# Nanyapura PCYC Boxing Program

# **EVALUATION REPORT**

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# **Executive summary**

An evaluation was undertaken in the PCYC Nanyapura Boxing program in Armidale during 2021. The findings of the evaluation indicate that the program has been successful in achieving its aims and enhance the development, knowledge, resilience and prosocial behaviour of the children and young people who participate.

Due to Covid restrictions and interruptions specific training programs were not run during 2021 which did impact upon the increase of knowledge of risky drug and alcohol use in the cohort who only participated in 2021, however the cohort who had been doing for longer than 12 months did show the increase in knowledge.

Training in running evaluation was undertaken on mentors of the program to enable the development of their skills and to enable an ongoing evaluation of the program. Results of the feedback to the training indicated that the participants gained new knowledge and confidence to undertake an ongoing evaluation.

It is recommended that the explicit training program recommence in 2022 and that an ongoing evaluation program is developed that will also incorporate parents/carers.



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# **Background**

The Nanyapura boxing program has been running through Police Citizens Youth Club (PCYC) Armidale since 2017. The program works with children and young people from disadvantaged backgrounds at risk of disengagement from school and/or entry into the juvenile justice system. The program provides mentoring through a structured physical activity (boxing), a breakfast program, and supports school engagement through transporting the children to school each day they participate.

The University of New England (UNE) was approached to undertake an evaluation of the program in November 2019. However due to COVID restrictions the survey of participants was not held until 2021. The funding for the evaluation was provided by the Alcohol Drug and Alcohol Foundation and auspiced by New South Wales (NSW) Police.

Since 2019 there have been 165 participants in the program comprised of 108 males of whom 79 identified at Aboriginal or Torres Strait Islander, and 57 females of which 45 identified as being Aboriginal or Torres Strait Islander.

#### **Project Aims**

The project aim was to determine the effectiveness of the Nanyapura Boxing program by evaluating if there were changes in knowledge and awareness of drug and alcohol use, the importance of health and wellbeing, culture as well as the concept of leadership. Along with training mentors in conducting an evaluation so that continuing evaluation can be undertaken on the program.

#### Methods

The initial evaluation project proposal was interview up to 20 participants aged 12 to 18 years as they joined the program and a follow up interview 3 month later following training of mentors in the program on how to develop an evaluation and conduct interviews. Due to COVID, the changes in some of the staff providing the mentoring, and the UNE requirements for Ethical research approval the evaluation was altered to being survey based, with the mentor training to occur following the survey.



The UNE researchers joined into the program late 2020 to gain an understanding of how the program was conducted to help develop the best methodology for the collection of the data required within the constraints due to COVID. Ethical approval HE21-077 was granted on 12 May 2021 with the surveys being conducted throughout June with participants 12 years and over.

Participants in the program were provided with information sheets, parental consent, and participant assent forms. When the consent and assent forms were returned the participants were provided with the paper based survey. The survey was provided to the participants during the program in small groups with the researchers on hand to answer any questions about the survey structure.

The survey was made up of five sections. The first section consisted of three questions on demographic information including gender, age and how long the individual had been participating in the program. Section two of the survey focused on whether the boxing program had increased the knowledge of participants in areas such as the harms of risky alcohol and drug use, and the importance physical exercise and personal hygiene. Furthermore, section three of the survey focused on whether the boxing program had a positive or negative effect on an individual's personal and social development, physical and mental health, behavioural and academic performance, and interactions with police. The questions in section 3 were based on a tool used by an evaluation of another PCYC program to assist with comparison and standardisation (Bowen & Neill, 2016). Sections four and five of the survey aimed to evaluate the impact of the Nanyapura program on promoting young participant's positive behaviours, thus, the questions were informed by subsets of the revised Australian Self-Report Delinquency Scale (ASRDS-R) and the Strengths and Difficulties (SDQ) questionnaire (Curcio et al., 2015; Campbell-Sills & Stein, 2007). The 10-Item Connor-Davidson Resilience Scale (CD-RISC) was used to measure if the program had increased the resilience of participants (Connor & Davidson, 2018).



The modified ASRDS-R, were listed twice, once in section four which focused on prior to joining the program, and then repeated in section five focusing on since joining the program, to compare the young person's behavior prior to and after joining the boxing

program. The CD-RISC and SDQ subset questions were framed in relation to since doing the boxing program to measure if the program had increased the resilience of participants. The CD-RISC and SDQ questions are asked on a five point Likert-scale with the participants selecting the answer which was most relevant to them.

Upon completion of the surveys they were sealed in individual envelopes to maintain the confidentiality of the participant's responses. The data from the paper surveys was then entered by the researchers into Qualtrics, an online survey tool, to enable the results to be stored electronically and also to be downloaded into the statistical analysis package SPSS.

Following the training of the five mentors, whom where serving Police officers, PCYC and Police liaison staff a survey was conducted on their previous evaluation training and the benefits from the training.

