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Cirkidz Youth Circus Skills Training SROI Report

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Executive Summary

The purpose of this study was to forecast the Social Return on Investment (SROI) associated with children's (8-14yrs) participation in Cirkidz circus-arts training on their mental health and wellbeing.

The early and middle years of childhood are recognised as being pivotal in ensuring good cognitive development throughout life, resulting in healthier societies. Healthier societies can mean a reduction in lifestyle related illness and therefore potentially reduce reliance on healthcare resources. Furthermore, healthier societies have been shown to be more economically productive.

The SROI analysis found that for every one dollar invested, \$7 of social return may be generated due to participation in Cirkidz Tweenz circus training.

Improvement occurred across four key areas concerning children's mental health and wellbeing. These four key areas were identified as: Stress relief, Self-esteem, Confidence and Socialisation.

The findings here indicate the value of investment in the performing arts, highlighting the importance the circus-arts has in helping improve children's mental health.

Associated impacts to improving children's self-esteem, confidence along with relieving stress are identified as decreasing the potential costs of treating associated illnesses: such as depression and anxiety.

Improvements in socialisation have been linked to costs associated to social dysfunction: such as crime victimization and incarceration.

The relative significance of the ratio calculated in this SROI of the Cirkidz Tweenz program has been provided through a review of various international SROI reports. Based on this analysis, the outcome ratio in this report is comparatively higher than findings from other similar SROI studies.

1 Introduction

This section provides some background to the Cirkidz Youth Circus Skills Training program, a brief overview of the SROI methodology and the approach taken to conduct this evaluation.

1.1 Background

This report has been produced in association with Cirkidz Circus School and The University of South Australia. This is the first time information regarding the SROI of circus for children, has been captured in Australia. Cirkidz circus school is a not-for-profit organisation that has been operating in Adelaide, South Australia for over 30 years. Cirkidz is embedded in its supportive community and offers circus-arts training to people from a diverse range of ages, skills and backgrounds. The organisation has worked in conjunction with government departments, other not-for-profits and educational institutions to continue to provide quality circus-arts training and expand their evidence base regarding the positive benefits of circus-arts training.

The purpose of this analysis is to establish the SROI associated with the impact that participation in Cirkidz circus-arts training has on children's health and wellbeing. Children were surveyed and participated in focus group interviews, prior to and after, six months of Cirkidz circus training. This analysis focuses on the mental and social benefits arising from circus participation identified by key stakeholders.

1.2 Art & Health

Art is argued as a resource for creating and maintaining good health. Creative activities such as arts-based programs and interventions, can positively impact young people's mental wellbeing¹. Furthermore, active engagement in the performing arts may assist in increasing resilience and coping ability, self-confidence, team-work skills and improvement in levels of physical activity^{2,3,4,5,6,7}. Participation and engagement across all arts can be defined as active (physical involvement, such as making art) and receptive (non-physical involvement, such as viewing art)⁸.

Research evaluating the impact of the circus-arts on people's health is minimal. It is accepted that the circus arts incorporate aspects of dance and drama, with unique circus-specific activities³. It has been established previously that dance and drama have beneficial impacts in improving people's health and wellbeing. Some evaluations have been undertaken regarding the SROI of the arts more broadly showing high levels of social return. However, these reports are without specific focus on any particular art form. Therefore, through this report we seek to add evidence to evaluating the impact of circus arts and the social value it can create for those who participate.

1.3 Social Return on Investment

The SROI framework has often been used by social enterprise in the not-for-profit sector and is beginning to be facilitated in other fields^{9,10}. Derived from a cost-benefit analysis (CBA), SROI is an economic measurement tool used to apply a dollar value to socially situated outcomes^{11,12}.

Often linked to performance management and improvements in service delivery, SROI is argued to provide evidence of socially innovative practices^{13,14,15}. The purpose is to measure a double or triple bottom line, which can be described as accounting for multiple outcomes related to monetary, social and environmental values¹⁶. Social indicators are established by aligning meaningful outcomes with measurable costs.

Credited with recent development in the SROI framework, Nicholls¹⁷ indicates SROI consists of two distinct aims. SROI is either evaluative and retrospectively measures actual outcomes, or forecast in prospectively predicting the impacts of an activity. This is a forecast SROI as this specific investigation is the first of its kind conducted at Cirkidz Circus School.

