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The relationship between justice system non-involvement and the social and emotional wellbeing of young Aboriginal and Torres Strait Islander people

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Aboriginal and Torres Strait Islander young people are highly overrepresented within the Australian justice system. Despite an increase in research and policies, it is still unclear which interventions, programs and policies are most effective. The aim of the current study was to investigate the relationship between the Social and Emotional Wellbeing (SEWB) of Aboriginal young people and justice system non-involvement from a strengths-based perspective. The sample consisted of 725 Aboriginal adolescents aged 10–15 years who completed The Next Generation Project's Youth Well-Being Study survey. Logistic regression was conducted to assess the SEWB factors associated with justice system non-involvement. It was found that self-rated good health, positive scores on the Prosocial Scale of the Strengths and Difficulties Questionnaire and younger age were significant predictors of justice system non-involvement. Policies and programs focusing on systems level approaches to support wellbeing in young Aboriginal people are likely to be beneficial.

Keywords: Aboriginal and Torres Strait Islander; health; Indigenous Australian; justice system; mental health; preventative programs; protective factors; social and emotional wellbeing; strengths-based; young people

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Of the 677 young people aged between 10 and 17 years in detention on an average night in Australia, 54% are of Aboriginal and/or Torres Strait Islander descent (Australian Institute of Health Welfare (AIHW), 2022; Evans & Fraser, 2009; Pfeifer et al., 2018). This high

incarceration rate is considered a major health and social issue for young Aboriginal and Torres Strait Islander people¹ (AIHW, 2012; Blandford & Sarre, 2009; Heffernan et al., 2009; Law Council of Australia, 2014). Statistics indicate that Aboriginal young

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¹For the purposes of this paper the term “Aboriginal peoples” will be used to respectfully refer to the diverse range of First Nation peoples across Australia and the Torres Strait Islands. This is in no way meant to minimise the vast differences in culture, language, ceremony, beliefs and rituals that exist between First Nation peoples.

people aged 10–17 years are 20 times more likely to be held in custody than non-Indigenous people of the same age (AIHW, 2022; Dudgeon et al., 2014; Papalia et al., 2019; Stathis et al., 2014). To compound this heightened custodial rate, Aboriginal young people held in custody are more likely to enter the juvenile justice system at an earlier age, have more contacts with the justice system and are more likely to be sentenced to detention rather than community-based supervision than their non-Indigenous counterparts (AIHW, 2012; 2018; Blandford & Sarre, 2009; Brown, 2012; Evans & Fraser, 2009; Pfeifer et al., 2018).

The experience of Aboriginal peoples

Aboriginal peoples represent the longest continuing cultures in the world, estimated to be over 65,000 years old (Nagel et al., 2020). Since the colonisation of Australia, Aboriginal peoples have been subjected to a wide range of discriminatory interventions, exclusions and social controls (White, 2015). This has resulted in a disproportionate and unacceptable level of disadvantage, within an otherwise wealthy country (Nagel et al., 2020). Decades of colonial exploitation and systemic attempts to destroy Aboriginal peoples and their cultures, such as forced removal of children, mass killings, imprisonment in missions, dismantling of traditional societies and hyper-incarceration, have contributed to this disadvantage (Desmond Dawes & Davidson, 2019; Dudgeon et al., 2014, 2017; Nagel et al., 2020). Despite this painful history and collective experience, Aboriginal people and communities continue to exhibit resilience and strength in contemporary society (Dudgeon et al., 2017). Many important cultural learnings have been passed through the generations and are exhibited by Aboriginal peoples today, including a powerful connection to culture, land, community and spirituality (Nagel et al., 2020).

The genocide² experienced by Aboriginal peoples has resulted in a characteristically young population. Aboriginal children aged 0–14 represent 34% of the Aboriginal population; whereas, children of this age range represent 18.7% of the total Australian population (AIHW, 2020). The developmental period in a person's life from puberty to young adulthood is characterised by extensive physical, mental and personal growth and transition, as the foundations for a successful adulthood are developed (Haswell et al., 2013; Williamson et al., 2016). Thus, to develop a better understanding of the experiences of Aboriginal peoples it is critical that research explores the experiences and characteristics of young people.