Data Analysis

Survey

During Term 2 2020 when the survey was conducted there were 38 participants in the program, though not all were eligible to undertake the survey as they were under 12 years of age. The final sample size for the study consisted of the 19 participants of the 19 respondents, six people did not answer all the questions in section four and five of the survey, with two people not answering all the questions in section four, and four people not answering all the questions in section five.

The initial run through of the data identified the need to collapse various fields to reduce the amount of zero responses in certain fields when doing the analysis across the whole sample. For the question regarding how long have you participated in the program the original responses included: less than 3 months; 3 to 6 months; 6 to 12 months; 1 year; 2



years; 3 years and 4 years, these were then collapsed into 'less than 1 year' and '1 to 4 years'. Additionally, a number of other questions surrounding the increase of the participants knowledge from the boxing program were collapsed from "has increased somewhat" and "has increased a lot" to "has increased" and "has not increased". The

collapsing of the response categories also helped maintain the confidentiality of the participants. Due to the small sample size, when running standard non-parametric tests the results were unreliable for cells which had less than 5 responses to those questions as a result the tests were not showing any statistically significant differences (Salkind & Frey, 2020). Thus, proportions were utilised to even out the data and show that the program had an effect. (Salkind & Frey, 2020).

### **Evaluation Training**

Three of the five participants completed the evaluation training survey, reminders had been emailed to all participants. The responses were downloaded to excel for some basic analysis to determine if the training did increase the knowledge of the participants.

## Results

### Survey Section 1

The initial section of the survey asked questions on the demographics of the participants. There was a higher proportion of male respondents (74%, n=14) compared to female respondents (26%, n=5) to the survey. The respondents were asked to indicate their ages and the results showed the majority of respondents were in the 12 years (n=5) or 17+ years (n=5) age category. The next largest age categories were 14 years (n=3) and 15 years (n=3), followed by 13 years (n=2) and then 16 years (n=1) as shown in Table 1.



**Table 1**Age and gender of survey respondents

		What gen		
		Male	Female	Total
	12 years	4	1	5
What is	13 years	1	1	2
your age?	14 years	3	0	3
	15 years	1	2	3
	16 years	1	0	1
	17+ years	4	1	5
Total		14	5	19

Additionally, the participants were asked to indicate how long they had been participating in the Nanyapura program. There were only three females who participated in the survey that had been involved in the program for more than one year. With two of the female participants in the survey only been involved in the program for less than a year. However, a majority of the male participants had participated in the program for more than one year as shown, with one participant being involved in the program since inception as shown in Table 2.



**Table 2**How long respondents have participated in the boxing program.

How long have you participated in the							
boxing program?							
	Male	Female	Total				
Less than 3 months	3	1	4				
3 months to 6 months	2	2	4				
6 to 12 months	1	0	1				
1 year	0	2	2				
2 years	3	0	3				
3 years	2	0	2				
4 years	3	0	3				
Total	14	5	19				

Due to the range of responses to how long individuals have participated in the program, and to increase the reliability and validity of data analysis and to maintain the confidentiality of respondents the responses were collapsed into having participated in the program for 'less than one year' and '1 to 4 years'. As shown in Table 3 there were six males who had participated in the program for less than 1 year, and eight had participated for 1 to 4 years, whilst there where three females who had been involved in the program for less than 1 year and two for 1 to 4 years.

# Table 3



Results of how long individuals had participated in the program collapsed into 'less than 1 year' and '1 to 4 years'.

How long have you participated in the boxing program?								
Male Female Total								
Less than 1 year	6	3	9					
1 to 4 years	8	2	10					
Total	14	5	19					

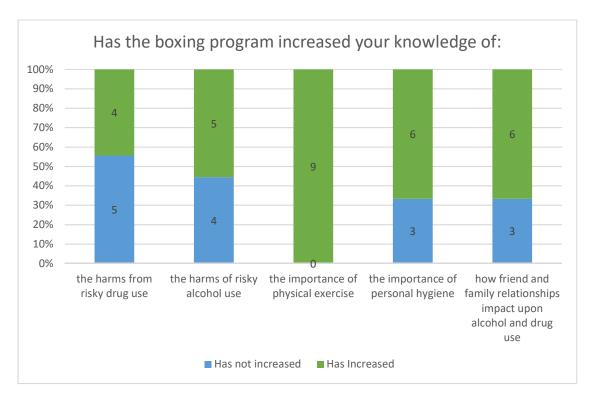
# **Survey Section 2**

In section 2 of the survey the participants were asked a series of question prefaced with 'has the boxing program increased knowledge of ...' the breakdown of responses for those that have participated in the program for less than 1 year is shown in Figure 1 and for 1 to 4 years in Figure 2. There were two other questions in this section which are explored separately. As shown in Figure 1 apart from the question on harm of risky drug use the majority of respondents who participated in the program for less than 1 year indicated that they had increased their knowledge harms of drug use, importance of personal hygiene and how friend and family relationship impact upon drug and alcohol use. The standout was that all respondents in the less than 1 year group indicated that the program has increased their knowledge of the importance of physical exercise. It is important to note that due to Covid-19 the program did not run for a period in 2020 and since the program has started up again there has not been any specific programs addressing drugs and alcohol use. For 2022 and any activities over summer 2021 educational lessons will be incorporated back into the morning sessions. Prior to the survey being undertaken there was no explicit educational component in relation to the harms of risky alcohol and drug use, relationships and personal hygiene for the less than 1 year group.