SROI analyses are argued to aide in determining the broad impact and outcomes of programs and activities. Linked to economic production, accurate representation of the state of a nation has been argued to require inclusion of broader parameters of societal measurement than are currently being conducted¹⁸. For example, some economists¹⁹ argue for a change in emphasis from traditional measures of national economic indicators such as gross domestic product (GDP). They stress the need to include measures of people's wellbeing alongside typical indicators. While this article is neither experimental nor aiming to quantify intervention outcomes, it provides balanced narrative theory of health economics and future directions. SROI may meet this developing requirement of measuring health and wellbeing and informing economic indicators. This is because like measurements of health and wellbeing, the SROI framework aims to capture social and environmental influences on peoples' lives. Therefore, in providing a dollar value to broad social outcomes impacted by changes in health, SROI can inform broader economic measures, improving accuracy of the true state of society. This SROI may assist policy makers in allocation of funding for activities aimed at improving child health and wellbeing.

Circus-arts may assist in creating positive outcomes for people and society. In providing monetized returns of circus-arts' social impact, this SROI analysis shows the cost savings that investment in the circus-arts can have for society.

1.4 Research Method and Data Analysis

This was a forecast SROI, aiming to prospectively predict the social impact of participation in Cirkidz circus training. A mixed method approach was used for this SROI analysis. Key stakeholders were children aged between 8-14years. Children were surveyed and participated in focus group interviews, prior to and after, six months of Cirkidz circus training.

The questionnaire used was the Kidscreen-27²⁰, an internationally validated, self-report measure across five domains of children's subjective thoughts on their health-related quality of life and wellbeing.

The Kidscreen-27 tool consists of 27 questions covering five HRQoL and wellbeing dimensions:

- Physical wellbeing,
- Psychological wellbeing,
- Autonomy and Parent relation,
- Social Support and Peers,
- School Environment.

The focus group interviews asked children their beliefs about how circus makes them feel and what they may get out of participating in Cirkidz circus training. Parents, Cirkidz circus trainers and circus artists were all consulted during development and throughout of the pre-post analysis. Children's beliefs remained central to accurately identify their health; hence children were the key stakeholders throughout the SROI investigation.

The collected questionnaire data was analysed using the Statistical Package for Social Sciences (SPSS). Results, while not significant, signified an increase across the five health and wellbeing domains. Thematic analysis was conducted on the focus group data using NVivo software, where four major themes emerged that corresponded to the questionnaire results. These four key areas are: stress relief, self-esteem, confidence and socialisation.

1.5 Sample

The age range of all participants was between 8-14 years, with an average age of ten years old. This age range is represented by Cirkidz circus schools Tweenz program. A majority of children reported a high social economic status (SES) according to postcode data. Where on average all participants come from areas in the top 30% of high SES in South Australia (decile average=7 adjusted for frequency, where 1 is lowest, 10 is highest).

The survey sample followed the same 23 participants' pre and post circus training: five children reported to have never participated in circus training before (22%). The average amount of time the remaining survey sample had participated in circus was 2.4 years (range of 1-5years). Eight children reported to participate in no other organised physical activity other than circus, outside of school (35%). The remaining children reported to participate in an average of 1.2 organised physical activities other than circus, outside of school (65%).

The focus groups included 54 respondents consisting of more females (74%) than males (26%).

1.6 Confidentiality

The information contained in the report is the property of Cirkidz and the University of South Australia, and may not be reproduced or transmitted in any form without their consent. The

University of South Australia may use information gathered for further research and education and is committed to do so whilst protecting the confidentiality of participants involved in the study. Outcomes of research efforts are usually reported in professional and academic forums. This research study received approval by the University of South Australia's Human Research Ethics Committee.

2 Stakeholders and Theory of Change

This section describes the stakeholders for whom social value is created over the six month period of Cirkidz circus training. Theory of change is discussed with identified changed, valued and described.

2.1 Stakeholders

The primary stakeholders of this SROI analysis were children who have participated in circus-training provided by Cirkidz Circus School. Initial discussions with secondary stakeholders were undertaken: this included Cirkidz general manager, the artistic director, circus trainers as well as children's parents. Initial discussions were undertaken to establish how they perceive the impact of circus-training for children. This assisted investigators with choice of measurement tools and scope of this forecast SROI analysis. While it is acknowledged that inclusion of information from this additional range of secondary stakeholders may be beneficial, the children are argued to be central to identifying if and how any change occurred. It is argued and supported that children in this study's age range are capable of accurately self-reporting on their own health and wellbeing²¹. As this is a forecast analysis, establishing the prospective of change occurring in the first instance, resulted in primary attention given to the primary stakeholder alone: children.

