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Understanding the Social and Emotional Wellbeing factors protecting Aboriginal and Torres Strait Islander young people from justice system involvement

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Aboriginal and Torres Strait Islander people are overrepresented in the Australian justice system. Previous research has uncovered a number of risk factors. However, very little attention, by comparison, has been given to protective factors, including Social and Emotional Wellbeing (SEWB) markers. The aim of the current study was to examine the relationship between SEWB markers and justice system non-involvement. The study utilised secondary data from the 2014–2015 National Aboriginal and Torres Strait Islander Social Survey, for young people aged 16–24 years. A hierarchical logistic regression found that SEWB markers were not significantly associated with justice system non-involvement when controlling for other variables. Being female, experiencing fair treatment as an Aboriginal person, abstaining from substances, being employed and housing stability were significantly associated with justice system non-involvement. These identified protective factors can inform preventative intervention strategies for young Aboriginal people at risk of involvement with the justice system.

Keywords: Aboriginal and Torres Strait Islander; Indigenous Australian; justice system; protective factors; Social and Emotional Wellbeing; strengths-based; young people.

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Introduction

The overrepresentation of Aboriginal and Torres Strait Islander people within the justice system

Aboriginal and Torres Strait Islander peoples¹ are considered to be caretakers of some of the world's oldest continuing cultures. They comprise hundreds of distinct nation groups around Australia, boasting a broad diversity of languages, histories, traditions and cultures

(Australian Institute of Health Welfare (AIHW), 2023b). Recent statistics estimate that Aboriginal people represent around 3.2% of the Australian population, yet they are substantially overrepresented within the Australian prison population (Australian Bureau of Statistics (ABS), 2022): nearly one third (32%) of the adult prison population and over one half (54%) of the juvenile detention population (AIHW, 2022, 2023a).

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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 these groups.

The majority of incarcerated Aboriginal people are male (91%) and relatively young in age (ABS, 2019). In 2021–2022, the rate of Aboriginal young people aged 10–17 years under supervision was 121 per 10,000 (AIHW, 2023c). In contrast, 6.5 per 10,000 non-Indigenous young people of the same age group were under supervision (AIHW, 2023c). This disparity demonstrates the magnitude of the current overrepresentation. On average, Aboriginal young people are more likely to have their first contact with the justice system at a young age and experience a rapid trajectory into the system (Koori Justice Unit, 2018; Pfeifer et al., 2018). It is argued that this is partially due to the lack of effective and appropriate preventative programs (AIHW, 2012; Commonwealth of Australia, 2016; Koori Justice Unit, 2018; Pfeifer et al., 2018; Smandych et al., 1993). This has important implications for subsequent criminal career trajectories and wellbeing (Pfeifer et al., 2018).

Previous research has shown that in Australia a complex and interrelated set of historical, social, cultural and environmental factors is associated with the overrepresentation of Aboriginal young people in the justice system (Doolan et al., 2013; Livingston et al., 2008; Papalia et al., 2019; Pfeifer et al., 2018). Many of the issues are systemic in nature (Cunneen, 2006; Doolan et al., 2013; Papalia et al., 2019; Smandych et al., 1993). Since colonisation, Aboriginal peoples have been subjected to a wide range of discriminatory interventions, exclusions and social controls, including forced removal of children, mass killings, imprisonment in missions, dismantling of traditional societies and hyper-incarceration (Desmond Dawes & Davidson, 2019; Dudgeon et al., 2017; Dudgeon et al., 2014; Nagel et al., 2020). This has resulted in a disproportionate level of disadvantage for Aboriginal peoples as compared to non-Indigenous Australians (Nagel et al., 2020).

Factors associated with justice system non-involvement

The majority of the research investigating the overrepresentation of Aboriginal people within the justice system is deficit-based—that is, it primarily focuses on risk factors as relevant intervention targets—and this is a common pitfall of the current research environment. This practice has been raised as a prevalent issue in research involving Aboriginal people (Thurber et al., 2020). Within criminological research, Aboriginal and/or Torres Strait Islander identity is sometimes viewed through a prism coloured by deficiency and disempowerment (Fforde et al., 2013; Pyle et al., 2019). This view may erroneously lead to a conclusion that Aboriginal and/or Torres Strait Islander identity itself is the *cause* of poor outcomes. Scholars have long called for the need to shift towards a strengths-based focus with the ultimate goal of advancing self-determination (Cunneen & Tauri, 2019). Strengths-based approaches are those that refocus research and policy to identify assets and strengths within individuals and communities and focus more on leveraging protective factors rather than solely mitigating deficits or risks (Thurber et al., 2020).

One strengths-based approach to addressing the overrepresentation of Aboriginal people within the justice system is to prioritise and cultivate protective factors. A protective factor is an influence in a person's life, whether a characteristic of themselves or of their environment, that mitigates against or decreases their likelihood of being involved in criminal activity or anti-social behaviour (Seto et al., 2023). The literature on protective factors for youth incarceration suggests that supportive family relationships, prosocial peers, academic achievement, reading ability, as well as psychological factors, such as self-esteem and empathy, are of greatest importance (Barnert et al., 2015). In a general sense, these appear mostly the same for Aboriginal young people. A report by the Koori Justice Unit (2017) mentioned a number of protective factors for young Aboriginal people including: (1) society and

community level factors such as cultural strength and resilience; (2) school level factors such as having pro-social peers; (3) family level factors including family stability; and (4) individual level factors such as strong social bonds within family and community. The influence of cultural identity for justice-involved populations is an emerging research topic, with evidence developing for its protective influence (Shepherd, 2019; Shepherd et al., 2018). Connecting with culture may have a stabilising influence on one's life by providing purpose, motivation and improved self-esteem (Shepherd, 2019).