Figure 1

For participants of less than one year, has the boxing program increased knowledge of:

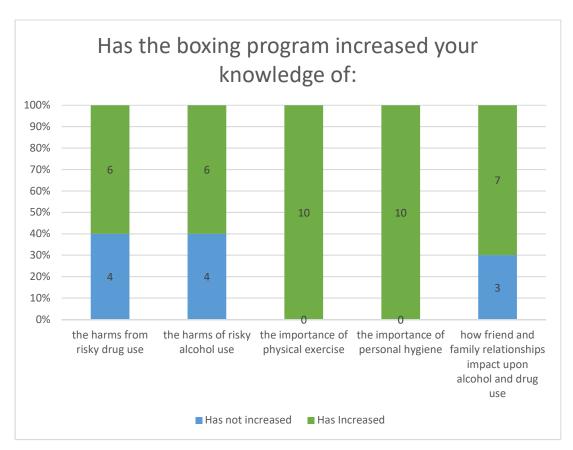


For those who have participated in the program for between 1 to 4 years, 60% indicated that the program had increased their knowledge of the harms of drug and alcohol use as well as how family and friends impact upon drug and alcohol use. All of the respondents agreed that the program has increased their knowledge of the importance of personal hygiene and physical exercise as can be seen in Figure 2. Similar to the less than 1 year group above those whom had been doing the program for only 1 year have not had the benefit of the explicit programs.



Figure 2

Has the boxing program increased knowledge of / taught participants of 1 to 4 years



The other questions in section two was in relation to the program teaching teamwork and leadership skills and how important participants considered relationships in reducing the use of drugs and alcohol. As shown in Figure 3 all the respondents indicated that they were taught skills, with the majority (80%) indicating the program taught them a lot of skills. In response the question how important are friends and family in reducing the use of alcohol and drugs the majority of individuals who responded identified that they were important, with 67% of those who had participated in the program for less than a year and 90% of those who had participated in the program for 1 to 4 years selecting this answer as highlighted in Figure 4.



**Figure 3**Response to has the boxing program taught you teamwork and leadership skills by duration in the program.

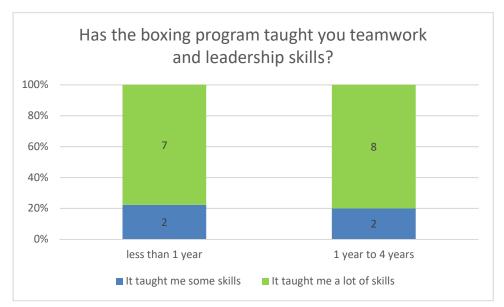
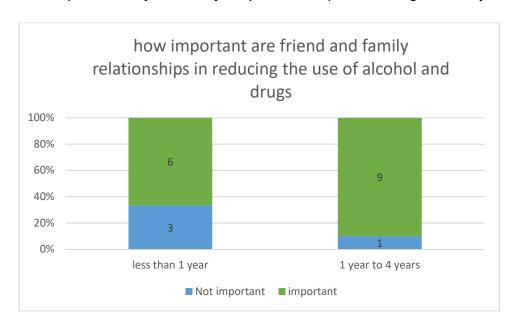


Figure 4

How important are friend and family relationships in reducing the use of alcohol & drugs?



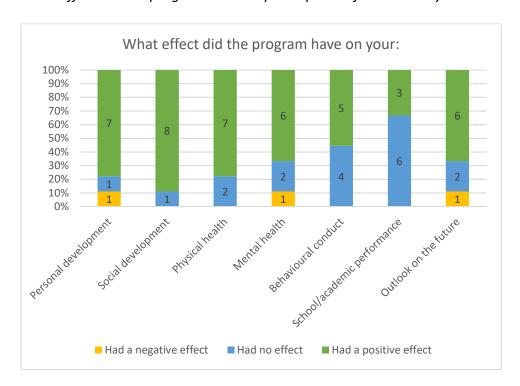


# **Survey Section 3**

Section three of the survey asked a series of questions on what effect the program had on the participants. For those who have been in the program for less than 1 year there was one respondent who indicated that the program had a negative effect on their personal development, mental health and outlook on the future. Unfortunately, due to the survey structure to maintain individual confidentiality that person was not able to be accurately identified to then intervene or discuss further with them their concerns. The remaining nine respondents indicated that there was no effect or positive effect with the majority responding a positive effect except in the question relating to school academic performance. For school academic performance the majority indicate that the Nanyapura program had no effect on their school performance as shown in Figure 5.