2.2 Theory of Change

SROI is based on a theory of change. We report here on the analysis of changes that occurred for children due to six months of participation in a circus-arts program. As this investigation was only short-term, we note that we can only presume the benefits of continued participation. However, long-term benefit of engagement in activity that supports physical and cognitive development for children has shown beneficial lasting outcomes in other studies²². We acknowledge that this current forecast SROI analysis may only be representative of change that can occur across this shorter time frame. Future investigations should consider the benefit of a longitudinal, evaluative SROI analysis.

This investigation identified change in a healthy population. While children were asked if they had any medical conditions, none were reported.

Results were drawn from both the questionnaire and focus group sessions with the children. Pairing of both varieties of information assists in ensuring triangulation and therefore, completeness of results.

The relevance of changes that were identified is broad. The early and middle years of childhood are recognised as being pivotal in ensuring good physical and cognitive development²². Healthier societies can mean a reduction in lifestyle related illness and therefore potentially reduce reliance on healthcare resources²³. Furthermore, societies with higher rates of health

and wellbeing have been shown to be more economically productive²⁴. Consequently identifying what actions and activities can assist in shaping good health and wellbeing for children, may support a variety of positive outcomes into the future.

2.3 Valuing Change

Data analysis showed positive impacts on children's mental health and socialisation. The changes were seen across four key areas: Stress Relief, Self-esteem, Confidence and Socialisation.

Survey and focus group results were compatible where the Kidscreen-27 questionnaire domains of 'psychological wellbeing' paired well with focus group themes related to mental health: stress relief, self-esteem and confidence. The Kidscreen-27 domain 'peers and social support' showed compatibility with the focus group theme of socialisation. Whilst other positive outcomes were identified, analysis conducted for this forecast SROI was based on triangulated and comparable results only.

The relative significance of these key areas is discussed below in relation to meaning and costs to the individual and society. Discussion here aims to highlight the importance each key area has for creating and maintaining the health and wellbeing of people and their community. While also signifying the negative outcomes that can result when these key areas of people's lives are neglected. All attempts to value notable changes identified during the investigation have been sourced by aligning change to verifiable and credible data sources.

3 Inputs, Outputs and Outcomes

This section briefly outlines the investments (inputs) which enabled the circus skill training sessions (outputs) to be conducted that led to the changes identified by stakeholders (outcomes).

3.1 Investments (inputs)

The cost of enrolment in the Cirkidz Tweenz program across a six month period was identified as \$632.50.

3.2 Activities (outputs)

Cirkidz circus school offers circus training alongside the primary and high-school teaching year. Classes are structured ensuring all classes experience the same components of circus skills. All Cirkidz circus trainers have themselves trained in circus at Cirkidz, allowing continuity and consistency of skills delivery.

Tweenz circus classes occur once per week for a six month period (referred to as a semester). Enrolment options are flexible, with typical enrolment being for a complete semester. The average size per Tweenz class is 15 students, with two trainers per class. All children are offered the opportunity to perform in a school-wide circus performance at the end of each semester.

3.3 Changes (outcomes)

The following changes were identified during data analysis. Changes have been allocated costings according to relevant, available evidence.

Mental Health Benefits

Data showed a clear benefit to participating children's mental health. Data from the Kidscreen-27 questionnaire showed children's mental health improved by 4.5% in the psychological wellbeing domain. Furthermore, focus group data analysis supported the survey results, with participants indicating circus helped alleviate stress, built self-esteem and confidence.

'For me circus helps not just physically but also mentally...you have to practice to succeed and do things the right way...because you have a growth mindset...I think circus helps and I really like circus, it makes me feel better'

The social benefits of having good mental health can be seen by looking at the social and individual burden of ill-health. The Australian Institute of Health and Welfare (AIHW)²⁵ estimates the cost of mental illness to society in 2013 as approximately \$3b, up from approximately \$2.2b in 2005. Global estimates of the financial/economic burden of depression

and anxiety suggest a large financial burden results from poor mental health^{26,27}. Such burden has been estimated through academic analysis of cost of illness and medical intervention cost-effectiveness studies. Improvements in mental health may mean reduced economic and health burden, allowing for investment of resources in supporting health-creating activities, where more sustainable economic gains may be made to benefit society.

In-depth analysis of both the survey and focus group feedback identified specific mental wellbeing benefits, these being Stress relief, Self-esteem and Confidence.

Stress Relief

Participation in Cirkidz circus training showed children found relief from life stressors, freedom, and happiness and saw improvements in their mental-wellbeing. For example, when asked how circus makes them feel, children reported:

‘Circus takes your mind off some things...sad things...Cirkidz is like a pick-up, it’s my weekly pick-up...It’s [circus] a time where you can have freedom...sometimes its sort of an escape’

Increased levels of stress have been associated with increased risk of physical and mental illness. Evidence suggests strong correlations with high stress levels and poor mental and physical health. Research has shown that ‘stressors proliferate over the life course and across generations, widening health gaps between advantaged and disadvantaged group members’²⁸ Providing children with the opportunity and space to find relief may assist in alleviating the negative impacts that can occur due to stress. Appendix 1 outlines the proxy costings for Stress Relief.

