have new avenues of communicating with parents and support workers Families have positive angle to engage with Participants Participants gain new interests Participants get out of negative routines/patterns	Unlock confidence and self- belief in participants Participants are re- engaged in positive activities

Figure 2. Noise Solution's Theory of Change.

Noise Solution's theory of individual transformation includes two important tenets. First, that young people can develop new positive identities around learning and work (a process sometimes described as resignification) through experiencing success and enjoyment in music-based learning. Second, that by documenting this new experience and sharing it with significant people in their life through an interactive blog, key relationships are re-framed in ways that are likely to support continuing transformation. These effects combine to make possible a third area of change, which is the integration of young people into the communities and social settings in which they need to be able to live, learn and work successfully.

The Context

It is well-established that disengagement from education is associated with a range of negative outcomes, impacting on both the individual and on society:

Much of the research suggests that marginalisation in education has negative long-term consequences for young people in terms of social engagement in the wider world, academic attainment, emotional development, and future employment.⁶

It is also understood that mental health and wellbeing influences young people's engagement with and benefit from educational opportunities:

- Pupils with better health and wellbeing are likely to achieve better academically.
- Effective social and emotional competencies are associated with greater health and wellbeing, and better achievement.⁷

⁶ Tawell, A et al (2015). Being Other: The Effectiveness of Arts Based Approaches in Engaging with Disaffected Young People, p.4. University of Oxford, Department of Education.

⁷ Brooks, F. (2014). The link between pupil health and wellbeing and attainment, p.4. Public Health England.



Resignification and growth mindset

Enabling young people with complex needs to re-engage in positive activities around learning and work can be supported through a process of resignification, which involves the development of new and positive identities as a consequence of relationships and experiences which undermine the pupil's original negative view of self, by revealing evidence of desirable, positive qualities.

Interventions such as those offered by Noise Solution create non-judgmental spaces for young people to trial a new identity that is grounded in the actualisation of their attributes and capabilities. An important dimension of these programmes is that young people are able to escape the identities or 'types' imposed on them in school or other settings and create room for a new, positive self to emerge.

Instead of labels such as being 'troubled' or 'at risk of failure' the projects allowed young people to become a success in a completely different role: a photographer, a songwriter or an artist. This involved a process of 'resignification' where this success enabled them to reevaluate and alter their participation and engagement in society⁸.

Many of the methods and principles identified by Tawell et al (2015) as being present in projects that make possible resignification, are key features of the Noise Solution model:

- Young people are able to experience success, possibly for the first time in a learning context, and receive affirmation and positive feedback from their tutors and those important to them.
 The resulting positive self-attributions allow a sense of competence and capability to replace old feelings of inadequacy and futility.
- Young people are able to start building concrete skills, creating new areas of capacity and proficiency. As their sense of competence grows, so their aspirations are raised.
- Young people have the opportunity to develop a trusting, respectful relationship with an adult, who is not in a conventional 'authority' role. This allows other relationships (for example, with parents and teachers) to be re-cast, providing young people with a set of tools and experiences for positive social interactions.
- Young people are able to learn in a safe and supported environment. This enables them to take risks and, in turn, build resilience to failure.
 - A welcoming and safe environment is a social space in which young people have freedom to be themselves, express their own creativity, voice their opinions in decision-making processes, try out new skills and roles, rise to challenges, and have fun in the process. (Jennings et al 2006, p.36)
- Young people can exercise a sense of control and agency in how the programme is implemented, shaping their creative pathway and experiencing a learning process that responds to their needs.

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⁸ Tawell, A. et al (2015), p.37



Environments conducive to Critical Youth Empowerment are those in which youth have a sense of ownership and yet are challenged and supported to move beyond their usual comfort zone; such environments are co-created by youth and adults. (Jennings et al 2006, p.41)

- Young people have opportunities to reflect on their progress and behaviours through blogging, and to identify and internalise those learning behaviours that succeed in creating the outcomes they value. This in turn motivates them to repeat their 'success behaviours'.
- Interactive blogs also enable the transformation process to be experienced as a shared endeavour, reducing a young person's sense of isolation. The co-creation process allows the young person's close circle to reflect back new perceptions of their identity and capability.
- Young people develop the 'self-protective individual behaviours' (self-control, perseverance, healthy personal choices) and 'other-protective socially responsible behaviours' (empathy, respect, negotiation, collaboration)⁹ that have relevance and value in all life domains, including formal education.
- Young people can use the creative process as a means of exploring and making sense of their life experiences and complex emotions.