Figure 5

What effect did the program have on participants of less than 1 year



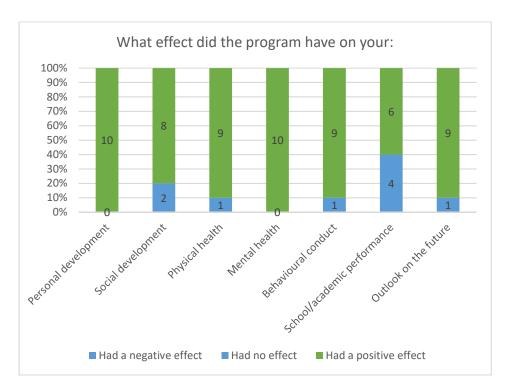
Additionally, those who had participated in the program for between 1 to 4 years a large majority reported it had a positive effect upon them as shown in Figure 6. With all respondents reporting that the program had a positive impact upon their personal



development and mental health. Similar, to the less than 1 year group there was less of a positive impact school academic performance with participants 4 out of the 10 (40%) respondents indicating that the program had no effect on their school academic performance.

Figure 6

What positive or negative effect did the program have on 1 to 4 years participants

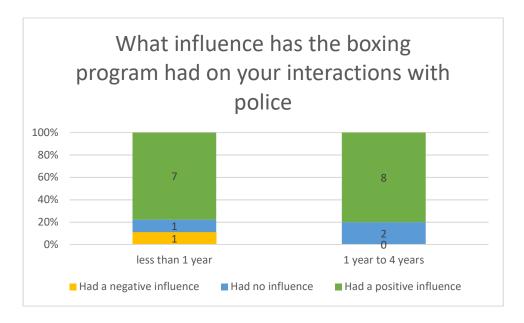


Moreover, the last question in section three focused on the influence the program has had on the participant's interactions with the police shown in Figure 7. For those who have been involved in the program for between 1 to 4 years, 90% responded that the program has had a positive influence, with 67% of those who had participated in the program for less than a year reporting that the program had a positive influence on their interactions with Police. However, for one less than a year participant, the program has a negative influence on their interactions with the police examination of the responses showed it was the same person who reported a negative effect to the other questions.



Figure 7

What influence has the program had on participant's interactions with police?



#### Survey Section 4

Section four of the survey was a list of 11 questions informed by the modified version of the ASRDS-R which respondents were to answer with either 'yes' or 'no'. It was repeated at the end of section five to get individuals to think about their behaviour prior to and since joining the program. The repetition of the question confused a number of participants who sought clarification when it came the repeat of the question, two respondents did not complete any questions and some respondents did not answer all questions in section five. As a result of the varying null responses the results are presented as proportions, Table 4 provides the results for the Yes responses as a proportion of all ASRDS-R questions in section four as before and from section five as after.

As can be seen in Table 4 was a decrease in the Yes response across all questions which indicates a reduction in the delinquent behaviour that the ASRDS-R tool identifies. For the less than 1 year participants there was a large in decrease in self reports of failing to keep a promise, school attendance, being involved in fights and most importantly a reduction in contacts with Police resulting in formal or informal caution.



**Table 4**Responses to the ASRDS-R tool as a proportion

			I		1	1	
		Less than 1 year	1 to 4 years			Less than 1 year	1 to 4 years
Failed to keep a promise		Gotten a piercing	Gotten a piercing or tattoo without parental permission				
Before	Yes	44.00	44.00	Before	Yes	22.22	22.22
After	Yes	12.50	37.50	After	Yes	12.50	12.50
Told a lie to son	neone			Made prank phon	e calls		
Before	Yes	100.00	88.89	Before	Yes	77.78	55.56
After	Yes	87.50	50.00	After	Yes	62.50	25.00
Not attended classes or wagged school		Intentionally hurt or been cruel to animals					
Before	Yes	55.56	55.56	Before	Yes	11.11	22.22
After	Yes	25.00	25.00	After	Yes	0.00	25.00
				Had contact with	the police (e.g. infor	rmal or formal caution	on) without
Been late for sch	nool, work, an appoint	ment, etc.		being charged for something that you did			
Before	Yes	77.78	88.89	Before	Yes	44.44	37.50
After	Yes	62.50	50.00	After	Yes	12.50	12.50
Purposely bashed someone up or got involved in a fist fight		Done something the	hat your parents did	not want you to			
Before	Yes	66.67	66.67	Before	Yes	88.89	66.67
After	Yes	25.00	12.50	After	Yes	57.14	50.00

### **Survey Section 5**

Section 5 was composed of two questions that had subsidiary questions, the first main question was informed by the SDQ. The second bank of sub-questions was the CD-RISC-10 to ascertain the resilience of the participants in the Nanyapura Boxing program. The responses covered a 5 point scale from being true nearly all the time to not true at all. The result of each question is presented in Tables 5, 6 and 7.