The overrepresentation of aboriginal people within the justice system

Young Aboriginal people are overrepresented throughout all stages of the Australian justice system, and this overrepresentation continues to climb despite an increase in awareness and attempts at reform³ (AIHW, 2012; Cunneen, 2006; Papalia et al., 2019; Weatherburn et al., 2003; Weatherburn & Fitzgerald, 2006). Policies designed to address the specific needs of Aboriginal communities often fall short in practice, failing to recognise the diversity of Aboriginal peoples and remaining committed to a mainstream punitive approach to criminal

²The term 'genocide' has garnered some scholarly debate within the Australian context. For the purpose of this paper genocide refers to frontier violence and killing of Aboriginal people from the late eighteenth century and the assimilation and forcible removal of Aboriginal children in the twentieth century (Dwyer & Ryan, 2016).

³There is some debate regarding the cause and solution to the over-representation of Aboriginal people in the justice system. Some scholars contend that the leading cause is high rates of Aboriginal involvement in serious crime and that to reduce this we need to address the underlying causes of criminality. Others claim that overrepresentation is the consequence of systemic bias towards Aboriginal people. See Weatherburn et al. (2003), Cunneen (2006) and Weatherburn and Fitzgerald (2006) for further details into the debate.

justice (Chua & Foley, 2015). Research shows that a complex and interrelated set of factors contributes to the overrepresentation of Aboriginal peoples in the justice system (Papalia et al., 2019; Pfeifer et al., 2018). One factor identified is the adoption of Western justice systems, laws and practices since colonisation (Hamilton et al., 2020; Pfeifer et al., 2018). This remains difficult for Aboriginal peoples who held well-established systems of law and order. Many Aboriginal people retain their community beliefs regarding definitions of offending, perceptions of justice and conceptualisations of rehabilitation (Pfeifer et al., 2018).

Another potential precursor for increased justice system involvement is the extreme levels of poverty and disadvantage faced by some Aboriginal people (Commonwealth of Australia, 2016). Research continually shows a consistent relationship between hardship and crime, and it is well established that Aboriginal people disproportionately face considerable disadvantage as a result of unemployment, substance abuse, mental health issues, over-crowded housing and family violence (Pfeifer et al., 2018).

Systemic bias and differential treatment on the part of police and other key justice system actors towards Aboriginal people is also identified as a contributing factor to the high involvement in the justice system (Law Council of Australia, 2014; Papalia et al., 2019). It is important to note that crime statistics do not measure prevalence of crimes or who is responsible for committing crimes but, instead, reflect the rate and the demographics of people who are caught and punished (Commonwealth of Australia, 2016). Aboriginal young people receive differential treatment from police even prior to committing a crime (Brown, 2012). Aboriginal people are more likely to be arrested, charged, taken to court and given bail conditions compared to their non-Indigenous counterparts, who are more likely to receive a police caution (Blandford & Sarre, 2009; Brown, 2012). A

study by Brown (2012), found that Aboriginal participants had numerous negative interactions with police and were hassled for innocuous acts such as catching public transport. This reflects a negative attitude from police and the courts towards Aboriginal young people, suggesting a larger systemic issue in the Australian justice system (Brown, 2012; Pfeifer et al., 2018).

Social and Emotional Wellbeing

It is well established throughout the literature that there is a relationship between poor mental health and engagement with the justice system (Clough et al., 2008; Dudgeon et al., 2014; Heffernan et al., 2009; Shepherd et al., 2020; Stathis et al., 2014). However, narrow Western definitions of mental health do not fully appreciate the holistic understanding of wellness held by Aboriginal peoples (Dudgeon et al., 2014, 2017; Gee et al., 2014). For researchers, policy makers and practitioners it is crucial to adequately define health concepts in a way that is relevant and consistent with the Aboriginal experience (Gee et al., 2014; Nagel et al., 2020; Salmon et al., 2019). Social and Emotional Wellbeing (SEWB) is a more culturally appropriate term, established and endorsed by Aboriginal peoples, to explain the sense of health and connectedness that is important to Aboriginal peoples (Gee et al., 2014; Mamor & Harley, 2018; Salmon et al., 2019; Skerrett et al., 2018). SEWB can be thought of as the individuals and the collective's connection to body, mind, land, family, culture and spirituality (Dudgeon et al., 2014, 2017; Garvey, 2008; Gee et al., 2014; Haswell et al., 2013; Salmon et al., 2019).