In these ways, the Noise Solution intervention is as much about the non-cognitive skills that it fosters, as the creative outcomes that it makes possible:

The term 'non-cognitive skills' refers to a set of attitudes, behaviours, and strategies that are thought to underpin success in school and at work, such as motivation, perseverance, and self-control. [...] Non-cognitive skills are increasingly considered to be as important as – or even more important than – cognitive skills or IQ in determining academic and employment outcomes¹⁰.

Public Health England¹¹ find evidence of a number of specific social and emotional competences that are a more significant determinant of academic attainment than IQ:

- pupils who are confident about their learning and who have a 'growth mindset' (they believe their most basic abilities can be developed through dedication and hard work) persist when faced with challenges
- pupils who can set goals, manage stress and organise their school work achieve higher grades
- pupils who use problem-solving skills to overcome obstacles do better academically

⁹ Jennings, L.B. et al (2006). Toward a Critical Social Theory of Youth Empowerment. Journal of Community Practice. Vol. 14, No. 1/2, pp. 38. The Haworth Press.

¹⁰ Utman L. and SChoon I. (2013) The impact of non-cognitive skills on outcomes for young people, p.3. Institute of Education.

¹¹ Brooks, F. (2014). The link between pupil health and wellbeing and attainment, p.6. Public Health England.



Recent guidance from the DfE¹² to schools advises that key protective factors for young people's mental health include:

- Good communication skills, sociability
- Being a planner and having a belief in control
- Problem solving skills and a positive attitude
- Experiences of success and achievement
- Capacity to reflect

These broader skills have a crucial interface with the notion of a growth mindset. It is increasingly understood that a growth mindset can help to transform young people's beliefs about their ability. A growth mindset sees the process of learning as a never-ending journey of unleashing potential. It therefore encourages young people to understand progress and achievement as things that result from practice and application rather than from a pre-determined quantum of ability (a fixed mindset). It also values the process of learning over the outputs of learning. As a result, young people become less dependent on other people's validations and better equipped to take on challenges and respond constructively to failure, as supported by research¹³.

There is growing evidence to suggest that a growth mindset serves as a protective factor that may promote resiliency, which sustains motivate and reduces the negative effects of adversity, failure, and stressful life events. [...]

Because it is possible to influence young people's self-theories, it is also possible for educators to intervene in order to optimize the learning potential of students.

Arts-based interventions that value outputs that cannot be understood in terms of 'correct' or 'incorrect' have a particularly important role to play in nurturing a growth mindset among vulnerable young people.

The creative arts can offer some young people who are perhaps most at risk of becoming disaffected a powerful set of tools for creating contexts that may provide them with the opportunity to re-negotiate identities and hence re-engage with school¹⁴.

¹² Department for Education (2016). Mental health and behaviour in schools: Departmental advice for school staff.

¹³ O'Neill, S. (2011). Developing a young musician's growth mindset: the role of motivation, self-theories and resiliency. In Music and the Mind (I.Deliege and J.Davidson Eds). OUP.

¹⁴ Tawell, A et al (2015). Being Other: The Effectiveness of Arts Based Approaches in Engaging with Disaffected Young People, p.4. University of Oxford, Department of Education.





Approach

Methodology of Impact Assessment

This evaluation aims to understand the contribution of Noise Solution to the outcomes of participants engaged in the programme, and their families and support workers. While Noise Solution has undertaken its impact reporting for the past eight years since its inception, this year's evaluation was designed and conducted by The Social Investment Consultancy (TSIC) as an external evaluation and validation tool, funded by the Cabinet Office's Impact Readiness Grant.