The first item in the SDQ explored whether, since doing the boxing program, the participants were more considerate of other people's feelings. As shown in Table 5, since doing the boxing program, 44% (n=4) of the 1 to 4 year participants responded with 'often true' and 33% (n=3) with 'true nearly all the time' to being considerate of other people's feelings. For the less than 1 year participants, Table 5 presents that 33% (n=3) responded with 'true nearly all the time' and 'sometimes true', and 22% (n=2) selected 'often true' to this item. Indicating that the majority or the participants where considerate of other feelings.



 Table 5

 Responses to the SDQ informed questions in section five (a) of the survey, as proportions.

	Less	1 to 4		Less	1 to 4	
	than 1	years		than 1	years	
	year			year		
I am considerate of other	r people'	s feelings	I am helpful if som	eone is hu	rt, upset	
			or fee	ling ill		
Not true at all	11	0	Rarely true	0	11	
Rarely true	0	11	Sometimes true	33	0	
Sometimes true	33	11	Often true	11	44	
Often true	22	44	True nearly all the	56	44	
			time			
True nearly all the time	33	33				
I am restless, overactive	I am restless, overactive, cannot stay still			I often fight with other young people		
for long			or bull	y them		
Not true at all	0	22	Not true at all	44	78	
Rarely true	0	11	Rarely true	22	22	
Sometimes true	67	22	Often true	22	0	
Often true	0	33	True nearly all the	11	0	
			time			
True nearly all the time	33	11				
I often lose my	temper		I think things o	ut before a	acting	
Not true at all	0	11	Rarely true	22	33	
Rarely true	44	33	Sometimes true	33	44	
Sometimes true	0	33	Often true	44	22	
Often true	0	11		ı	1	
True nearly all the time	56	11				



I am generally well beha	I have a good atte	ntion span	and see		
what adults request			tasks throug	th to the e	nd
Not true at all	33	0	Not true at all	0	22
Rarely true	0	11	Rarely true	44	22
Sometimes true	11	11	Sometimes true	22	11
Often true	22	56	Often true	33	44
True nearly all the time	33	22			

The next item focused on whether an individual was restless, overactive, and unable to stay still for long since being involved in the boxing program. For those who have participated in the program for less than a year, Table 5 indicates that the responses were split between two answers, 33% (n=3) selected 'true nearly all the time' and 67% (n=6) selected 'sometimes true'. For those who have been involved in the program for 1 to 4 years, Table 5 highlights that the largest responses were 33% (n=3) for 'often true', and 22% (n=2) for both 'sometimes true' and 'not true at all'. Again indicating the positive impact of the program on the participants.

The following item inquired as to whether participants, since doing the boxing program, often lost their temper. As shown in Table 5, for those who have participated in the program for less than 1 year, 56% (n=5) responded with 'true nearly all the time' whilst 44% (n=4) answered with 'rarely true'. However, for those who have participated in the program for a period of 1 to 4 years, results demonstrated that the largest responses were 33% (n=3) for both 'sometimes true' and 'rarely true'. The difference between the less than 1 year group and the 1 to 4 years group does indicate that overtime the program has a positive effect on the participant's ability to control their temper. This fits in the with programs ethos of self-discipline and respect that is reinforced during the sessions.

The subsequent item then focused on whether, since doing the boxing program, the young person felt as though they were generally well behaved and did what adults requested. For the 1 to 4 year participants, Table 5 displays that 56% (n=5) responded with 'often true', with the next answer having the most responses being 22% (n=2) for 'true nearly all the



time'. Table 5 shows that for the less than 1 year participants, 33% (n=3) responded with 'not true at all', however, another 33% (n=3) answered with 'true nearly all the time'. A further 22% (n=2) of this group responded with 'often true'. With the minority of participants responding indicating that they are not well behaved and do not usually do what adults request is a having a positive outcome on the participants behaviour and relationships with adults.

Moreover, participants were asked if they felt that since doing the boxing program they were helpful if someone is hurt, upset or feeling ill. As shown in Table 5, for those who have been involved in the program for 1 to 4 years, the largest responses to this question were 44% (n=4) for both 'true nearly all the time' and 'often true'. Additionally, for those who have been involved in the boxing program for less than 1 year, Table 5 exhibits that 56% (n=5) selected 'true nearly all the time', with the next largest response showing 33% (n=3) for 'sometimes true'. Whilst a concern that one of the 1 to 4 year participants indicated they were not helpful, that concern is outweighed by the overwhelming positive response from the other participants.

Furthermore, participants of the program were asked to consider if, since doing the boxing program, they often fought with other young people or bullied them. As shown in Table 5, 78% (n=7) of the 1 to 4 year participants and 44% (n=4) of the less than 1 year participants responded with 'not true at all'. Similarly, Table 5 demonstrates that 22% (n=2) of each group responded with 'rarely true', however; another 22% (n=2) of the less than 1 year group selected 'often true'. The difference between the two groups whilst it cannot be shown to be a significant statistical difference it is a positive indication that there is a positive difference over time. Thus, indicating that the program is having a positive impact which again aligns with the programs ethos of self-discipline and respect.