Social and Emotional Wellbeing

The aforementioned protective factors for young Aboriginal people are reflective of the components of Social and Emotional Wellbeing (SEWB) markers. The concept of SEWB is central to the holistic view of health held by Aboriginal people and is characterised by the recognition of connections to mind, body, culture, spirituality, Country, family and community (Dudgeon et al., 2017; Gee et al., 2014; Jones & Day, 2011; Mamor & Harley, 2018; Shepherd et al., 2017).

Connection to mind

The connection-to-mind domain considers the whole spectrum of basic cognitive, emotional and psychological human experience (Gee et al., 2014). A healthy connection to mind is experienced as inner strength, resilience and peacefulness (Dudgeon et al., 2017). An individual with a strong connection to mind is able to manage their thoughts, stress, emotions and problems to protect and promote wellbeing. Connection to mind can be demonstrated through the absence of mental disorder and psychological distress, a sense of belonging, self-esteem, life satisfaction and internal mastery (Gee et al., 2014).

Connection to body

A strong connection-to-the-body domain of SEWB is expressed as feeling physically strong and healthy, engaging in healthy behaviour (e.g., healthy diet, exercise and access to healthcare), physically participating in life to the fullest extent possible and demonstrating respect for one's body (Dudgeon et al., 2017). Ill health and disability are also considered markers of the connection to body domain.

Connection to culture

Culture can be thought of as a body of collectively shared values, principles, practices, customs and traditions and has long been recognised as empowering for most Aboriginal people (Dudgeon et al., 2017). Connection to culture is shown through an individual's opportunity and ability to develop a connection to the knowledge, beliefs, laws and practices of their culture. This can be demonstrated through participating in workshops, being part of Aboriginal groups, knowledge of one's own mob, spending time with Elders and participating in cultural traditions such as ceremonies and language (Dudgeon et al., 2022).

Connection to spirituality

Spirituality is a dynamic aspect of Aboriginal culture; it gives meaning to life and creates a sense of identity (Dudgeon et al., 2017). Connection to spirituality is generally demonstrated through an individual participating in mindful practices, such as meditating or reflecting, or taking time out (Dudgeon et al., 2022).

Connection to Country

Land or Country refers to an area to which people have a traditional or spiritual association that brings about a deep sense of belonging (Dudgeon et al., 2017). Maintaining a connection to land is demonstrated through knowing where one is from, being able to return to Country, spending time in Country and fulfilling one's cultural responsibility to Country.

Connection to family

The collectivist nature of Aboriginal culture is governed and maintained by a complex and intricate set of rules that constitute the family and kinship systems (Dudgeon et al., 2017). A strong connection to family is manifested as an environment that is caring, obliging and reciprocal, with effective communication between members, and this results in feelings of security in the individual. Conversely, disunity and dysfunctions within family systems can negatively impact individuals and the collective.

Connection to community

Despite diversity in the types of communities in which Aboriginal people are involved, most Aboriginal people are strongly connected to their community (Dudgeon et al., 2017). A strong, healthy, functioning community will act as a significant support to the individual, particularly those who are vulnerable or at risk. Connection to community can be demonstrated through seeking support from and actively engaging with the community (Dudgeon et al., 2022). This engagement can be through activities such as men's and women's groups, social groups, sports groups and community projects.

When the harmony of these interrelations is disrupted, poor SEWB or ill health can be experienced (Dudgeon et al., 2017; Gee et al., 2014). SEWB is embedded within a historical, political and social framework, and consideration must be paid to Australia's colonial history, past and present government policies and social determinants of health when considering an individual's SEWB (Dudgeon et al., 2017; Gupta et al., 2020). The protective value of strong SEWB for Aboriginal people has been demonstrated in the literature. A study by Young et al. (2019) examined the protective factors for resilience in urban Aboriginal adolescents and found that resilience was associated with nurturing family environments, community social support and regular exercise. Further, a qualitative study by Reilly

et al. (2020) explored the risk and protective factors for methamphetamine use as described by Aboriginal stakeholders. They found that discussions of the protective function of prosocial involvement in the community and active engagement in community activities were prevalent. Similarly, the role of a cohesive, functional and healthy family was identified as being protective. Thus, improving the SEWB of Aboriginal people appears influential to developing healthy and resilient individuals. The downstream effects of enhanced SEWB at an individual level are stronger communities, which can support all members to meet their full potential (Haswell et al., 2013).

A limitation within the existing literature exploring SEWB markers as protective factors, or even risk factors, is that there isn't a unified measure of SEWB. A broader generalisation of what SEWB encapsulates is not necessarily incorrect; however, the current study wishes to restrict the measure of SEWB to fit within the seven domains (mind, body, culture, community, family, Country and spirituality), thus limiting the availability of relevant literature to explore.

To date, little attention has been paid to whether—and how—research could investigate the protective nature of SEWB markers for Aboriginal people, as an alternative to risk- or deficit-focused approaches, to reduce justice system involvement. To the best of our knowledge, only one other study has explored the utility of SEWB as a protective factor for young Aboriginal people in the justice context (Harrison et al., 2024). The study aimed to explore the factors associated with justice system non-involvement. The authors of the study utilised survey responses from an Aboriginal youth wellbeing study that were reflective of SEWB markers. The predictor variables included age, self-rated physical health and scores on the Strengths and Difficulties Questionnaire. That study found that for a sample of young Aboriginal people aged 10–16 years, components of SEWB (better physical health and prosocial qualities) were found

to be significant predictors of justice system non-involvement. However, the study did have a number of limitations that may have impacted the validity and reliability of the findings. The survey that was utilised was not specifically designed to examine the relationship between justice system non-involvement and SEWB markers, and therefore the authors were restricted to a limited number of survey items that were reflective of SEWB markers. The study was also limited by the unequal distribution of justice-involved and justice-non-involved groups, with no effort made to account for this in the analysis. The low frequencies displayed for the justice-involved group may have impacted the findings due to the sparse data.