This evaluation included:

- Surveys from learners: 34 completed Start, Mid and End questionnaires. 11% of students have not completed the surveys and hence they were not included in the sample size.
- **Blogs:** Three randomly selected blogs were chosen out of the sample size of 200 plus. Each blog contains on average 70 blog posts.
- Interviews: A 'data corpus' of nine interviewees, fulfilling stakeholder roles of participant, family and professional roles (one each per blog) were identified. Each was around an hour long, conducted by Simon Glenister, Director of Noise Solution, as part of an independent post grad research project (University of Cambridge).

Surveys

The surveys were redesigned in 2016 based on the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS), which is widely used throughout the UK and beyond by NHS commissioners, scientists and psychologists. WEMWBS is a 14 item scale with 5 response categories, summed to provide a single score ranging from 14-70. The items are all worded positively and cover both feeling and functioning aspects of mental wellbeing. WEMWBS was developed by researchers at the Universities of Warwick and Edinburgh, with funding provided by NHS Health Scotland, to enable the measurement of mental well-being, published and validated in 2006. While WEMWBS was originally designed for adults, it has also been validated for use by people aged 13 or above, and it is therefore suitable for Noise Solution's target beneficiaries 15.WEMWBS is used as an indicator in the Public Health Outcomes Framework, and is commonly adopted by Clinical Commissioning Groups (CCGs).

It was a conscious decision by Noise Solution and the Board, given their years of experience working directly with commissioners; this decision was validated by interviews with commissioners and desk research. There are three main reasons why WEMWBS emerges as the most appropriate framework for Noise Solution:

¹⁵ BMC Public Health 2011, Warwick-Edinburgh Mental Well-being Scale (WEMWBS): Validated for teenage school students in England and Scotland. A mixed methods assessment



- Alignment with Noise Solution's philosophy: All the statements of WEMWBS are
 positively worded, and this fits very well with Noise Solution's philosophy focusing on the
 positive instead of negative aspects of a person's life.
- 2. Similarities with Noise Solution's historical impact measurement: The previous surveys at Noise Solution were already capturing outcomes that correspond to eight out of 14 statements in WEMWBS; also Noise Solution was using a 5-point scale like WEMWBS'. This allows for continuity in data collection and impact reporting.
- 3. Statistically robust: it has been academically validated as having good psychometric properties, good validity and reliability with the ability to distinguish between population groups. It has been widely used in population surveys in the UK and elsewhere, including in the Health Survey for England in 2011, hence it is possible to establish benchmarking data for Noise Solution.

Apart from WEMWBS, the surveys also use a measure known as Percentage of Potential Increase (POPI) in reporting impact. This system allows us to provide percentage measurements of participants, using self reflected assessments, of confidence and self determination. Percentages provide an easily understood way of reflecting complicated feelings. It is calculated by taking the initial learner score (e.g. 2) on a Likert scale, calculating the gap to the maximum score (5), then comparing the actual increase versus the potential increase and converting this to a percentage.

Blogs

Web-logs, or 'blogs', are a form of internet communication that allow authors to maintain ongoing, reverse-chronological entries for an audience. Noise Solution utilises Tumblr, a blogging platform as a means for which programme participants can document their experiences of Noise Solution and share this amongst their network. The blogs provide rich data about behaviour that would not otherwise be easily observed, and can help to inform the evaluation of the programme.

In order for Noise Solution to utilise this data, the text has been coded to identify a series of themes for subsequent processing and analysis. The coded qualitative data can be referenced against demographic data to understand who is using the programme and whether there are trends, for example across age groups, gender or ethnicity. The data can be used in conjunction with other monitoring tools to help identify impacts of the programme.

The method of analysis used followed a grounded theory approach, which is a systematic qualitative approach to data collection and analysis, that is concerned with generating theory. Grounded theory allows for a large amount of information to be examined and compiled into discrete categories based on themes that are found within the data. This process is a structured and highly iterative method of data collection and analysis. It is based on constant comparison between already coded and new data samples to allow for the emergence of new themes as the data set grows.