The second last item inquired if participants, since doing the boxing program, thought things out before acting. For the 1 to 4 year participants, Table 5 displays that the highest response to this question was 44% (n=4) for 'sometimes true', followed by 33% (n=3) for 'rarely true' and 22% (n=2) for 'often true'. For the less than 1 year participants, Table 5 highlights that the largest response to this item was 44% (n=4) for 'often true', followed by 33% (n=3) for 'sometimes true' and 22% (n=2) for 'rarely true'. Whilst no one responded



true all the time, given the developmental age of the group it is not surprising. Though it is interesting that the less than 1 year group did indicate that they think things out more than the 1 to 4 year group.

The final item in this question asked participants whether, since joining the boxing program, they have a good attention span and see tasks through to the end. For the 1 to 4 year participants, Table 5 presents that 44% (n=4) responded with 'often true', whilst the next largest responses were 22% (n=2) for both 'rarely true' and 'not true at all'. However, for the less than 1 year participants, results show that 44% (n=4) responded with 'rarely true', followed by 33% (n=3) for 'often true' and then 22% (n=2) for 'sometimes true'. These results again could be a result of the developmental age stage of the participants it could also be an indication of difficulties they face outside of the program.

The CD-RISC-10 and aimed to determine if the program had increased the resilience of participants. The 10 items in the scale related to different aspects of resilience such as flexibility, ability to regulate emotion, optimism, sense of self-efficacy, and the ability to focus and maintain attention under stress (Davidson, n.d.). It was expected that the 1 to 4 year respondents would have shown an increase in their resilience as a result of participating in the program, whilst there is an increase in reported resilience the difference is not very large. The results were scored with from 0 (rarely true) and 4 (true nearly all the time), and Table 6 displays the total scores for the less than 1 year participants and the 1 to 4 year participants.



**Table 6**Total scores of the results from the CD-RISC-10.

CD-RISC-10 Total Scores					
Less than 1	1 to 4 years				
year					
20	22				
31	24				
30	25				
3	21				
23	36				
18	26				
40	23				
16	38				
	29				
Mean: 22.6	Mean: 27.1				
Median: 21.5	Median: 25				

There was a total of eight responses to the CD-RISC-10 for the less than 1 year group and nine for the 1 to 4 years group. As shown in Table 6, there was a significant range to the scores as the lowest total score for the less than 1 year participants was 3 and the highest score was 40. For the 1 to 4 years group, Table 6 displays that the lowest score was 21, with the highest score at 38. The mean score for the less than 1 year participants was 22.6, which was lower than that of the 1 to 4 years group, which was 27.1. Connor and Davidson (2020) provide the results from two US studies of the CD-RISC-10 to provide a standardised comparison group, in order to effectively analyse the results. In these studies, the mean scores were 32.1 and 31.8, which are higher than the results from this evaluation.

Additionally, the median score for the less than 1 year participants was 21.5, and 25 for the 1 to 4 years group. These scores are in the lowest quartile, with the lowest to highest quartiles from Connor & Davidson (2020) being 0-29, 30-32, 33-26 and 37-40, respectively.



For the less than 1 year group, five respondents were in the lowest quartile, two respondents were in the second quartile and one was in the top quartile (Connor & Davidson, 2020). Furthermore, for the 1 to 4 years group, seven responses were in the lowest quartile, and of the two remaining responses, one was in the third quartile and the other was in the top quartile (Connor & Davidson, 2020).

**Table 7**Results to aspects of resilience in the CD-RISC-10, as proportions.

	Less than	1 to 4		Less than	1 to 4
	1 year	years		1 year	years
Flexibil	lity		Ability to regu	ılate emotioi	1
I am able to adapt wh	en changes o	occur.	I am able to handle u	inpleasant or	painful
			feelings like sadnes	ss, fear, and a	inger.
Rarely true	12.50	0	Not true at all	12.50	0
Sometimes true	12.50	56	Rarely true	12.50	0
Often true	62.50	33	Sometimes true	12.50	33
True nearly all the time	12.50	11	Often true	50	44
			True nearly all the	12.50	22
			time		
I tend to bounce back at	fter illness, i	njury or	Optin	nism	
other hard	lships.				
Not true at all	12.50	0	I try to see the humorou	us side of thi	ngs when I
			am faced wit	th problems.	
Rarely true	12.50	0	Not true at all	25	0
Sometimes true	12.50	22	Rarely true	12.50	0
Often true	12.50	44	Sometimes true	25	33
True nearly all the time	50	33	Often true	0	56
Sense of self	-efficacy		True nearly all the	37.50	11
			time		
I can deal with whatev	er comes m	y way.	I believe I can achieve i	my goals, eve	n if there
			are obs	tacles.	
Not true at all	25	0	Not true at all	12.50	0