Current study

There is an urgent need for more research focused on protective factors among Aboriginal young people. Nurturing protective SEWB markers through early preventative intervention programs could help reduce the risk of justice system involvement (Haswell et al., 2013; Koori Justice Unit, 2018). Early intervention strategies seek to prevent a young person becoming involved with the justice system in any capacity (Commonwealth of Australia, 2016). Preventing initial involvement at a young age may help reduce the overrepresentation of Aboriginal people in the justice system. Given the theoretical benefits associated with adopting a SEWB approach, unpacking these potential benefits empirically is warranted. This paper explores this by examining whether SEWB markers influence Aboriginal young peoples' likelihood of being involved with the justice system. The study utilises a secondary data analysis approach with microdata obtained from the 2014 to 2015 National Aboriginal and Torres Strait Islander Social Survey (ABS, 2016).

The aims of the current research are to: (a) examine the relationship between SEWB markers and justice system non-involvement for Aboriginal young people, and (b) explore

whether those relationships remain for Aboriginal young people when controlling for typical factors associated with justice system involvement. Two hypotheses are tested: that SEWB markers will be positively associated with justice system non-involvement (H1), and that these positive associations will remain significant when controlling for typical factors associated with justice system involvement (H2).

Method

Participants and procedures

Data were obtained from the Australian Bureau of Statistics 2014–2015 National Aboriginal and Torres Strait Islander Social Survey (ABS, 2016). This survey was conducted from September 2014 to June 2015 and includes data from a sample of 11,178 Aboriginal people living in private dwellings across Australia. The National Aboriginal and Torres Strait Islander Social Survey is a six-yearly multidimensional social survey that provides broad social information relevant to Aboriginal peoples Australia-wide. The Australian Bureau of Statistics supports the principle of Indigenous data sovereignty and actively works towards incorporating it into their practices through engagement with Aboriginal communities during planning, collection and dissemination activities. The survey was developed in consultation with Aboriginal groups and prominent Aboriginal academics and research bodies, as well as government agencies, to give Aboriginal communities greater control over how the data was collected, used and disseminated.

Informed consent by all participating adults and the parents or guardians of participants aged 17 years and under obtained by the Australian Bureau of Statistics to collect data for the National Aboriginal and Torres Strait Islander Social Survey. As part of the informed consent process conducted by the Australian Bureau of Statistics, all participants were informed that their data may be used in

future research projects. The survey was administered by experienced Australian Bureau of Statistics interviewers using a Computer-Assisted Interviewing questionnaire. Data were extracted for the current project, using DataLab, which allows for registered users to access detailed Australian Bureau of Statistics survey and integrated microdata for approved projects. Informed consent was not obtained from the individual participants included in the use of the data for this paper, as all participant data is de-identified by the Australian Bureau of Statistics prior to being made accessible to the researchers. A waiver of consent was approved for the use of secondary data by the Swinburne Human Research Ethics Committee (ID: 5550, approved 5/4/2022).

Materials

The 2014–2015 National Aboriginal and Torres Strait Islander Social Survey included a range of typical factors associated with justice system involvement (e.g. experience of stressors, experience of racism and employment status), as well as items from which the culturally appropriate concept of SEWB can be measured (e.g. cultural identity, recognition of traditional Country and psychological distress).

Dependent variable

The dependent variable for this study was self-reported involvement with the justice system (i.e. not involved or involved). The justice involvement variable was created using responses from two survey questions ‘whether formally charged by police’ and ‘whether ever incarcerated’. Thus, we considered participants who had been charged or had been incarcerated (or both) as being justice involved. Participants who responded that they had never been charged nor incarcerated were considered justice non-involved.

Predictor variables

The predictor variables for this study are grouped into two categories. Within the first category are variables reflective of SEWB markers, and the second category comprises variables that have been shown to be associated with justice system involvement (e.g. Ferrante, 2013; Hunter, 2001; Weatherburn et al., 2006, 2008).

SEWB markers

A total of 15 survey items were chosen to reflect five of the seven SEWB markers. The survey did not have any survey items available that measured a connection to family or spirituality; we were therefore unable to include these in our analysis. Conversely, multiple survey items were identified as measuring connection to mind, body, culture and community.

Mind

To measure connection to mind we chose survey items that assessed the participants’ cognitive, emotional and/or psychological experience. Two survey items were chosen: self-reported overall life satisfaction measured on a scale from 0 to 10 (with 0 being not satisfied at all and 10 being completely satisfied) and scores on the Kessler 5 (K5). Life satisfaction measures the extent to which a person feels satisfied with their life and how fulfilled they are (Olson et al., 2021).

The K5 is a modified version of the Kessler Psychological Distress Scale 10 (K10; Kessler et al., 2003). It measures levels of psychological distress and has been adapted for use in Aboriginal population surveys (ABS, 2016). The K5 has been shown to be a valid measure of psychological distress for Aboriginal populations, demonstrating good acceptability, good internal consistency/reliability ($\alpha = 0.89$), no indication of item redundancy, and achieved construct validity (70.1% of variance explained by one component; Brinckley et al., 2021). The scale asks participants five questions about how often during

the preceding four weeks they had felt nervous, without hope, restless, sad or if 'everything was an effort'. Participants respond on a five-point Likert scale (1 = none of the time, 2 = a little of the time, 3 = some of the time, 4 = most of the time, and 5 = all of the time). Responses to the questions are tallied to create a total score between five and twenty-five. Total scores between five and eleven are indicative of low levels of psychological distress and scores between twelve and twenty-five are indicative of high levels of psychological distress.

Body

Three survey items were chosen to measure connection to body, each assessing the physical health of the participant. The first was self-assessed health status, measured on a Likert scale (from 1 = excellent, to 5 = poor). The other two were disability status and whether the participant had been diagnosed with a long-term health condition, both of which were dichotomous variables (0 = no, 1 = yes).