Self-esteem

Self-esteem is defined as how much we may value, approve or like ourselves and how we may perceive and act on ideas of self-deficiency²⁹. Self-esteem may be further defined as freedom from depressive concepts of the self at any given moment in time. Children reported that circus helped them feel better about themselves and improved their self-esteem. This is best captured through the following example from focus group interviews:

‘I think it improves my mood because when you’re doing a trick and you’ve done it right it just feels really good, I felt very good when I finally landed a front flip’

Evidence suggests that having good levels of self-esteem assists in coping when faced with difficult tasks³⁰ How well one copes and values their ability to succeed during difficulty can be safeguarded with good levels of self-esteem. Overall, positive self-esteem results in good health and wellbeing, while poor self-esteem is a risk factor contributing to negative life outcomes^{30,31}. Appendix 2 outlines the proxy costings for Self-esteem.

Confidence

Children reported gains in their self-confidence. The following excerpts from focus group interviews further highlight the benefits children found:

‘Success, it probably gives you a feeling of happiness, you’re proud of yourself’

‘You do sit down and watch something and then you get to try it out and it’s fun to learn all the little bits and try and get your hand in the right position and everything and then once you’ve accomplished it you get kind of a proudness because like woohoo I can do this!’

Confidence is defined as the level of belief one has in one’s self to succeed³². This concept while related to self-esteem, differs slightly. Where self-esteem may dictate how we perceive and deal with self-deficiency, having confidence is associated to how we may believe we are able to incorporate or overcome deficiency going forward. Appendix 3 outlines the proxy costings for Confidence.

Socialisation

Socialisation is defined as the process of learning how to mix socially with others and learning socially acceptable behaviours within a given culture³³. Children reported an increase in the Kidscreen-27 domain of social support and peers, of 3.65% between their pre and post measurements. Furthermore, pairing with survey results, focus group data revealed the positive outcomes of good socialisation the students believed was related to Cirkidz circus training, as captured in the following:

‘I bought a unicycle and I’m helping to teach others how to do it...It feels really good because I like watching people develop their skills, I like watching them come and be like ‘oh I don’t know’ and then get on the unicycle and get a feel for it and watching them learn and become better and better. ‘Sally’, she started off saying ‘oh you can ride a unicycle can you help me’, so now we are both at the same level’

Socialisation especially in the early years of life is argued as necessary for decreasing social dysfunction and crime in later years of life. Socialisation assists children to learn and practice empathy for others and can help them understand their own place in their world. There is evidence that suggests that low empathy is linked to bullying and bullying has an impact on health and wellbeing³⁴. Social dysfunction, leading to crime links to increases in costs of policing, court costs and imprisonment³⁵. The Australian Institute of Criminology (AIC)³⁶ and the Australian Bureau of Statistics (ABS)³⁷ show that some of the most common form of offences recorded for young people are public order offences. Such offences are often linked to social dysfunction, where poor socialization can increase the risk of a person committing a crime. The Productivity Commission^{38,p.80} shows that the incarceration rates of adults cost \$35,802M (or

\$3.6B approx.) in 2005, and these prisoner incarceration rates continue to rise. In 2014, there were 32,683 incarcerated persons nationally, the cost of imprisonment per prisoner, per day in Australian prisons nationally was \$281 and the cost to taxpayers of detaining a young person was \$227,760 per person, per annum³⁸. According to the AIC³⁶, the criminal justice system has continued to increase in expenditure by an average of 10% per year since 2003. In 2012, the cost of policing accounts for 71% of the total cost of corrections - seeing \$432 (tax dollars) spent per person/per head of population annually in Australia. Appendix 4 outlines the proxy costings for Socialisation.

4 Social Return Calculation

Here we discuss the process of calculation of the SROI ratio. We include relevant deductions to the final calculation to ensure the SROI analysis is balanced and credible.

4.1 Duration

Children reported to have participated in Cirkidz circus training for two and a half years on average. This may then assist in representing the minimum duration of participation to achieve the full benefit of identified outcomes. Furthermore, attendance of the children was reported by Cirkidz as 95% across six months of circus training.