Sometimes true	37.50	11	Sometimes true	37.50	33
Often true	25	56	Often true	12.50	44
True nearly all the	12.50	33	True nearly all the	37.50	22
time			time		
			I am not easily disc	ouraged by	failure.
I know having to cope w	vith stress c	an make	Not true at all	12.50	0
me stror	nger.				
Not true at all	12.50	0	Rarely true	25	33
Rarely true	25	22	Sometimes true	25	22
Sometimes true	37.50	22	Often true	12.50	22
Often true	0	33	True nearly all the	25	22
			time		
True nearly all the	25	22	Cognitive focus/ma	intaining at	tention
time			under stress		
I think of myself as a st	trong perso	n when	Under pressure, I stay focused and think		
dealing with life's challenges and			clea	rly.	
difficult	ies.				
Not true at all	12.50	0	Not true at all	12.50	0
Rarely true	12.50	0	Rarely true	25	22
Sometimes true	25	33	Sometimes true	25	44
Often true	37.50	22	Often true	25	22
True nearly all the	12.50	44	True nearly all the	12.50	11
time			time		

Moreover, the individual items were examined to determine the impact of the program on different aspects of resilience identified by the CD-RISC-10 (Connor & Davidson, 2020). The individual aspects of resilience that the program has shown to have the most significant impact on is flexibility, emotional regulation, sense of self-efficacy and optimism.

Firstly, results of this study show that the boxing program has increased the flexibility of all participants. Additionally, participants were asked about their ability to adapt when changes



occur, as a results of participating in the boxing program. Results in Table 7 demonstrate that 62.50% (n=5) of the less than 1 year participants responded with 'often true', with a further 12.50 (n=1) selecting 'true nearly all the time'. For the 1 to 4 year participants, Table 7 highlights that 56% (n=5) answered with 'sometimes true', 33% (n=3) selected 'often true' and a further 11% (n=1) responded with 'true nearly all the time' to this item. Additionally,

Table 7 displays that 50% (n=4) of the less than 1 year participants responded with 'true nearly all the time' to the other item that corresponded with flexibility, 'I tend to bounce back after illness, injury and other hardships'. For the 1 to 4 year participants, Table 6 shows that the largest response to this item was 44% (n=4) for 'often true', followed by 33% (n=3) for 'true nearly all the time' and 22% (n=2) for 'sometimes true'.

The Nanyapura program has shown to have an increase in the sense of self-efficacy of respondents. For the 1 to 4 year participants, Table 7 indicates that 56% (n=5) selected 'often true' and a further 33% (n=3) selected 'true nearly all the time' to the item, 'I can deal with whatever comes my way', as a result of participating in the program. For the less than 1 year group, results show that the majority of responses were 'true' to a degree, with 37.50% (n=3) selecting 'sometimes true', 25% (n=2) answering with 'often true' and a further 12.50% (n=1) selecting 'true nearly all the time'. Similarly, the second item that corresponded with a sense of self-efficacy was, as a result of participating in the program, individuals know that having to cope with stress can make them stronger. Table 7 displays that the results were more positively different for the 1 to 4 year participants in regard to this item, with 22% (n=2) selecting 'true nearly all the time', 33% (n=3) answering with 'often true' and 22% (n=2) responding with 'sometimes true'. For the less than 1 year participants, Table 7 presents that 25% (n=2) responded with 'true nearly all the time', and 37.50% (n=3) selected 'sometimes true' to this item. Furthermore, the third item which related to self-efficacy was, 'I think of myself as a strong person when dealing with life's challenges and difficulties'. For those who have been involved in the program for 1 to 4 years, Table 7 shows that the largest response was to this item was 44% (n=4) for 'true nearly all the time', followed by 33% (n=3) for 'sometimes true' and 22% (n=2) with 'often true'. For the less than 1 year participants, the largest responses were 37.50% (n=3) for 'often true', 25% (n=2) for 'sometimes true'.



The boxing program also increased the ability of participants to regulate their emotions. This is demonstrated in Table 7 as 50% (n=4) of the less than 1 year participants responded with 'often true', with a further 12.50% (n=1) selecting 'true nearly all the time' to the item, 'I am able to handle unpleasant or painful feelings like sadness, fear and anger'. Additionally, for the 1 to 4 year participants, Table 7 exhibits that the largest response to this item was 44% (n=4) for 'often true', with the remaining responses as 22% (n=2) for 'true nearly all the time' and 33% (n=3) for 'sometimes true'.