The first stage of analysis used is vivo coding (using a word or short phrase taken from the data and assigning a label). Common concepts were then grouped together based on category construction until no new themes emerged and a tag was created. The text was then categorised



using the Coding Analysis Toolkit (CAT) - a free, open source, cloud computing platform. The blog posts were converted to plain text files and uploaded onto the system, enabling the auto-loading of discrete items of codeable units. Generally the programme understands a new codeable unit as a new blog post. The user can then type the tag or theme in the "User Defined Code" field as they review the data.

Interviews

Interview questions were designed derived from thematic literature review within the three core themes of Noise Solution's work: practice (music practice), blogging and transformational engagement. The interviews were preceded by pre-interviews aiming to establish rapport. Instead of bringing in external evaluators, the interviewers were the tutors themselves so that the atmosphere of trust will not be broken. The interview questions, listed in Appendix 1, were broad so that they form a guide to the discussion but allow flexibility for the interviewer and the interviewee to pursue areas of interest should they arise.

Data Collection Process

The diagram summarises the data collection process as described from the perspective of the participants, given Noise Solution's learner-centred approach.

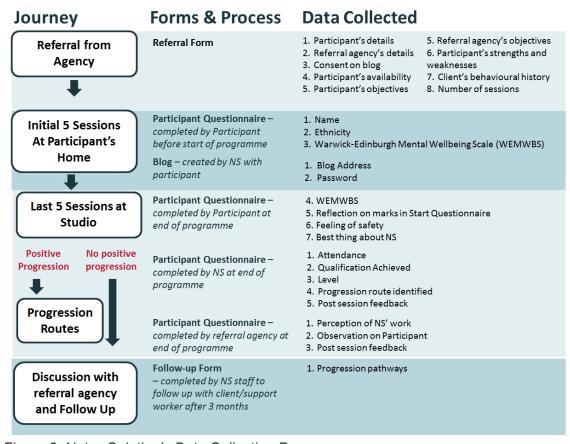


Figure 3. Noise Solution's Data Collection Process.



Ethics

As an organisation that prides itself on the trust it builds with vulnerable populations, Noise Solution holds research ethics in high regard. First, Noise Solution's participants and referral agencies have given written and verbal consent for any data to be collected, as part of the participation process. Noise Solution retains full control over content with participants and family having the final say on what is and is not published. Passwords are also created for the blogs which are hosted on Tumblr in order that they are only shared within the trusted community of the participants. Unless otherwise requested Noise Solution blogs are hidden behind password firewalls and not openly available to the public.

Second, the data collection tools were designed with reference to the British Educational Research Association's Ethical Guidelines on education research (BERA, 2011), and to the guidance of Warwick University in using WEMWBS. This resulted in recorded consent within the interview being requested prior to commencing, with particular emphasis made at the start of each interview of the absolute control of content that participants held. Moreover, we make it clear that the evaluation is confidential and the decision to participate or not does not affect the service offered.

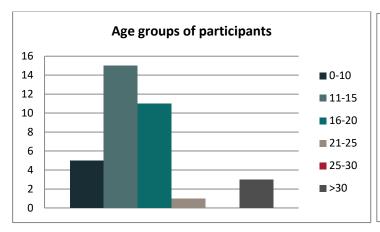
Third, the tutors are the ones collecting data from the participants, instead of external evaluators. This is because Noise Solution treasures the rapport between the tutors and the participants, who will understand the best what the limits to evaluation are.



Impact

Overview

Noise Solution works with 80 people per year; and in 2016, 35 participants have joined so far. 89% of participants have successfully completed among the hardest to reach young people. 30% of the sessions booked fall under education, 42% mental health and 27% under offending/youth services, and the rest are an overlap of these issue areas. Noise Solution's target group is young people Not in Education, Employment or Training (NEET), those involved with mental health services, offending services or education (schools/colleges), across Suffolk. One of Noise Solution's recent projects is commissioned by the Child Adolescent Mental Health Services (CAMHS) team in Suffolk referring clients they identified as not engaging, with issues around severe anxiety and clinical depression. The core client group tends to be 11 to 20 years old. The graphs below summarise the demographic information of the participants:



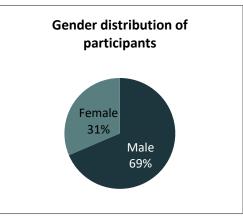


Figure 4. Age groups of participants.