Culture

Connection to culture is shown through an individual's ability to access and involve themselves with the knowledge, beliefs, laws and practices of their culture. Six survey items were utilised to measure this: whether the participant speaks an Indigenous² language; whether they understand an Indigenous language; whether they are currently learning an Indigenous language; whether the participant was involved in selected cultural events, ceremonies or organisations in the last 12 months; whether they participated in selected cultural activities in the last 12 months; and whether they identify with a

clan, tribal or language group. Each variable was dichotomous (0 = no, 1 = yes).

Community

Connection to community is demonstrated through accessing support from and actively engaging with the community. Three survey items were utilised to measure connection to community: whether the participant felt able to get general support from outside their household; whether they participated in selected sporting, social or community activities in the last 12 months; and whether they participated in organised sport or physical activities in the last 12 months. Each of these variables were dichotomous (0 = no, 1 = yes).

Country

Connection to land or Country is demonstrated by knowing where one is from and spending time on Country. Whether or not the participant recognised an area as homelands or traditional Country (0 = no, 1 = yes) was used to measure their connection to Country.

Other variables

A total of nine other variables were chosen from the literature as being factors typically associated with justice system involvement.

Age

The age crime curve is a well established and evidenced theory in criminological research that shows a curvilinear relationship between age and crime, whereby offending behaviour increases during adolescence, peaks in late adolescence to early adulthood and declines thereafter (Monahan et al., 2009; Rocque et al., 2019). In the current study participant age was measured in years.

Socio-economic status

Socio-economic status and financial strain are identified as risk factors for Indigenous over-incarceration (Shepherd et al., 2020).

²The term 'Indigenous' is used throughout the Method and Results sections when referring to variables, as this was the term used in the National Aboriginal and Torres Strait Islander Social Survey questions and data files.

Participants were asked to report their personal gross weekly income in deciles from 1 to 10 (1 being the lowest and 10 being the highest).

Sex

Prior research and crime statistics show that males are more likely to be involved with the justice system, and more likely to be incarcerated (AIHW, 2023c; Cho et al., 2019). Participant sex was categorised as male (= 1) or female (= 2).³

Experience of stressors

Previous research has found that experience of stressors or adverse life experiences is associated with offending behaviour and justice system involvement, with justice-involved individuals enduring more stressors than those not involved in the justice system (Shepherd et al., 2020). Participants were asked whether they had experienced stressors in the past 12 months (0 = no, 1 = yes). Stressors included health problems, family changes, work problems and other problems.

Experience of racism

Experience of racism was common amongst Aboriginal participants involved with the justice system in research by Hundleby et al. (2007) in Canada. Participants were asked if they had experienced unfair treatment in the last 12 months because of their Aboriginal and/or Torres Strait Islander identity (0 = no, 1 = yes).

Employment status

Unemployment is shown to be linked to offending behaviour and justice system involvement (Marchetti & Daly, 2017;

Shepherd et al., 2020; Weatherburn et al., 2006). Participants were asked their labour force status (0 = not employed, 1 = employed).

Homelessness

Homelessness is associated with multiple adverse health and social outcomes, including justice system involvement. Experiencing homelessness is significantly associated with an increased risk of violent offending leading to conviction (Nilsson et al., 2024). Participants were asked whether they had ever experienced being without a permanent place to live (0 = yes, 1 = no).

Removal from natural family

Historically, many Aboriginal children were removed due to the Stolen Generation government policy; more recently, there is a disproportionate rate of Aboriginal children entering the Child Protection system (Shepherd et al., 2020). Removal from natural family is considered a risk factor for justice system involvement in the literature (Shepherd et al., 2020). Participants were asked whether they or a relative had ever been removed from their natural family (0 = no, 1 = yes, 2 = refuse to answer).

Substance use

Substance abuse and misuse is linked to offending behaviour and involvement with the justice system (Hundleby et al., 2007; Marchetti & Daly, 2017; Shepherd et al., 2020; Weatherburn et al., 2006). Substance use was measured in the current study by asking participants if they had used substances in the last 12 months (0 = no, 1 = yes, 2 = refuse to answer).

Statistical analysis

The analysis was conducted at the national level; it was, however, restricted to young Aboriginal people aged between 16 and 24 years. A two-step hierarchical logistic regression was utilised to assess whether any

³Sex was presented as a dichotomous variable in this study due to being measured in this way in the survey. The authors acknowledge that having a 'gender' variable with other categories besides male and female might have influenced the findings of this study. This is something that future research should consider.

of the predictor variables were associated with *not* being involved with the justice system. Assumption testing was carried out, and it was discovered that the age variable violated the assumption of linearity between the predictor variables and log odds. To address nonlinearity, restricted cubic splines were fitted to the age variable. Splines work by transforming the variable by splitting the range of values in intervals and fitting a separate curve in each interval, resulting in a curve that is smooth and continuous (Lusa & Ahlin, 2020). Knots are the points that delimit the intervals, and for this analysis we fitted five knots for the age variable. All other logistic regression assumptions were met.

At Step 1, SEWB markers were inputted into the logistic regression to examine whether SEWB was associated with justice system non-involvement. At Step 2, the remaining predictor variables were inputted along with the SEWB markers, to examine if those associations in Step 1 would remain.

All analyses were performed in R Studio within the Australian Bureau of Statistics DataLab, and all outputs were vetted by the Australian Bureau of Statistics through their output protocol.

Ethics

Ethical approval for the current study for the use of secondary data was received from Swinburne University of Technology Human Research Ethics Committee (ID: 5550, approved 5/4/2022). Approvals were also granted for Microdata access in DataLab from the Australian Bureau of Statistics.