The majority of current research looking at the SEWB of young Aboriginal people takes a deficit approach, highlighting that young Aboriginal people experience significantly more SEWB difficulties, mental health problems and psychological distress than non-Indigenous young people (Mamor & Harley,

2018). Aboriginal young people are more often evaluated as being at risk of clinically significant emotional or behavioural difficulties and are more likely to engage in self-harm or suicide compared to non-Indigenous young people (Garvey, 2008; Helmer et al., 2015; Williamson et al., 2016). However, only a limited number of studies have examined the SEWB of Aboriginal young people from a strengths-based approach. The Longitudinal Study of Indigenous Children (LSIC) is a national study of 1,759 Aboriginal children across Australia. The LSIC collected responses to a number of SEWB factors, including standard health measures, identity, cultural engagement, language use, community strengths and problems, life stressors, distress and family relationships (Salmon et al., 2019). The results of this study found that young people who attended cultural events and spent time with extended family members were more likely to have higher levels of resilience. The authors argue that these findings infer that connection to culture and family may act as protective factors for Aboriginal young people. A 2016 study by Williamson and colleagues examined the mental wellbeing and physical health of Aboriginal children aged 4–17 years. The paper took a strengths-based approach and focused on the factors associated with good SEWB. Parents and carers of participants were asked to complete the Strengths and Difficulties Questionnaire (SDQ) for their child and answer questions relating to physical health, nutrition, exercise and development. Findings indicated a close to average level of risk for emotional or behavioural problems and the majority (72%) of children exhibiting good mental health. Child mental health was also correlated with aspects of physical health, carers' wellbeing, and home environment. This literature provides evidence of SEWB factors as being protective to young Aboriginal people; this may indicate that SEWB factors could be an appropriate target for preventative programs.

SEWB and justice system involvement

There are little to no studies focusing selectively on the relationship between the SEWB of young Aboriginal people aged 10–15 years and the justice system, and the implications of this relationship on preventative program targets. Findings from research with Aboriginal adults involved with the justice system and non-Indigenous young people involved with the justice system indicate that there is some relationship between wellbeing and justice system engagement. A study by Shepherd et al. (2020) provides insight into the wellbeing of Aboriginal adults both involved and not involved with the justice system. This study examined the differences between participants by incarceration status across a number of factors, such as mental health concerns, education, employment, service access and substance use. The results showed significant associations between wellbeing indicators and incarceration, whereby those with characteristics of worse wellbeing were more likely to have been incarcerated. In another study, it was found that young people within the justice system experienced a higher prevalence of comorbid mental health problems and a higher death rate as compared with those who had no involvement (Clough et al., 2008). Similarly, in a study of adult Aboriginal prisoners in Victoria it was shown that the mean score on the Kessler-5 distress scale for the sample was above the high/very high distress threshold (Shepherd et al., 2018). This study also revealed that being culturally engaged was negatively associated with distress, suggesting cultural engagement is a protective factor to psychological distress.

As outlined in the literature review above, there appear to be several gaps in the current literature regarding the relationship between SEWB and justice system involvement. Most of the scientific focus has been directed toward documenting the unacceptable levels of overrepresentation of Aboriginal people in the justice system and to defining the lives of this group in terms of deficit in comparison to

the non-Indigenous population (Helmer et al., 2015; Pfeifer et al., 2018). However, a deficit approach paints a limited picture of Aboriginal lives (Heffernan et al., 2009). It is important to consider the impact for Aboriginal communities and people to continually have their experiences and lives described in terms of what they are lacking (Helmer et al., 2015). Deficit-based approaches can cause harm to the population, reinforce feelings of helplessness, increase stigma and generate little knowledge about factors associated with strong SEWB (Helmer et al., 2015; Henderson et al., 2007; Williamson et al., 2016). In light of this, the current study will utilise a strengths-based approach to explore the relationship between SEWB and justice system non-involvement. Identifying the factors associated with high SEWB among Aboriginal young people may provide valuable information for health-promoting policies and programmes, such as justice reinvestment and other preventative programs (Henderson et al., 2007; Williamson et al., 2016).

Preventative programs

The overrepresentation of Aboriginal people in Australian prisons and detention centres impacts greatly on Aboriginal people, families and communities (Finizio, 2018). Overrepresentation also results in a staggering cost to the Australian economy, with a recent study estimating a \$109,500 annual cost to house a person in prison (Desmond Dawes & Davidson, 2019; Finizio, 2018). This expenditure is a poor investment in social, health and economic terms, especially in relation to the incarceration of low-level offenders (Calma, 2018). In light of this, a number of Australian government and research reports have called for alternative strategies to reducing crime and reoffending amongst Aboriginal people, with a focus on specialised approaches to address causes at a community level (Calma, 2018; Desmond Dawes & Davidson, 2019; Willis & Kapira, 2018). Cost reduction,

decarceration and improved public safety are the primary goals of preventative programs (Brown, 2016). These programs focus on early intervention and crime prevention through redirecting money away from funding imprisonment to funding community programs instead (Brown, 2016; Calma, 2018; Desmond Dawes & Davidson, 2019; Finizio, 2018; Labrecque et al., 2018). By reducing the likelihood of people from overrepresented areas and communities being sentenced or reducing the time they spend in prison, there is a possibility of measurably reducing the expenditure on the prison system (Brown, 2016; Willis & Kapira, 2018). Preventative programs are proving to be an effective evidence-based and collaborative method of reducing justice system involvement in Aboriginal communities. However, it is unclear which specific factors are most effective to target for young Aboriginal people.