4.2 Sensitivity Analysis

In calculating a SROI it has been necessary to make assumptions or use data which is not subject to universal agreement. To assess the degree that this may influence a final value that has been calculated a sensitivity analysis is carried out and the results recorded. Reductions in value have been made to ensure we do not over-claim regarding outcomes/benefits of the SROI analysis. By doing this the value of the benefits can be expressed within defined limits. The most significant assumptions that were made were tested in the sensitivity analysis as detailed below. Appendix 5 further outlines deadweight and attribution in accordance with findings.

4.2.1 Deadweight

A reduction for deadweight reflects the fact that a proportion of an outcome might have happened without any intervention. Deadweight has been calculated on the proportion of people who would be active on their own accord.

As this investigation is the first of its kind and assumes a forecast SROI analysis, no control group was included in the research strategy. Therefore, comparable external information was sought to ascertain the level of association of the intervention to the outcome.

Mental Wellbeing

Comparable information was drawn from the Australian Child Wellbeing Survey; Mental health of children and adolescents 2015^{39, p.138}. This report identified the level of change across a much larger time frame than our study. However, some indications can be drawn to inform the percentage of deadweight attributable to our calculations. The report shows that from a sample of almost n=3000 children between the ages of 6-17years. The change in mental health between 1998-2014yrs (16years) remained stable: where mental health overall appeared to remain relatively stable, increasing by less than one percent (0.9%). This calculates to 0.056% (0.9/16years) of an improvement in children's mental wellbeing per year. We therefore predict

that 0.028% of any improvement in mental wellbeing seen in our sample, may have occurred even without circus training across the six month period.

Youth offenders represented approximately 0.4% of the total national Australian population in the year 2015 (ABS 2016). Accordingly, there is a 0.4% chance that young people will offend. The likelihood of repeat offending is high however has not been included in this SROI analysis.

4.2.2 Attribution

Attribution takes account of external factors, or the contribution of others, that may have played a part in the changes that are identified.

Attempts were made to control for covariates that may impact the results. Participants were asked if they participated in any other organised physical activity outside of school. This was done to estimate the level of attribution that can be made regarding the percentage of attributable impact from participation in circus training being due to the intervention. Data analysis showed that from the sample, children participated in other organised sports at an average frequency of 1.2 times per week. We may therefore estimate that we can be 50% sure that the results are due to circus participation and not some other organised physical activity. Hence, level of attribution is set at 50%. We acknowledge that this is an estimation only and further investigations should attempt to control for other possible covariate factors.

4.2.3 Displacement

Displacement applies when one outcome is achieved but at the expense of another outcome, or another stakeholder is adversely affected.

In relation to this program displacement could have arisen as a result of children ceasing to take part in another activity because they were involved in the regular circus training sessions. However due to the nature of groups involved in the program, i.e. their parents enrolled them into the program and the majority of the participants were already engaged in other activities there is little risk of displacement. In addition, displacement was not identified in the course of participant feedback.

4.3 Calculation of Social Return

An SROI is expressed as a ratio of return and is calculated by dividing the value of the impact by the value of the investment. However before the calculation is made the Impact Value is adjusted by deducting Deadweight and Attribution percentages (Appendix 5). This is to reflect the present day value of benefits projected into the future.

Based on this a social return on investment of \$7 has been calculated for every \$1 invested in the Cirkidz Tweenz program.

4.3.1 Relevancy of SROI ratio

The relative significance of the ratio calculated in this SROI of the Cirkidz Tweenz program has been provided through a review of various international SROI reports. A full list of all reports reviewed has been provided in Appendix 6.

Comparable SROI reports focusing on youth, arts and health were found within eight reports spanning 2008-2016.

The countries these analyses were conducted in were:

- Australia (n=2),
- Canada (n=3),
- UK/Scotland/Ireland (n=2),
- United Arab Emirates (n=1).

A review of the findings from these reports indicates SROI ratios of:

- 1:2 (n=2),
- 1:3 (n=1),
- 1:4 (n=3),
- 1:5 (n=1),
- 1:18 (n=1).

The specific focuses of these SROI reports were:

- Youth (general) (n=3),
- Mental health issues (n=1),
- Youth with disabilities (n=1),
- Indigenous youth (n=3).

This report's SROI analysis focused on assessing healthy or general youth. With this in mind it can be seen that only three reports focussed on youth in general, in relation to the arts and health.

The three SROI reports that focused primarily on apparently healthy youth and the arts were published between 2008 – 2016.

These SROI studies were conducted in:

- Canada (n=1) with a ratio finding of 1:4,
- UK/Scotland/Ireland (n=2) with ratio findings of 1:4 & 1:5.