Results

Descriptive statistics

A total of 11,178 Aboriginal and Torres Strait Islander people from all around Australia completed the 2014–2015 National Aboriginal and Torres Strait Islander Social Survey. The current study was interested only in the data for participants aged 16–24 years (inclusive); any

participant who was outside of this age range was excluded from the analysis. One further participant was excluded for not answering the two justice-involved survey items. The final sample consisted of 1302 Aboriginal young people; 957 (73.5%) of these had not been involved in the justice system and 345 (26.5%) had been involved with the justice system. The mean age was 20 years, and there was a slightly larger representation of females than males, 732 and 570, respectively.

Logistic regression Model 1—SEWB markers

Step 1 of the hierarchical logistic regression was performed to assess the impact of 15 SEWB markers on the likelihood that participants had *not* been involved with the justice system.

Model 1 was statistically significant, $\chi^2(15, N = 1302) = 71.01, p < .001$, indicating that it was able to distinguish between participants who had not been involved with the justice system and those who had been involved. The model explained 4.7% (Hosmer & Lemeshow R^2) of the variance in justice system involvement or non-involvement.

Four of the predictor variables reflecting SEWB markers made a unique statistically significant contribution to the model (understands an Indigenous language ($p = .004$), recognises an area as homelands or traditional Country ($p = .043$), participated in selected cultural activities in last 12 months ($p = .006$) and overall life satisfaction ($p = .002$); see Table 1).

Overall life satisfaction mean score for those who were justice involved was 7.1, and the mean score for individuals not involved with the justice system was 7.6. The frequencies for the three categorical variables are presented in Table 2.

Odds ratios (OR) are a measure of effect size for counts (Field, 2018). The odds of an event occurring is defined as the probability of an event occurring divided by the probability of an event not occurring. If the resulting ratio

Table 1. Summary of hierarchical logistic regression analysis for variables predicting likelihood of justice system non-involvement.

Variable	Model 1			Model 2		
	B (SE)	Wald statistic	p	B (SE)	Wald statistic	p
Speaks an Indigenous language	0.04 (0.20)	0.20	.842	-0.11 (0.23)	-0.50	.620
Understands an Indigenous language	-0.60 (0.21)	-2.90	.004	-0.37 (0.23)	-1.57	.118
Learning an Indigenous language	-0.19 (0.23)	-0.83	.408	-0.49 (0.26)	-1.86	.063
Identifies with clan, tribal or language group	0.09 (0.16)	0.59	.557	0.16 (0.17)	0.93	.351
Recognises area as traditional Country	-0.34	-2.02	.043	-0.19 (0.19)	-0.97	.333
Involved in cultural events	0.08 (0.15)	0.51	.611	-0.05 (0.17)	-0.31	.759
Participated in cultural activities	-0.42 (0.15)	-2.77	.006	-0.38 (0.17)	-2.25	.025
Health status	-0.09 (0.07)	-1.31	.191	0.06 (0.08)	0.71	.481
Disability status	-0.27 (0.017)	-1.56	.119	-0.14 (0.20)	-0.72	.473
Long-term health condition	0.18 (0.14)	1.30	.194	0.20 (0.16)	1.21	.225
Life satisfaction	0.11 (0.04)	3.10	.002	0.07 (0.04)	1.69	.091
K5 score	-0.09 (0.15)	-0.64	.520	-0.08 (0.17)	-0.46	.645
Support	0.01 (0.20)	0.05	.960	0.13 (0.23)	0.58	.560
Participated in community activities	0.29 (0.37)	0.76	.446	0.44 (0.42)	1.07	.286
Participated in physical activities	0.08 (0.14)	0.58	.560	0.03 (0.16)	0.17	.867
Income				-0.03 (0.05)	-0.59	.557
Age (18)				-0.16 (0.24)	-0.67	.506
Age (20)				-0.89 (1.31)	-0.68	.498
Age (22)				2.93 (3.84)	0.76	.446
Age (24)				-3.16 (4.84)	-0.65	.513
Sex				0.95 (0.16)	5.98	<.001
Stressors				-0.06 (0.20)	-0.31	.755
Removal from family (Yes)				-0.21 (0.16)	-1.34	.181
Removal from family (Refuse)				-0.06 (0.50)	-0.13	.899
Unfair treatment				-0.36 (0.16)	-2.23	.026
Substance use (Yes)				-0.81 (0.16)	-5.15	<.001
Substance use (Refuse)				0.50 (0.31)	1.59	.111
Employment status				0.83 (0.20)	4.17	<.001
Homelessness				0.42 (0.16)	2.64	.008

Note: Bold text indicates statistically significant result ($p \leq .05$).

Table 2. Frequencies by level of justice system involvement—SEWB markers.

Variable	Level of justice system involvement		OR [95% CI]	<i>p</i>
	Involved	Not involved		
Understands an Indigenous language			0.55 [0.37, 0.83]	.004
Does not understand	128 (37.1%)	521 (54.4%)		
Does understand	217 (62.9%)	436 (45.6%)		
Recognises area as traditional Country			0.71 [0.51, 0.99]	.043
Does not recognise	86 (24.9%)	352 (36.8%)		
Does recognise	259 (75.1%)	605 (63.2%)		
Participated in cultural activities			0.66 [0.49, 0.88]	.006
Did not participate	91 (26.4%)	367 (38.3%)		
Did participate	254 (73.6%)	590 (61.7%)		

is greater than or less than one, the odds of one outcome are greater than the odds of the other. The OR for the significant predictor variables showed that young Aboriginal people who were able to understand an Indigenous language (OR 0.55, 95% CI 0.37–0.83), recognise an area as homelands/traditional Country (OR 0.71, 95% CI 0.51–0.99) and participated in cultural activities in the last 12 months (OR 0.66, 95% CI 0.49–0.88) were more likely to be involved with the justice system. The odds ratio of 1.12 (95% CI 1.04–1.20) for overall life satisfaction indicates that the higher an individual rated their overall life satisfaction, the more likely they were to report *not* having been involved with the justice system.