Aim

The aims of the current research are to: (1) compare the SEWB of Aboriginal young people aged 10–15 years who have and have not had prior involvement with the justice system, and (2) to explore the factors associated with no justice system involvement. It is hoped that the findings of this study may highlight the types of protective factors that can be utilised as targets in preventative programs and policies to minimise the overrepresentation of Aboriginal people in the justice system.

Hypotheses

A number of hypotheses are proposed:

H1: It is hypothesised that young people reporting better general health will be less likely to be involved with the justice system.

H2: It is hypothesised that those young people with Strength and Difficulties Questionnaire (SDQ) responses conducive of high strengths and low difficulties will be less likely to be involved with the justice system.

H3: It is hypothesised that those who report a stronger connection to culture will be less likely to be involved with the justice system.

H4: It is hypothesised that those who report a stronger connection to community will be less likely to be involved with the justice system.

H5: It is hypothesised that those who report a stronger connection to family will be less likely to be involved with the justice system.

Method

Participants and procedures

The study sample comprised 725 young people aged 10–15 years who completed the baseline survey of the Next Generation Youth Well-being Study (see Gubhaju et al., 2019). The Next Generation Youth Well-being Study is a strengths-based survey assessing the health and wellbeing of Aboriginal and Torres Strait Islander adolescents aged 10–24 years from Central Australia, New South Wales and Western Australia. Participants were recruited from the community through personal contacts and networks, youth centres, sporting clubs and youth health services, and by peer recruiters (i.e. individuals employed at the three sites to recruit peers within their networks). Informed consent was gained from each participant and from the parent/carer of those participants under the age of 16 years. Participants then completed the baseline survey and health assessments. Surveys were created on REDCap (Research Electronic Data Capture) and designed to be self-completed electronically on tablets. A more detailed methodology for the Next Generation Youth Well-being study can be found in Gubhaju et al., 2019.

Materials

Dependent variable

The dependent variable for this study was self-reported involvement with the justice system

(0 = Involved, 1 = Not Involved). Participants were asked a total of four justice-related questions in the survey ‘Have you been questioned or given a warning by police?’, ‘Have you been harassed by or had any negative contact with the police?’, ‘Have you been charged by police?’, and ‘Have you been sent to jail by a judge or magistrate?’, in which they could respond with ‘Yes’ or ‘No’. The current study considered a participant who had answered ‘Yes’ to the question(s) ‘Have you been charged by police’ and/or ‘Have you been sent to jail by a judge or magistrate’ as justice involved. Participants who had answered ‘No’ to these survey items were considered not justice involved.

Predictor variables

The predictor variables for this study are all reflective of SEWB components. SEWB is a multidimensional concept of health that recognises connections to mind, body, culture, family, spirituality and Country. The Next Generation survey asked participants several questions that reflected some of these connections, and these responses were chosen to measure participants’ SEWB. Only those that were found to be associated with justice system involvement, via chi-square and *t*-test analyses, were utilised in the current study.

Age. Participants were asked how old they were in years at the time of the survey.

Health (body). Participants were asked to respond on a 5-point Likert scale to the question: ‘In general, how would you say your health is?’ Responses ranged from *poor* (= 0) to *excellent* (= 4).

Mental health (mind). The Strengths and Difficulties Questionnaire (SDQ; Goodman et al., 1998) self-report version was utilised to measure their connection to mind or mental health component of SEWB. The SDQ is a commonly used mental health screening tool and has demonstrated acceptability and

validity for use amongst Aboriginal young people (Williamson et al., 2014). The questionnaire comprises 25 items designed to assess the psychological adjustment of children. Participants responded to each item as *not true*, *somewhat true*, or *certainly true*. Total difficulties scores between 0 and 14 are considered close to average (80% of population), scores of 15–17 are considered slightly raised (10% of population), scores of 18–19 are considered high (5% of population), and scores of 20–40 are considered very high (5% of population). The items in the SDQ comprise five scales (five items each), that provide some understanding of the presence or absence of Emotional Symptoms, Conduct Problems, Hyperactivity-Inattention, Peer Problems and Prosocial Behaviour. Please note that the Hyperactivity–Inattention scale was not found to be significantly associated with justice involvement (see [Appendix](#)), therefore this scale was not included in the final analysis.