The social return finding in this report shows a SROI ratio of 1:7 that is for every \$1 invested in the Cirkidz Tweenz program, \$7 worth of savings could occur in the future concerning youth mental health. The outcome ratio identified in this report is comparatively higher than findings from other similar SROI studies.

4.4 Materiality considerations

Throughout an SROI process judgments have to be made about how to interpret and convey information, particularly in relation to valuing change. At times the rationale behind a decision is obvious and fully evidenced; at other times additional explanation or information may be required.

An SROI requires clarity and transparency regarding the approach that is taken so that there is no possibility of confusion or misinterpretation. Applying a concept of materiality means that explanations must be offered for information that can be interpreted in different ways and which can exert influence on the decisions others might take.

A key concept that can be of particular importance is ensuring that outcomes are not perceived as being duplicated. In assessing issues that are material, SROI requires that various factors are taken into account and clearly communicated. The preparation of this report and the analysis within has been conducted to provide full transparency concerning all assumptions and calculations.

5 Summary & Conclusion

This section provides a summary of findings concerning the social value created by the Cirkidz Tweenz program and outlines conclusions from the study.

The Cirkidz circus school offers circus training classes for children across a variety of age groups. The focus of the circus training is to provide children and youth the opportunity to develop their physical and mental wellbeing.

The SROI analysis provided in this report has demonstrated the extent to which the Cirkidz Tweenz program has been effective and brought about positive changes, specifically in relation to mental wellbeing.

Based on rigorous research and best assumptions this SROI analysis has shown that the Cirkidz Tweenz program has created a relatively notable social value of \$7 for every \$1 of investment.

Building on these findings it could be concluded that any 'scaling-up' of the Tweenz program to more young people would seem to provide positive social returns, particularly in relation to reducing future mental health costs associated with youth.

In particular, providing regular circus-arts training to youth could be viewed as an opportunity to implement a health promotion initiative for families as well as a cost effective preventive health program.

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Appendix 1: Stress Relief Proxy

	Description	Value	Rationale	Source
Indicator	Stress Relief		Increased levels of stress have been associated to increased risk of physical and mental illness. Circus may assist with coping with life stressors.	Survey data (psychological wellbeing) & focus group data
Proxy	Per 6 months treatment psychology/ist. Drugs per 6 months.	\$2892 \$12	Australian Psychological society recommends the following costing for any patient in 2016: \$241 per hour approx. (varies according to time of session, see pdf). Therefore, 1 session every two weeks for 6 months = 12weeks x \$241= \$2892. (cost to full fee paying parent to send child to psychologist for treatment of depression/anxiety).	Australian Psychological Society, Pharmaceutical Benefits Scheme

Appendix 2: Self-Esteem Proxy

	Description	Value	Rationale	Source
Indicator	Self esteem		Circus assists children to feel good about themselves and interactions with others. Circus allows children to learn at their own pace in a supportive, non competitive environment.	Survey data (psychological wellbeing) & focus group data
Proxy	Per 6 months treatment psychology/ist.	\$2892	Costing can relate to treating mental illness.	Australian Psychological Society, Pharmaceutical Benefits Scheme
	Drugs per 6 months .	\$12	Self esteem links to depression - links to feeling poorly about ones self and life, having severe negative impact on self-esteem.	

Appendix 3: Confidence Proxy

	Description	Value	Rationale	Source
Indicator	Confidence		Circus assists children to feel good about themselves and interactions with others. Circus allows children to learn at their own pace in a supportive, non competitive environment.	Survey data (psychological wellbeing) & focus group data
Proxy	Per 6 months treatment psychology/ist.	\$2892	Costing can relate to treating mental illness.	Australian Psychological Society, Pharmaceutical Benefits Scheme
	Drugs per 6 months .	\$12	Self worth links to anxiety – feelings that they may not be good enough, low self-belief/confidence, putting people at risk of anxiety disorders.	

Appendix 4: Socialisation Proxy

	Description	Value	Rationale	Source
Indicator	Socialisation		Builds empathy (and vice versa) for others, social capital and ensures a safe space. Poor socialisation is associated to social isolation and may lead to social dysfunction in youth - and can be linked to crime. May also be described as improving cognitive ability.	Survey data (psychological wellbeing) & focus group data
Proxy	Juvenile detention Spent on policing in 2012	\$624 per person per day - x 182days (6months)= \$113,880. \$216 p/p (national average), per 6months.	Literature in relation social dysfunction: linked to criminology - self-control theory is linked to dysfunction and socialisation. Socialisation especially in the early years of life is argued as necessary for decreasing dysfunction and crime in later years. There is evidence that suggests that low empathy is linked to bullying - bullying has an impact on health and wellbeing. Social dysfunction, leading to crime links to increases in costs of policing, court costs and imprisonment.	Australian Institute of Criminology, Australian Productivity Commission, ABS, Australian Commissioner for Children and Young People.