Logistic regression Model 2—controlling for other factors

Step 2 of the hierarchical logistic regression was performed to assess whether the SEWB markers identified in Step 1 remained statistically significant when controlling for typical factors associated with justice system involvement. Model 2 was statistically significant, $\chi^2(29, N = 1302) = 238.20, p < .001$, indicating that this model was also able to distinguish between individuals who had not been involved with the justice system and those who had been. The second model explained 16.8% (Hosmer & Lemeshow R^2) of variance.

One of the SEWB markers remained significant across both models—participated in selected cultural activities in last 12 months ($p = .025$)—and five of the predictor variables added in Step 2 made a unique statistically significant contribution to the model—sex ($p < .001$), unfair treatment ($p = .026$), substance use in last 12 months ($p < .001$), employment status ($p < .001$) and homelessness ($p = .008$); see Table 1. The frequencies for the sex, unfair treatment, substance use, employment status and homelessness variables by level of justice system involvement are shown in Table 3.

The strongest correlates of being justice non-involved were sex and employment status, the odds ratios for both showing that being female and being employed more than doubled the odds of not being involved with the justice system (OR 2.57, 95% CI 1.89–3.52 and OR 2.28, 95% CI 1.55–3.38, respectively). The homelessness variable was also a strong predictor (OR 1.53, 95% CI 1.11–2.09), not ever experiencing homelessness increased the odds of not being involved with the justice system. The odds ratios for the cultural activity variable remained stable across the two steps (0.66 in Step 1 and 0.68, 95% CI 0.49–0.95 in Step 2), again showing that those who participated in selected cultural activities in the last 12 months were more likely to be involved with the justice system. Similarly, those who

Table 3. Frequencies by level of justice system involvement—risk/protective factors.

Variable	Level of justice system involvement		OR [95% CI]	p
	Involved	Not involved		
Sex			2.57 (1.89–3.52)	<0.001
	Male	188 (54.5%)	382 (39.9%)	
	Female	157 (45.5%)	575 (60.1%)	
Unfair treatment			0.70 (0.51–0.96)	0.026
	No	201 (58.3%)	690 (72.1%)	
	Yes	144 (41.7%)	267 (27.9%)	
Substance use			0.44 (0.32–0.60)	<0.001
	No	161 (46.7%)	625 (65.3%)	
	Yes	164 (47.5%)	230 (24%)	
	Refuse to answer	20 (5.8%)	102 (10.7%)	
Employment status				2.28 [1.55, 3.38] <.001
	Not employed	236 (68.4%)	519 (54.2%)	
	Employed	109 (31.6%)	438 (45.8%)	
Homelessness				1.53 [1.11, 2.09] .008
	Experienced	159 (46.1%)	265 (27.7%)	
	Not experienced	186 (53.9%)	692 (72.3%)	

had unfair treatment because of their Aboriginal identity (OR 0.70, 95% CI 0.51–0.96) and those who had used substances in the last 12 months (OR 0.44, 95% CI 0.32–0.60) were more likely to be involved with the justice system. The difference between the models, χ^2 (78, $N=1302$) = 249.47, $p < .001$, shows that Model 2 is a significant improvement over Model 1.

Discussion

The aims of this study were to examine the relationship between SEWB markers of Aboriginal young people and justice system non-involvement and explore whether those relationships remain when controlling for typical factors associated with justice system involvement. We predicted that SEWB markers would be positively associated with justice non-involvement (H1) and that these positive associations would remain even after controlling for typical factors associated with justice system involvement (H2). The findings

did not support either hypothesis. Significant associations were found between justice system involvement and four of the predictor variables when only SEWB markers were examined. These predictor variables were: understands an Indigenous language, participation in cultural activities, recognises area as traditional Country and overall life satisfaction. However, of those four variables, the first three showed a negative, rather than a positive, association with justice system non-involvement. Further, the only SEWB marker that remained significant when controlling for other factors was participation in cultural activities, and it was negatively associated with justice system non-involvement.

SEWB and justice system non-involvement

In Step 1 of the hierarchical logistic regression, life satisfaction was shown to have a positive association with justice system non-involvement. The mean self-rated life satisfaction for the young people who had not been involved with the justice system ($M=7.6$) was slightly

higher than the mean for those who had been involved ($M = 7.1$). Life satisfaction can be interchangeably referred to as subjective well-being or quality of life (Olson et al., 2021); it is the extent to which a person feels satisfied with the conditions of their life. When rating one's life satisfaction, people will generally make comparisons between their fulfilled and desired wants and needs, judge their circumstances against some standard that they have developed over the course of their life, and weigh their experiences against those of similarly situated peers (Olson et al., 2021). Causal inferences are not able to be drawn from the current findings, as it is unclear in which direction the association occurred between life satisfaction and justice system non-involvement because of the cross-sectional nature of the study.

However, the findings of the current study reflect the general literature examining the relationship between life satisfaction and involvement with the justice system or criminality, higher satisfaction of life is significantly associated with less involvement (Olson et al., 2021). Findings from Hanniball et al. (2021) also suggest that life satisfaction relates in important ways to the offending of young people. For their sample of community and at risk youth in Canada, life satisfaction was significantly associated with fewer self-reported offending outcomes.

However, in the current study the association between life satisfaction and justice system non-involvement did not remain when controlling for typical factors associated with justice system involvement. Olson et al. (2021), Hanniball et al. (2021) and Van Damme et al. (2016) noted similar findings in their studies: when controlling for other risk factors, life satisfaction did not remain significantly associated with justice involvement. Taken together, this pattern of findings suggests that there might be mediating factors involved in the association between life satisfaction and justice system non-involvement, such as an individual's resilience, mental health problems or social determinants (Olson et al., 2021).