Emotional symptoms. Questions relate to the individual's feelings of worry, nervousness, fear, and unhappiness. Participant responses received a score from 0 to 10, with higher scores indicating the participant is at an increased risk of clinically significant problems. Scores between 7 and 10 are indicative of very high emotional problems.

Conduct problems. Questions relate to the individual's feelings of anger, level of obedience and behaviours such as fighting with other children, lying, and stealing. Participant responses received a score from 0 to 10, with higher scores indicating a higher risk of clinically significant conduct problems. Scores between 6 and 10 are considered reflective of very high conduct problems.

Peer problems. Questions relate to the individual's peer relationships, such as whether they are lonely, if they have friends, and if they are bullied or liked by others. Participant responses received a score from 0 to 10, with

higher scores indicating poorer peer relationships. Scores between 5 and 10 are considered very high peer problems.

Prosocial behaviours. Questions relate to how the individual treats others, such as whether they are considerate to other people's feelings, whether they share with and help others and whether they are kind to those younger than themselves. Participant responses received a score from 0 to 10, with lower scores indicating the participant exhibits a lower level of prosocial behaviours. Scores between 0 and 4 are indicative of very low prosocial qualities.

Community, culture & family. Participants were asked questions about their Aboriginal cultural engagement, connection with their family and community and engagement in community activities. These questions required a mixture of binary, multiple-choice and Likert scale responses.

Statistical analyses

The analysis was restricted to young people aged between 10 and 15 years who identified as Aboriginal and/or Torres Strait Islander. The associations between justice system involvement and items reflecting connection to mind, body, culture, family, spirituality, and land were examined using chi-square analyses and *t* tests. Logistic regression was utilised to assess whether not being involved with the justice system was associated with any variables found to be significant in the chi-square and *t*-test analyses. All the logistic regression assumptions were met.

All analyses were programmed in IBM SPSS Statistics v.28.

Ethics

Ethical approval for the current study was received from Swinburne University Human Research Ethics Committee. The Next Generation Youth Well-being Study received

ethics approvals from the following committees: Central Australian Aboriginal Human Research Ethics Committee, Western Australian Aboriginal Health Ethics Committee, Aboriginal Health and Medical Research Council of NSW Ethics Committee, Alfred Health Ethics Committee, and the University of Melbourne Medicine and Dentistry Human Ethics Sub-Committee.

Results

The Next Generation Youth Well-being Survey produced 30 independent variables that represented SEWB domains. Chi-square and t-test analyses were conducted to find the variables that were significantly associated with justice system non-involvement (see [Appendix A and B](#) for results). Eight categorical independent variables violated the chi-square assumption that no more than 20% of expected counts should be less than five. According to Field (2018), when the expected frequencies are too low, there is a radical reduction in test power. Due to the violation of this assumption these independent variables were discounted and removed from the analysis. Remaining

variables were considered significantly associated at the $p < .05$ level.

Sample statistics

Overall, 725 participants completed the Next Generation Project Youth Wellbeing survey version for 10–15-year-olds. During the data screening process, eight cases were found to be over the age of 15 years, and four did not identify as Aboriginal and/or Torres Strait Islander; these were removed. A further 82 cases were removed for not responding to the two required justice related items on the survey. The final sample consisted of 631 participants, 597 of whom had not been involved with the justice system and 34 who had been involved. Of the participants, 338 identified as female, 284 as male and 1 identified as ‘no gender’, the remaining 8 participants did not respond. The majority (68.4%) completed the survey in Western Australia, 25.8% were from NSW and 5.7% from Central Australia. Most of the participants (98.1%) identified as Aboriginal, and the remainder identified as Aboriginal and Torres Strait Islander. Descriptive statistics for justice involved and justice non-involved are presented in [Table 1](#).

Table 1. Comparison of justice involved and justice non-involved sample statistics.

	Not Involved		Involved		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Gender						
Male	265	44.4	19	55.9	284	45.0
Female	324	54.3	14	41.2	338	53.6
No gender	1	0.2	—	—	1	0.2
Not answered	7	1.2	1	2.9	8	1.3
Location						
Central Australia	29	4.9	7	20.6	36	5.7
Western Australia	412	69.0	20	58.8	432	68.4
NSW	156	26.1	7	20.6	163	25.8
Aboriginal status						
Aboriginal	587	98.3	32	94.1	619	98.1
Torres Strait Islander	—	—	—	—	—	—
Aboriginal & Torres Strait Islander	10	1.7	2	5.9	12	1.9

Table 2. Statistically significant predictor variables.