The program has also shown to have a significant impact on the optimism of participants. This can be seen through the responses to the item, 'I try to see the humorous side of things when I am faced with problems'. For the 1 to 4 year participants, Table 7 displays that 56% (n=5) responded with 'often true' to this item, with the next highest response as 33% (n=3) for 'sometimes true'. For the less than a year participants, Table 7 presents that 37.50% (n=3) answered with 'true nearly all the time', with the next largest responses being 25% (n=2) for both 'sometimes true' and 'not true at all'. Additionally, the item, 'I believe I can achieve my goals, even if there are obstacles' was also listed in regard to optimism, with the majority of all respondents indicating that this statement was true to varying degrees. Table 7 demonstrates this as 37.50% (n=3) of the less than 1 year participants selected 'true nearly all the time', 12.50% (n=1) answered with 'often true' and a further 37.50% (n=3) selected 'sometimes true'. Furthermore, the other item that corresponds with optimism was, 'I am not easily discouraged by failure', to which Table 7 shows that the highest response was 33% (n=3). Interestingly, the remaining responses were evenly split with 22% (n=2) representing each of the following, 'sometimes true', 'often true' and 'true nearly all the time'. For the less than 1 year participants, Table 7 indicates that the answers 'true nearly all the time' and 'sometimes true' both received 25% (n=2) of responses, and a further 12.50% (n=1) selected 'often true'.

The final aspect of resilience the program has increased is the participants' ability to maintain attention or cognitive focus under pressure. The CD-RISC-10 item which corresponds with this aspect was, 'under pressure, I stay focused and think clearly'. For the 1 to 4 year participants, Table 7 demonstrates that the highest response to this item was 44% (n=4) for 'sometimes true', followed by 22% (n=2) for 'often true'. For those who have



been involved in the program for less than 1 year, Table 7 shows that the responses for 'often true' and 'sometimes true' both received 25% (n=2), with a further 12.50% (n=1) selecting 'true nearly all the time'.



## **Evaluation training**

Of the three respondents to the evaluation training questionnaire only 1 had previous experience in conducting evaluations. Questions on the increase in understanding of confidentiality, consent, ethics and mandatory reporting elicited responses ranging from partially, moderately and extensively increased. In relation to managing, evaluating and presenting survey/interview information the responses ranged from increased, moderately increased and extensively increased. For questions around confidence in the ability to develop a survey and semi structured interviews the respondents indicated a moderate and extensive increase. Similarly, responses indicated that the respondent's and a moderate and extensive increase in their understanding of managing disclosures and the principles of confidentiality in presenting information.

### Conclusion

Whilst the Nanyapura program has not run explicit alcohol and drug education programs since the advent of COVID-19 and the participant number was small, it can be seen that the program has had an overall positive impact upon those who have been involved and who participated in the survey. The recent lack of explicit training on the impact of drugs and alcohol can be seen in the results of those participating for less than one year in relation to increasing their knowledge of the harms of drugs and alcohol use. However, for those in the one to five years group there was an increased awareness thus indicating the program overtime and the previous education programs have led to an increased awareness of drug and alcohol misuse.

The majority of participants in both groups reported that the program had a positive impact upon them except in the area of School and academic performance for the less than 1 year group. However the positive improvements in mental health, social development etc. should lead overtime through increased wellbeing of the participants to improvements in school and academic performance as was seen in the one to five years group. The other important finding in line with the aims of the Nanyapura Boxing program was the reported positive influence for both groups of the interactions with Police.



The reported decrease in behaviours that are linked to delinquency highlight that the program is having a positive impact upon the participants. In particular the strong reduction in those who had been involved in fights and receiving informal or informal Police cautions highlights the positive impact of the program with it reinforcement of positive behaviour of the participants. Similarly the reported increase in resilience of the participants who had been in the program for a period of time shows the positive impacts of the Nanyapura Boxing program.

As a primary prevention program, the Nanyapura program has shown to achieve its aims and enhance the development, knowledge, resilience and prosocial behaviour of the children and young people who participate. The results indicate that program has varying degrees of impact on the respondents, demonstrating a correlation between the length of time an individual has participated in the program and the more significant the positive impact on them. The program has shown to have a positive effect on the different developmental aspects of participants, and increased their knowledge of a healthy mindset. This is consistent with the literature on similar programs which highlights the effectiveness of these programs on engaging youth, improving their mental and physical health, improving their prosocial behaviour and supporting their overall well-being and development. However, the program has not significantly increased the resilience of participants or their knowledge in relation to harms associated with the risky use of drugs and alcohol, the latter can be attributed to the pause in the educational aspects of the program.

The training in undertaking evaluations has been successful and there is planned ongoing engagement via the lead author to work with the mentors to develop an ongoing evaluation tools and processes.

#### Recommendations

The survey results indicate that the participants who experienced the educational lessons in relation to the harms associated with risky drug and alcohol use have benefitted from them, and the program would benefit from restarting the lessons. With the training of the mentors it is recommended that an ongoing evaluation program be undertaken with new entrants to



the program being provided a survey and followed up towards the end of the year for all participants. To overcome the difficulties of being able to survey those under 12 it is recommended that the parents/carers of those under 12 be provided a survey to record any changes in behaviour etc. in that cohort on an annual basis.



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