Figure 5. Gender distribution of participants.

As a small organisation, Noise Solution has designated five Key Performance Indicators that summarise its impact on the participants and the wider community. They are measured based on data from the surveys, augmented with qualitative data from blogs and interviews.



Noise Solution's KPIs

- KPI 1: Aggregate achievement
- KPI 2: Increase in confidence
- KPI 3: Increase in self-determination
- KPI 4: Achieve qualifications
- KPI 5: Progression into confirmed/planned profession routes

KPI 1: Aggregate Achievement

KPI 1 looks at the overall wellbeing of the participants and evaluates the wellbeing differences of the participants prior to joining the programme, and upon completion. Based on the workbook published by ChaMPs¹⁶ and after obtaining approval from the University of Warwick, the WEMWBS scores from 34 valid responses were analysed. The sample size of 34 allows for statistical significance, therefore a paired sample t-test, a statistical technique that is used to compare two population means commonly used in 'before-after' studies. By using the paired sample t-test, one can statistically conclude whether or not the Noise Solution programme has improved the wellbeing of the participants.

After running a sample t-test on Excel, the results show that one can statistically conclude that Noise Solution programme has improved the wellbeing of the participants. The P value is 0.0004, much lower than what researchers would conclude as statistically highly significant (P < 0.001). The differences between the participants' WEMWBS scores before and after the Noise Solution programme are statistically significant. This means that the result of improved wellbeing of the participants is unlikely due to chance, but attributed to the Noise Solution programme. Given the small sample sizes (fewer than 50 users), it is typically hard to find statistical significance; but when we do find statistical significance with small sample sizes, the differences tend to be meaningful enough to warrant action¹⁷. The table below shows the full results of the sample t-test.

t-Test: Paired Two Sample for Means	Variable 1 (Pre)	Variable 2 (Post)	Explanation
Mean	41.44117647	48.73529412	Averages for the two groups
Variance	150.4358289	239.3520499	Variance is the standard deviation (SD) squared
Observations	34	34	This is how many people there was before and after data for

¹⁶ ChaMPs (2013), "Using and analysing WEMWBS to measure the impact of interventions in improving mental wellbeing", http://www.champspublichealth.com/writedir/c145WEMWBS%20workshop%20workbook%20FINAL.pdf

¹⁷ Sauro, J (2014), "What Does Statistically Significant Mean?" from http://www.measuringu.com/blog/statistically-significant.php



Pearson Correlation	0.715589462	This is the correlation between people's before and after scores (it will be between 0 and 1 where 1 is a perfect correlation, 0 is no correlation)
P(T<=t) two-tail	0.000431858	This is the significance level. Anything less than 0.05 can be said to be significant at the 95% level.

Out of the sample size of 34, there are 25 people with a meaningful positive change – 76% of participants. According to the ChaMPs¹⁸, over a 3-point increase would constitute a meaningful positive change. The average point increase is 6.8 over the 10-week period, and the graph below shows the change in overall WEMWBS scores.



Figure 6. Changes in overall WEMWBS scores among participants

Noise Solution works with vulnerable populations that experience a low level of wellbeing 19 before joining the programme, as they are often referred to by mental health services, youth offending services and schools which see them disengaged from services. As shown by the graph below, none of the participants before joining experience a high level of wellbeing; however after the

¹⁹ According to ChaMPs, the categories for low, moderate and high levels of wellbeing are:

low wellbeing: where total score is less than 42

moderate for 42-58

high for greater than 58.



programme, nearly a third of the participants experience a high level of wellbeing. The percentage of participants experiencing a low level of wellbeing has decreased to less than 20%.