Variable	Not Involved		Involved		p
	M	SD	M	SD	
Age	12.17	1.67	13.59	1.28	<.001
Health ^a	2.72	.98	2.00	1.17	<.001
Emotional Scale ^b	3.53	2.33	4.45	2.12	.028
Conduct Scale ^b	3.45	1.80	4.79	2.26	<.001
Peer Scale ^b	4.66	1.66	5.33	1.87	.022
Prosocial Scale ^c	6.95	2.14	6.00	2.68	.014
SDQ Total Difficulties Score ^d	16.85	5.60	20.18	6.69	.001

Note. The Strengths and Difficulties Questionnaire (SDQ) is comprised of five scales (Emotional Scale, Conduct Scale, Hyperactivity-Inattention Scale, Peer Problem Scale and Prosocial Scale), each of which are scored separately. The Total SDQ score is the sum of scores from the Emotional Scale, Conduct Scale, Hyper-Inattention Scale and Peer Problems Scale.

^aMeasured from *poor* (0) to *excellent* (4). ^bScores range from 0 to 10, higher scores indicative of higher risk of clinically significant problems. ^cScores range from 0 to 10, lower scores (0–4) indicative of very low prosocial qualities. ^dScores range from 0 to 40, scores between 20 and 40 are indicative of very high total difficulties.

Descriptive data for the involved and not involved groups is presented in Table 2.

Predicting justice system non-involvement

A logistic regression was performed to assess the impact of age, health, total difficulties score on the SDQ and scores on the Emotional Symptoms, Conduct Problems, Peer Problems and Prosocial Scales of the SDQ on the likelihood that participants have no contact with the justice system.

The logistic regression model was statistically significant, $\chi^2(8, N=576) = 53.11, p < .001$, indicating that the model was able to distinguish between participants who had not been involved with the justice system and those who had been involved. The model explained 28% (*Nagelkerke R²*) of the variance in involvement or non-involvement with the justice system and correctly classified 95.3% of cases.

Three of the predictor variables made a unique statistically significant contribution to the model (age, health, and Prosocial Scale of the SDQ; see Table 3).

The strongest predictor of not being involved with the justice system was

participants’ self-reported health, recording an odds ratio of 1.74. This indicated that the higher a participant rated their health the more likely they were to report not having been involved with the justice system.

The second strongest predictor of justice system non-involvement was the participants’ score on the Prosocial Scale of the self-report SDQ. The results showed that for every additional point score on the Prosocial Scale, participants were approximately 1.35 times more likely to report not having been involved in the justice system. That is, participants who were not involved with the justice system were more likely to portray prosocial behaviours ($M = 6.95$) than those who had been involved with the justice system ($M = 6.00$).

Age was also found to be a predictor of justice non-involvement in this model. The odds ratio of 0.63 for age indicates that for every year younger the participant was they were approximately 37% less likely to report involvement with the justice system.

Discussion

The aims of this study were to compare the SEWB of Aboriginal young people aged 10–

Table 3. Results of logistic regression examining justice system non-involvement.

Variable	<i>B</i>	<i>SE</i>	Wald Statistic	<i>p</i>	OR [95% CI]
Age	-0.46	0.15	9.59	.002	0.63 [0.47,0.84]
Health	0.55	0.22	6.03	.014	1.74 [1.12,2.69]
Emotional Scale	0.18	0.21	0.70	.402	1.20 [0.79, 1.82]
Conduct Scale	-0.12	0.20	0.34	.561	0.89 [0.60, 1.32]
Peer Scale	0.09	0.23	0.15	.704	1.09 [0.70, 1.70]
Prosocial Scale	0.30	0.12	6.60	.010	1.35 [1.07,1.69]
Total SDQ	-0.20	0.14	1.88	.170	0.82 [0.62, 1.09]

15 years who have and have not had prior involvement with the justice system, and to explore the factors associated with no justice system involvement. The findings from this study showed support for the first and second hypotheses; participants with better self-rated health and participants who scored higher on the SDQ scale of Prosocial Behaviour were less likely to be involved with the justice system. The specific survey items that were chosen to represent connection to culture, community and family were not found to be statistically significant; thus, the three remaining hypotheses were not supported.