The significant association between life satisfaction and justice system non-involvement is also in line with the theoretical underpinnings of the Good Lives Model of rehabilitation. The Good Lives Model is a strengths-based framework, proposing that humans want to realise a range of primary goods, which then contribute to their quality of life or life satisfaction (Ward, 2002). Mental health problems can act as barriers to an individual's achievement of life satisfaction, and individuals who are confronted with a poor quality of life may then become involved with the justice system, according to the assumptions of the Good Lives Model. This framework of rehabilitation closely resembles various aspects of SEWB, positing that basic fulfilment through the domains of the body, self, and social life provide the minimal necessary conditions for human wellbeing. Notably the Good Lives Model is not a preventative intervention; instead, it is a framework designed for those already involved with the justice system to aid in their desistance (Van Damme et al., 2016). However, in line with the findings of the current study and those from previous research, following a framework similar to the Good Lives Model, which prioritises fulfilment of the wellbeing domains, for preventative interventions could be beneficial.

An unexpected finding in Steps 1 and 2 of the regression model, was the associations between the connection to culture, community and Country variables and justice system non-involvement. The results showed the opposite to what was expected, suggesting that a stronger connection to culture, community and Country resulted in a higher likelihood of being involved with the justice system. There was a greater percentage of justice-involved Aboriginal young people who recognised a homeland or traditional Country (75.1%) and were able to understand an Indigenous language (62.9%), than justice-non-involved young people (63.2% and 45.6%, respectively). Similarly, there was a greater

percentage of involved Aboriginal young people who had participated in selected cultural activities in the last 12 months (73.6%) than justice non-involved (61.7%). It is with caution that we interpret these findings and emphasise again that the analysis cannot determine the direction of the association between culture and justice system involvement. Furthermore, the analysis does not consider a number of potentially confounding factors, such as geographical location (Shepherd et al., 2020), or systemic issues, such as over policing (BasTable & Sentas, 2016).

Controlling for other factors

From a strengths-based perspective, the results of Step 2 of the hierarchical logistic regression showed strong support for the relationship between sex, fair treatment as an Aboriginal person, abstaining from substances, employment status and housing stability and justice system non-involvement. While these factors were not used as measures of SEWB itself, it should be acknowledged that social determinants such as employment status, housing conditions, level of educational attainment and experiences of unfair treatment all have an impact, concurrently and cumulatively, on SEWB (Gee et al., 2014). Of particular note was the disparity in employment and housing stability between the justice-involved and justice-non-involved groups. Of the justice-non-involved young people, 72% had experienced housing stability throughout their lives, compared to 53.9% of the justice-involved young people, and 45.8% of those who were not involved with the justice system were employed- compared to 31.8% of those who were involved with the justice system. Similarly, a lower percentage of the justice-involved young people (58.6%) had experienced fair treatment as a person identifying as Aboriginal and/or Torres Strait Islander in the last 12 months than the justice-non-involved young people (72.1%). All of these factors have been well established within the literature as risk and protective factors for Aboriginal and non-Indigenous people

(Hundleby et al., 2007; Marchetti & Daly, 2017; Nilsson et al., 2024; Shepherd et al., 2020; Weatherburn et al., 2006).

Participation in a cultural activity was the only SEWB marker that remained statistically significant when controlling for traditional risk and protective factors in Step 2 of the logistic regression. Similar results were found by Shepherd et al. (2020). That paper also used the 2014–2015 National Aboriginal and Torres Strait Islander Social Survey data; however, they restricted their sample to males. They found that a higher percentage of Aboriginal males who had been incarcerated in their lifetime had participated in cultural activities (74.8%) than those who had never been incarcerated (69.1%).

Although there are limited studies that examined the relationship between connections to culture, community and Country and justice system non-involvement, previous research investigating the protective nature of these connections had varying results. Some of these studies showed that stronger cultural attachment is associated with higher likelihood of justice involvement. For example, research by Dockery (2010), showed that although a strong attachment to traditional culture was statistically associated with better health, a lower likelihood of engaging in risky alcohol consumption and a lower likelihood of being arrested; participants with an intermediate level of cultural attachment were more likely to be arrested than those with minimal attachment. This finding could be indicative of the isolation, confusion and lack of self-esteem that those ‘living between two cultures’ may feel (Dockery, 2010). Other studies suggest the opposite—that is, that stronger cultural attachment can act as a protective factor. For instance, in their focus group study, Venner et al. (2023) interviewed five Aboriginal participants who had experience working with Aboriginal people with justice system involvement and found that all participants unanimously identified a connection to culture as protective against offending.

As this is a cross-sectional study, these findings might reflect a tendency for justice-involved individuals to engage with their culture, community and Country after becoming involved, as a way to desist from further offending or simply to connect with other Aboriginal people while in prison, as opposed to these connections leading to offending behaviour. While our research data precluded us from accounting for this possibility, some available research exists to support this idea. For instance, research looking at the influence of cultural engagement on psychological distress for Aboriginal people in custody found evidence to suggest that cultural engagement was a protective factor against distress (Shepherd et al., 2018). Furthermore, a study examining the relationship between cultural identity, cultural engagement and violent recidivism for a sample of Aboriginal people in custody found that cultural identity and cultural engagement were significantly correlated and predicted one another, and that cultural engagement was significantly associated with non-recidivism (Shepherd et al., 2017).

There are several reasons why cultural engagement may be beneficial for those in custody. For this population, cultural engagement provides opportunities to participate in meaningful activity while in custody and may establish a sense of routine, stability and social support (Shepherd et al., 2018). Furthermore, diversion programs aimed at young Aboriginal people focus on building strong cultural, familial and community connections to help divert young people from the justice system (The Closing the Gap Clearinghouse, 2013). As this study included young people who had been formally charged within the justice-involved group, an unknown number of this group may have participated in such diversion programs. This might explain the larger percentage of justice-involved Aboriginal young people who had participated in cultural activities, were able to understand Indigenous language and identified an area as traditional Country.