Appendix 5: Deadweight & Attribution measures

Indicator	Deadweight	Attribution
Stress relief	Mental illness overall risk = Australian Child Wellbeing Survey; Mental health of children and adolescents 2015 ^{39, p.138} : Over 16 years = 0.9% improvement in child mental health. This calculates to 0.056% annually (0.9/16years) with 0.028% improvement across the six month period.	50% Youth survey respondents reported participating in an average of one other, out of school organised physical activity. Hence, there is an estimated 50% attribution of the identified outcomes being due to circus training.
Self-esteem		
Confidence		
Socialisation	Youth offenders represented approximately <u>0.4% risk of offending</u> of the total equivalent population in 2015 ³⁶ .	

Appendix 6: SROI Report Comparison Table

Year	Country	Project title	Group	Focus	SROI Ratio
2007	Minnesota, USA	Youth mentoring program	Youth	Life skill development & health	1:1.9
2008	Beaconsfield, UK	Urban Beatz School program	Youth	Art & health	1:4
2009	UK	Personal development program (youth at risk)	Youth	Life skill development & health	1:4
2010	Calgary, Canada	Child & Youth Services	Youth	Counselling & intervention	1:11
2011	London, UK	Off Centre	Youth	Art & health	1:5
2011	Scotland	Café Culture	Older adults	Art & health	1:8
2012	Canada	The Becoming Clubhouse	Youth with mental health issues	Art & health	1:2.2
2012	Kirklees Council, UK	The Nerve Centre	People with neurological conditions	Art & health	1:2
2012	England	Community based health project	Obese adults & children	Health	1:5
2012	Calgary, Canada	Social leisure youth program	Youth with disabilities	Leisure/recreation	1:7
2013	Australia	Beyond empathy - Rites of Passage project	Indigenous youth	Art & health	1:3
2013	Australia	Indigenous Money Mentor Program	Indigenous adults	Financial literacy	1:4
2013	Canada	VIBE arts	Youth	Art & health	1:4
2013	Sharjah, UAE	“Conversations” Project	Youth with disabilities	Art & health	1:4
2013	UK	Get into reading Initiative	Youth	Reading & health	1:6
2013	Scotland	Glasgow Health Walks	Older Adults	Physical activity	1:8
2013	Melbourne, Australia	Literacy Buddies	Primary school children	Literacy	1:8
2014	Inverell, Australia	Helping Hand and Linking Youth program	Indigenous youth	Justice	1:3
2014	Tasmania	Youth Prevention and Diversion program	Indigenous youth	Justice	1:3
2014	Scotland	Impact Arts Fab Pad Project	At risk adults	Art & health	1:8
2014	Clyde Muirshiel, UK	Clyde Muirshiel Regional Park	Local population & business	Leisure/recreation	1:9
2015	Tasmania	Tasmanian youth justice programs	Youth	Justice	1:3.5
2015	Canada	Learning Through the Arts’ Youth Empowerment Program	Indigenous youth	Art & health	1:2
2015	Limerick, Ireland	Le Chéile Restorative Justice Project in Limerick	Youth	Justice	1:3
2015	London, UK	Balsam Centre Wellbeing Support Project	People with mental health needs	Art & health	1:3
2015	London, UK	Peer support form people with dementia	Older adults with dementia	Art & health	1:5

2015	Illinois, USA	The value of the Not-for-Profit Arts & Culture Field in Illinois	Local population & business	Art & health	1:27
2015	Illinois, USA	The value of the Not-for-Profit Youth Development Field in Illinois	Youth	Life skill development	1:45
2016	London, UK	Transported	Local population	Art & health	1:2
2016	Narrogin, Australia	Strong Culture, Strong Community	Indigenous youth	Art & health	1:18
2016	Northern Ireland	Women's Support Network (WSN)	Women	Life skill development & health	1:19