The strongest predictor of justice non-involvement in the model was a participant's self-rated health. It was found that the better a participant rated their own health the less likely they were to be involved with the justice system. This might suggest that helping young Aboriginal people to maintain good physical health, for example by becoming more connected with their bodies, maintaining a healthy diet, exercising regularly through team and individual sport and having access to regular health care could help protect young Aboriginal people from engagement with the justice system. Previous research suggests that there is a relationship between better health and higher socio-economic status (Shepherd

et al., 2012), and socio-economic status is documented well throughout literature to be associated with justice system involvement. Poor health outcomes are intricately entwined with deeply embedded socio-economic disadvantage and marginalisation. Therefore, socio-economic status might be a mediating factor in this result and future research should endeavour to add a socio-economic status variable when looking at this relationship between health and justice system involvement. However, previous studies have also shown that there is a strong relationship between physical health and mental health (Williamson et al., 2016), and this evidence is in line with the holistic view of SEWB and the results of this study.

The Prosocial Behaviours Scale scores from the SDQ were also found to be significantly associated with justice non-involvement. A high score on this scale reflects an individual who is considerate of other people's feelings, who shares and helps others and shows kindness to children younger than themselves. The findings from this study indicate that young Aboriginal people who score higher on the Prosocial Scale and assess themselves as having the qualities mentioned above are less likely to be involved with the justice system. Previous research has not specifically

looked at the Prosocial Scale of the SDQ and justice system non-involvement, so it is difficult to compare this finding to past literature. However, associations between mental health problems and difficulties and justice system involvement from a deficit-based perspective are in line with this finding. That is, those involved with the justice system are shown to be more likely to have mental health problems, diagnoses of mental health disorders and experiences of psychological distress (Shepherd et al., 2020).

The association between age and justice system involvement has been documented regularly throughout previous research. The age crime curve shows that during late childhood and adolescence there is a major increase in the number of young people who engage in delinquent acts, and then this number tends to decrease in late adolescence and young adulthood (Loeber et al., 2015). It is universally accepted that involvement with the justice system and offending behaviour typically begins to increase between the ages of 12–14 years, and offending prior to this is relatively rare (Fagan & Western, 2005). The findings in the current study reflect previous literature with the mean age in the non-involved group around 12 months younger than the mean age of the involved group. Preventative programs aimed at young people at an early age are especially important within Aboriginal communities due to Aboriginal people often becoming engaged with the justice system at a much younger age than non-Indigenous people. The evidence suggests that programs should be targeted at primary-school-aged children, to enable pro-social affiliations to develop from a young age. Attempting to deliver a secondary intervention program to an individual who is already disengaging from prosocial affiliations is significantly more difficult.

This study addresses a major gap in the current literature and is the first study to investigate the relationship between SEWB of Aboriginal young people aged 10–15 years and non-

involvement with the justice system from a strengths-based perspective. Furthermore, the Next Generation Youth Well-Being Study provided an extraordinarily rich dataset of young Aboriginal people. The findings from this study will provide the research community with a valuable foundation to further research in this area. However, there are several caveats to note in relation to the current study. First, the results are limited due to the unequal distribution of participants within the two dependent groups; involved and not involved with the justice system, and the small absolute number of young people engaged with the justice system. This research was focusing on a young sample from the general population; therefore, it is not surprising that the majority of the sample had not been involved with the justice system. The low frequencies exhibited within the justice-involved group may have an impact on the validity of coefficient and odds ratio estimates, standard errors, and model fit statistics, due to the sparse data. Thus, the findings from this study need to be interpreted with these limitations in mind. The Next Generation team also used convenience sampling methods in specific locations within three states of Australia; thus, the sample might not be representative of the young Aboriginal populations from other areas.

The findings from this research did not demonstrate a connection between justice system non-involvement and connection to family, culture or community. These components of SEWB are difficult to measure, and the lack of significant association within this research does not prove that there is not such a relationship. The Next Generation Youth Well-Being Study was not specifically designed to support an investigation of the relationship between SEWB and justice system non-involvement. Therefore, some components of SEWB could not be adequately measured from the survey and were therefore omitted, such as connection to spirituality and land. Some questions utilised from this survey may not have adequately or accurately measured the components of SEWB, including those used to

measure connection to family, community and culture. Furthermore, the nature of the survey did not allow for a holistic portrayal of SEWB; instead, each component was presented as a standalone variable. Nevertheless, given the paucity of research available investigating SEWB factors as protective for justice involvement, this study provides an excellent foundation for further research.