Limitations

The findings of this study should be considered in light of several limitations. Firstly, the data utilised in this study was older data, collected almost 10 years prior to data analysis. The use of older data may have implications on the validity of the findings and the generalisability of the findings in the present day. However, the National Aboriginal and Torres Strait Islander Social Survey 2014–2015 is the most current national-level survey data available that measured justice system involvement and wellbeing. The reliability of the findings may be compromised due to the unequal distribution of participants within the two dependent groups. It is not surprising that there were more justice-non-involved Aboriginal young people than justice-involved, as there are more people within the Aboriginal population who have never been involved with the justice system. Secondly, the use of cross-sectional data does not give researchers the ability to distinguish the direction of the association between justice system non-involvement and SEWB markers or other factors. For example, it is not possible to discern whether the variables influenced justice system involvement or if involvement with the justice system influenced participants' responses to the variables.

The way in which the dependent variable was operationalised could also be considered a limitation. The justice-involved group included those who had been incarcerated and those who had been formally charged by police. This is a broad definition of being involved with the justice system—some of the associations found may not have remained significant if the justice involvement group only included those who had been incarcerated. However, the operationalisation of justice involvement including those individuals who had been charged by police was due to the purpose of the study being to identify preventative, early intervention targets. It was important, therefore, to include those in the very early, or minor, stages of justice system involvement to try to ensure a greater understanding of

individuals at all stages of their justice system involvement as compared to those not involved with the justice system. Analysis of the influence of geographical location should be considered in future research, including state-based differences, differences between individuals living in urban and rural locations and influence of living on Country. Furthermore, the study did not account for geographical location. Aboriginal people are not a homogenous group, and it is likely that there would be differences between individuals from different areas and states.

Finally, this study aimed to contribute to the literature investigating Aboriginal involvement with the justice system from a strengths-based perspective using strengths-based language. However, it was challenging to present findings from an external survey against a body of existing literature that had been written with a deficit focus, while maintaining strengths-based language throughout. The authors have made every attempt to present in a strengths-based manner where it is practicable to do so. Future strengths-based research should build and improve on this.

Future research would benefit from time-sensitive variables (pre- and post involvement) to unpack the relationship between justice system involvement and SEWB markers. It would be beneficial to examine whether SEWB markers—particularly connection to culture, community and Country—might be acting as protective factors after involvement occurs—that is, once young Aboriginal people have experienced a level of involvement with the justice system, do they become better connected to their culture, and does this increase their ability to desist from becoming involved again? Future research might also consider supplementing quantitative data with qualitative interviews of Aboriginal peoples both involved and not involved with the justice system, to gain a more comprehensive understanding. Furthermore, in line with limitations outlined in the introductory section of this paper, it would be beneficial for future

research to develop a unified definition and operationalisation of SEWB and SEWB markers, including psychometrically valid measurement tools.

Conclusion

The current study set out to explore the relationship between SEWB and justice system non-involvement in order to highlight the types of protective factors that can be utilised as targets in preventative programs and policies to help minimise the overrepresentation of Aboriginal people in the justice system. The results of this study showed that being female, experiencing fair treatment identifying as Aboriginal and/or Torres Strait Islander, abstaining from substances, being employed and experiencing housing stability were significant correlates of justice system non-involvement for young Aboriginal people. Although the majority of these variables were used as controls, to explore whether SEWB markers were associated with justice system non-involvement, the findings might provide insight into reducing the overrepresentation of Aboriginal people in the justice system.

Implications

The findings of this study could inform targets for preventative intervention strategies. Justice Reinvestment is aimed at investing in local community initiatives that address the underlying issues leading to justice system involvement (Desmond Dawes & Davidson, 2019; Haysom, 2024; Robyn, 2022). Since its inception, it has been gathering momentum in Australia as an appropriate intervention to address the overrepresentation of Aboriginal young people in the justice system and has shown to be influential in reducing offending (Finizio, 2018; Haysom, 2024).

The findings suggest that preventative intervention should focus on helping young Aboriginal people become employed, abstain from substance use (or misuse) and find stable housing. All of these targets rely on

developing a connection to a supportive community and ensuring that individuals are connected to appropriate supports within the community. Employment outcomes are increased through upskilling and education, accessing programs and support networks can aid with the cessation of substance use, and there are supports that exist within communities to find stable housing. Although the association between life satisfaction and justice system non-involvement did not remain significant when controlling for the other variables, it should not be discounted as an appropriate target for preventative intervention. Further research should investigate the protective nature of life satisfaction for justice system non-involvement. Furthermore, in line with theoretical underpinnings of the Good Lives Model framework, the findings of this study and previous research, the notion that strengthening Aboriginal young people's connection to mind, as demonstrated through life satisfaction, is a worthy target for informing intervention and prevention strategies.

To conclude, the findings highlighted the association between unfair treatment as an Aboriginal person and justice system involvement. A major factor associated with the overrepresentation of Aboriginal people within the justice system is the systemic and structural discrimination that exists within the people and the system. Although beyond the scope of the current study, a component to reducing this overrepresentation remains in addressing this systematic bias.

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Ethical standards

Declaration of conflicts of interest

Maicee Young has declared no conflicts of interest.

Mohammed Ali has declared no conflicts of interest.

Justin Trounson has declared no conflicts of interest.

Stephane Shepherd 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 ID: 5550, approved 5/4/2022 providing approval for the current study for the use of secondary data) and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent

Informed consent was not obtained from the individual participants included in the use of the data for this paper, as all participant data is de-identified by the Australian Bureau of Statistics prior to being made accessible to the researchers. A waiver of consent was approved for the use of secondary data by the Swinburne Human Research Ethics Committee (ID: 5550, approved 5/4/2022).

Data availability statement

Data from the National Aboriginal and Torres Strait Islander Social Survey are available to registered users of the Australian Bureau of Statistics microdata.

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