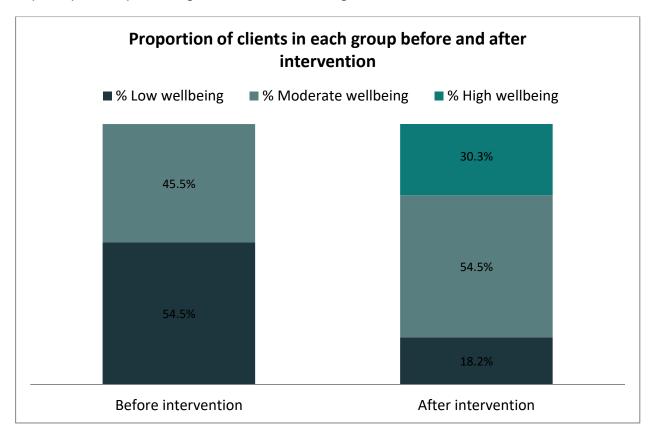


Figure 7. Categorisation of wellbeing before and after Noise Solution

Based on the Health England Survey 2010, when WEMWBS was last surveyed, the average (mean) WEMWBS is 51²⁰ and the scores do not vary greatly between age groups. Benchmarking the WEMWBS scores against national averages show that 1) Noise Solution's participants have low wellbeing (average score of 41.4, 9.6 points lower than the national average); and 2) After the intervention, participants' wellbeing level is close to the national average (average score of 48.7, only 2.3 points lower than the national average).

KPI 2: Increase in confidence

Through making music that participants can feel proud of, Noise Solution's clients experience a huge increase in confidence and self-esteem. One-to-one provision is an important part of Noise Solution's delivery, as many of the leaners need a lot of support to build trust with advisers and

²⁰ Department of Health (2013), "No Health Without Mental Health – Mental Health Dashboard" (https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/265388/Mental_Health_Dashboard.pdf) and NHS (2010), "Health Survey for England 2010" (http://digital.nhs.uk/catalogue/PUB03023/heal-surv-eng-2010-resp-heal-summ-rep.pdf)



help get their confidence up again. 50% of participants register an increase in confidence and participants experience an average increase of 30% in confidence. Developing confidence and self-esteem made up 15% of the blog content available. The remarkable increase in confidence is echoed by their family members or carers, with 85% noting in the end questionnaire that the participant was more confident than when they started with Noise Solution.

There is rich qualitative data detailing how participants experience an increase in confidence, through interviews.

Professional

"In terms of her confidence, I would say it improved quite a lot... I think prior to that, she'd been trying to push herself to do loads of stuff that felt really difficult and painful and unpleasant and I think she's better at saying: 'I can't do this' or 'I can do this' or 'I'd like to do that'. From a confidence point of view, I would say it improved quite a lot, from probably 2 to 9 or something."

Family Member

"She can smile and look beautiful, she can have confidence and she can achieve. So I would want to show them that, so that they would be proud of her. I wanted to show people that you just see this D, and you just hear the shouting and the screaming, but this is what else D can do."

Participant

"...Seeing the blog made me realize I can do things. And if I have a go at it, then that will build up the confidence to make me be able to do it more. Maybe, attempt to do other things, as well."

KPI 3: Increase in self-determination

Young people learn how to make music in a style they're interested in (e.g. hip hop, grime, dubstep, or any other genre). Therefore, they gain a sense of self-determination and an understanding that they can make their own choices and decisions about their lives. This KPI is based on participants' answers to three questions that are part of WEMWBS: I've been thinking clearly, I've been able to make up my own mind about things, I've been dealing with problems well. 54% of participants registered an increase in self-determination, with 29% of average increase.

One learner described how this change occurred through joining Noise Solution in an interview:

"Well, if you're feeling negative you sort of get stuck in this loophole of negative stuff and people compliment you and you go "pff, you're lying" you just brush it off. So sometimes you just need to go "actually that went really, really well and everything else might have gone completely wrong but that one thing went really well. And it sort of breaks you out of that cycle."

This is echoed by a family member's comment in the end questionnaire:

"Lets the individual direct their own creative path and grow in a way that suits them. It's not 'prescribed' and thus lets people find their own voice."