Implications

This study aimed to compare the SEWB of Aboriginal young people who have and have not had prior involvement with the justice system and explore the SEWB factors associated with no justice system involvement. It was hoped that the findings of this study may highlight the types of protective factors that can be utilised as targets in preventative programs and policies to minimise the overrepresentation of Aboriginal people in the justice system. Preventative programs, such as justice reinvestment initiatives, are designed to prevent and reduce crime among young people and are widely used within Aboriginal communities. Although at an early stage of development, justice reinvestment has been met with enthusiasm and support in Australia and is viewed as an avenue to overcome some key justice system issues (Willis & Kapira, 2018). However, there was a paucity of evidence available to guide which interventions would be most effective.

The results from the current study showed that age, self-rated health and self-rated prosocial qualities were significant predictors of justice system involvement for the Aboriginal young people who participated. The findings from this study may suggest that preventative program interventions should focus on bettering the overall health of young Aboriginal people, for example through healthy eating, exercise, and access to regular health care. Supporting young Aboriginal people to connect with others prosocially may also work as an effective target for preventative programs, this could be achieved by developing their

prosocial qualities, by encouraging helping and sharing with others. From a holistic SEWB viewpoint these targets may be achieved by having young Aboriginal people engage with programs and activities that help them become more involved and connected with their families, community and culture, as well as promoting and improving connections to their body and mind. These could include individual and team sports or cultural activities within the community. These targets should be aimed at children younger than 12 years old as a means to better the SEWB of Aboriginal young people and their communities and help lower the risk of becoming involved with the justice system.

It is imperative to consider, however, that factors associated with Aboriginal SEWB and justice system involvement are largely structural and systemic issues that will require more than isolated preventative programs to solve them. A major cause of Aboriginal overrepresentation within the justice system, and hence, a major component of the solution, remains in addressing the systemic bias that exists in people and the systems we establish and maintain.

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Ethical standards

Declaration of conflicts of interest

Maicee Harrison has declared no conflicts of interest.

Justin Trounson has declared no conflicts of interest.

Stephane Shepherd has declared no conflicts of interest.

Lina Gubhaju has declared no conflicts of interest.

Anna Williamson has declared no conflicts of interest.

Rebecca Ivers has declared no conflicts of interest.

Francine Eades has declared no conflicts of interest.

Robyn Williams has declared no conflicts of interest.

Sandra Eades has declared no conflicts of interest.

Ethical approval

All procedures performed in studies involving human participants were in accordance with the ethical standards of Swinburne University Human Research Ethics Committee (Project 20234327-13891) and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Ethical approval for the Next Generation study was received from the following committees: Central Australian Aboriginal Human Research Ethics Committee (Ref #16-398 [phase 2]), Western Australian Aboriginal Health Ethics Committee (Ref #627 [phase 1]; Ref #719 [phase 2]), Aboriginal Health and Medical Research Council of NSW Ethics Committee (Ref #1255-17), Alfred Health Ethics Committee (Ref #149-15 [phase 1]; Ref #255-16 [phase 2]) and the University of Melbourne Medicine and Dentistry Human Ethics Sub-Committee (ID# 1851155).

Informed consent

Informed consent was obtained from all individual participants included in the study.

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Appendix A. Chi-square analysis results showing the relationship between justice system non-involvement and SEWB factors

Variable	χ^2	df	p
Participates in a club	1.35	1	.246
Participates in team sport	0.79	1	.375
Participates in sport ^a	—	—	—
Participates in creative activity ^a	—	—	—
Participates in academic activity ^a	—	—	—
Participates in new skill activity ^a	—	—	—
Participates in religious activity ^a	—	—	—
Participates in other activity ^a	—	—	—
Culture identity	1.32	618	.189
Culture confident	1.46	618	.144
Importance of language	1.92	618	.055
Language ^a	—	—	—
Culture at school ^a	—	—	—
Culture ancestors	0.42	91	.677
Close to family	−0.01	92	.990
Proud family	−0.61	93	.546
Engaged with family	0.01	91	.990
Other support	1.18	92	.243
Family identity	0.30	92	.763

^aThese variables violated the chi-square assumption of expected counts and could not be analysed.

Appendix B. *T*-test results showing the relationship between justice system non-involvement and SEWB factors

Variable	Statistic	<i>df</i>	<i>p</i>
Age	4.93	626	<.001
Level of activity	-0.89	554	.373
Health	-3.86	588	<.001
Importance of culture	-1.67	35.15	.103
Emotional Symptoms scale	2.20	611	.028
Conduct problems scale	4.04	610	<.001
Hyperactivity-inattention scale	1.15	611	.249
Peer problems scale	2.29	612	.022
Prosocial behaviour scale	-2.46	612	.014
SDQ total difficulties score	3.27	611	.001