Project title	Report link
Youth mentoring program	http://www.mpmn.org/Files/SROI%20Mentoring%20Report%204-07.pdf
Urban Beatz School program	http://www.thamesvalleypartnership.org.uk/wp-content/uploads/SROI-Pilot-Project-Urban-Beatz-master.pdf
Personal development program (youth at risk)	http://chesterrep.openrepository.com/cdr/bitstream/10034/88342/8/092+SROI+summary+proj+67.pdf
Child & Youth Services	http://www.socialvalueuk.org/app/uploads/2016/03/sroi_discovery_house.pdf
Off Centre	http://static1.1.sqspcdn.com/static/f/579533/20632434/1350309467913/Off+Centre+SROI+Report+Final.pdf?token=w0jAh8PlihvHNtDrkKlXnDJ7GDU%3D
Café Culture	http://1068899683.n263075.test.prositehosting.co.uk/wp-content/uploads/2013/03/Craft-Cafe-SROI-FINAL-REVISED-v2-1.pdf
The Becoming Clubhouse	http://www.abilitiescouncil.sk.ca/images/file/SROI/SROI-The%20Becoming%20Clubhouse-December%202012.pdf
The Nerve Centre	http://www.thinklocalactpersonal.org.uk/_assets/BCC/Growing_Social_Capital_SROI_-_March_2012.pdf
Community based health project	http://www.socialvalueuk.org/app/uploads/2016/04/HLW_Social_Value_Report_Revised-TVB-Sept12.pdf
Social leisure youth program	http://www.abilitiescouncil.sk.ca/images/file/SROI/SROI%20SLYP-Out%20Executive%20Summary.pdf
Beyond empathy - Rites of Passage project	http://be.org.au/wp-content/uploads/2015/11/RoP-SROI_CCF_final-report.pdf
Indigenous Money Mentor Program	https://www.nab.com.au/content/dam/nabrwd/About-Us/corporate-responsibility/docs/nab-imm-sroi-report_151013_final.pdf
VIBE arts	http://vibearts.ca/website/wp-content/uploads/AFCY-SROI-Exec-Summary-Two-pager-final-1.pdf
“Conversations” Project	http://resources.sustainablesquare.com/ENBD_SROI_Conversations_Report_Final.pdf
Get into reading Initiative	http://www.cph.org.uk/blog/using-social-return-on-investment-analysis-to-evaluate-the-get-into-reading-initiative/
Glasgow Health Walks	http://www.pathsforall.org.uk/SROI
Literacy Buddies	https://static1.squarespace.com/static/52045752e4b0330b6437dade/t/52dce051e4b086a63887cc91/1390207057810/Literacy-Buddies_SROIReport.pdf
Helping Hand and Linking Youth program	https://www.dpmc.gov.au/resource-centre/indigenous-affairs/forecast-sroi-analysis-helping-hand-and-linking-youth-program-inverell-shire-council
Youth Prevention and Diversion program	https://www.dpmc.gov.au/resource-centre/indigenous-affairs/forecast-sroi-analysis-youth-prevention-and-diversion-program-circular-head-aboriginal-corporation
Impact Arts Fab Pad Project	http://1068899683.n263075.test.prositehosting.co.uk/wp-content/uploads/2013/04/Impact-Arts-Fab-Pad-Project.pdf
Clyde Muirshiel Regional Park	http://www.clydemuirshiel.co.uk/wp-content/uploads/2011/03/SROI-report-2014.pdf
Tasmanian youth justice programs	https://www.savethechildren.org.au/_data/assets/pdf_file/0016/123640/SCA_Youth-Justice-TAS_SROI_FINAL5b25d.pdf
Learning Through the Arts’ Youth Empowerment Program	https://www.rcmusic.ca/sites/default/files/files/LTTA-social-investment-case-study.pdf
Le Chéile Restorative Justice Project in Limerick	http://www.drugsandalcohol.ie/23342/7/Building-Bridges-Restorative-Justice-SROI-Evaluation-2015.pdf

Balsam Centre Wellbeing Support Project	http://eprints.uwe.ac.uk/27545/1/02-Balsam%20Centre%20Wellbeing%20Support%20Summary%20and%20Full%20Report.pdf
Peer support form people with dementia	http://www.hin-southlondon.org/system/resources/resources/000/000/157/original/Social_Return_on_Investment_Study_Dementia_Peer_Support_Groups.pdf
The value of the Not-for-Profit Arts & Culture Field in Illinois	http://buildingstrongeril.com/wp-content/uploads/DFROI_AC_Report_Together.pdf
The value of the Not-for-Profit Youth Development Field in Illinois	http://buildingstrongeril.com/wp-content/uploads/DFROI_YD_Report_Together.pdf
Transported	http://www.creativepeopleplaces.org.uk/sites/default/files/Transported%20Evaluation%20Report%20Years%201-3.pdf
Strong Culture, Strong Community	http://www.canwa.com.au/wp-content/uploads/2016/05/CAN-SCSC-SROI-Summary-Report-08012015.pdf
Women's Support Network (WSN)	http://www.wsn.org.uk/sites/default/files/publications/WSN_SROI%20Reports_Falls_Shankhill_Windsor_FINAL_Aug11.pdf