KPI 4: Achieve qualifications

In 2016, 69% of all participants intended to take the Arts Awards, 88% of whom have succeeded in doing so. Arts Awards, managed by Trinity College London, are a range of unique qualifications that supports anyone aged up to 25 to grow as artists and arts leaders. There are five different levels: Discover, Explore, Bronze, Silver and Gold; and Noise Solution offers the opportunity for participants to take part in Arts Awards in Bronze, Silver or Gold. Since inception, 65 participants have achieved qualifications, the majority of whom secured the Arts Awards in Bronze. Each young person's portfolio is in the form of their own Arts Award blog. For Noise Solution, the impact of achieving an accredited qualification that is nationally recognised is important for young people who have previously been told they are failing.

The focus of the Arts Awards is to help participants excel in something that they are interested in, and their family members and carers have also noted the change. As a family member noted, "A engages well with 1-2-1. With Noise Solution and with A's creative side he has shown how he can escape and focus in a positive light. A has a very high interest in IT and has loved every minute of Noise Solution." Another family member noted, "B actually attending and came out buzzing every week. Getting her there was sometimes difficult as she struggles to get out of bed but when she comes out she is buzzing, excited and happy. It's important that she is doing something that is her interest which makes a big difference."



How a Noise Solution learner secures the Arts Award

- Explore the arts as a participant: Young people work with Noise Solution's advisers to learn how to create music in the style they are interested in (e.g. hip hop, grime, dubstep, or anything else). Extracts from sessions and recordings made are uploaded onto the blog, along with reflections at the end of each session about what they enjoyed and how they are progressing.
- Explore the arts as an audience member: Often the young people's anxiety issues mean it is not possible for them to attend arts events, so they compare and contrast YouTube videos of performances by different artists. They post their reviews and comparisons on their blog.
- **Arts inspiration:** Young people listen to music and use the internet to research their arts inspiration which is uploaded onto the blog.
- Arts skills share: Young people pass on a skill that they have learnt through their Part A activity, such as using REAPER (music software). Different blog posts document the planning, delivering and evaluation of the skills share.

"I've learnt to make music which is something I can now do. It's given me confidence to interact with new things I've not done before - experience something some other people can't. It's opened up pathways to what I maybe can do when I'm older. Things look brighter than they did." Bronze Arts Award participant.



KPI 5: Progression into confirmed/planned profession routes

For participants who intend to take the Arts Award, the qualifications often give them their first successful educational experience and reframes their emotional response to being in education as one of success. Even for those who do not intend to take the Arts Awards, the Noise Solution experience gave them something they feel interested in. Surveys show that 62% of participants have experienced an increase in feeling interested about new things - an average increase of 40%. Participants also are engaged and inspired by the programme, which covers 18% of the blog content. This is echoed by their family members or carers, with 81% noting in the end questionnaire that the participant was more engaged in activities and learning than when they started with Noise Solution.

Noise Solution's tutors also actively seek out for progression routes for the participants. 73% of participants have appropriate progression identified after Noise Solution – 50% of these progression routes are confirmed, 50% of these are planned.



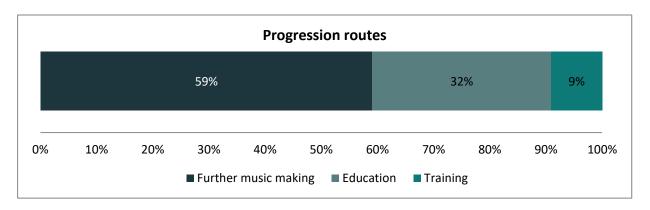


Figure 8. Categorisation of progression routes among Noise Solution's participants

Blogs Analysis

All the KPIs selected above are also reinforced by analysing the blogs which articulate the depth of change that participants go through over the ten-week period. Six main themes emerged from the blogs: learning/education, aspiration, developing confidence/self-esteem, engaged/inspired, concern and connection with others. These relate to the above KPIs designated.

Tag	Example words	Description
Aspiration	Career/future plans/ courses at college/ possibilities/ applying for courses/possible courses/start college and see where it takes me	Participant talks about plans for the future. Participant has an understanding of there being possibilities beyond the programme.
Learning/ Education	Producing/Creating/learnt/ knowledge/construct/ positive progress/analyse	Participant talks about a process of knowledge production or demonstrates learning through sharing work in the text.
Developing Confidence/ Self-esteem	feel good and confident/ independently and on my own/ improvising/confidence/ personal preference/I can teach/ feel at peace/ soul cleansing	Participant writes about the belief that they have in themselves. They use positive terminology to describe themselves or their wider situation.
Engaged/ Inspired	feeling excited/inspire/have a fun time/Hobby/10 out of 10/ beyond out of this world/ there should be more - it's fun	Participant demonstrates enjoyment in the programme. They demonstrate feeling excited and enjoying what they are doing.



Tag	Example words	Description
Concern	this is going to take longer than expected/student unsure/ not fussed	Participant is unsure of a situation. Generally negative comments that may demonstrate being disengaged or anxious.
Connecting with others	people said how good it was/catch up with/ he made us feel comfortable	Participants talks about meeting with and engaging with others. Participants talks about connections outside of the programme.
		NB whilst some blogs have multiple authors, the content is coded based on words and phrases. Therefore family or friend who writes a post may not automatically fit into this category.

Upon reviewing three randomly selected blogs, these are the key points:

- At 59%, the highest proportion of content is concerned with discussion around learning or education.
- Developing confidence and selfesteem, and being engaged and inspired by the programme make up a third of the content available.
- Only a small proportion of the data is concerned with aspirations, uncertainty or connections with others.

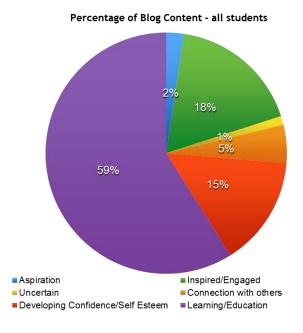


Figure 9. Analysis of blog content



Conclusion

Since Noise Solution's inception in 2009, impact evaluation has been at the core of its work. They have been measuring their impact through the blogs that amass quality qualitative evidence, as well as through pre- and post-surveys that measure the percentage increase in the participants' levels of enjoyment, engagement, confidence and onward transition. The surveys rely on self-reporting from participants, triangulated with additional comments by referral agency and the tutors. This is the second report authored by an external consultancy to validate Noise Solution's work, and has come in a period of scaling for the organisation.

In conclusion, Noise Solution's impact on the participants has been overall very successful. Compelling evidence – both qualitative and quantitative – show that Noise Solution's 10-week intervention using the innovative medium of music, have led to increased confidence, self-determination and overall wellbeing among the hardest to reach populations, as well as leading to concrete qualifications and pathways.

Limitations

As a small organisation with only one full-time staff member, Noise Solution also shows how small organisations can incorporate evaluation in its day-to-day work, by focusing on key indicators and the use of cloud-based platforms and social media which allow multiple points of access. However, its impact evaluation is not without challenges. The biggest challenge is that the completion rate is 89% - and the results in this report are not able to take into account the impact on the non-completers. There is also little information as to why they drop out, although anecdotes are collected from referrers and in some cases, participants go through a hiatus and then re-join the programme.

Noise Solution also lacks limited follow-up data from graduates, due to staff capacity. As part of this evaluation process, follow-up questionnaires have been drafted to send to graduates three months after the end of the programme. Noise Solution organised an event in late 2015 with 35-40 people (past learners and families) together with a film crew, and the results can be found on Noise Solution's website: www.noisesolution.org.

Moving Forward

With a recent grant from the Arts Council, Noise Solution's expansion will encompass East of England and eventually nationwide. Noise Solution also aims to mainstream their approach as part of health, social care and education commissioning; and to improve the research and evidence base of this sector as to what works.

If you have any suggestions on this report or on Noise Solution's work more generally, please contact Simon Glenister at info@noisesolution.org.