

Desiring education, exhibiting agency, experiencing systemic obstacles: Re-examining the perceptions and experiences of education among Indigenous and non-Indigenous students in Australia

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We present new findings from a Western Australian mixed-methods study exploring a sample of Indigenous and non-Indigenous secondary school students' ($N = 536$) experiences and perceptions of school. Respondents hailed largely from remote or regional Western Australia, although approximately half attended boarding school. This article presents findings of multivariate analysis of responses to the Multi-Dimensional Student Perceptions of School Questionnaire (MSPSQ) and identifies that Indigenous and non-Indigenous students in this study were found to be equally likely to report a positive perception of the benefit of education and the importance of attending and completing year 12, and equally likely to experience family support for education. Yet, student experience of positive school culture, career development opportunities and access to study environment significantly differed across schools. Despite equivalencies across groups regarding perceived importance of completing school, Indigenous students were significantly less likely than non-Indigenous students to express an intention to go on to further education beyond year 12.

Keywords: theory of planned behaviour, perceived benefit of education, self-efficacy, Indigenous education, school completion

Introduction

Education provides individuals with both knowledge and agency in a complex world. Yet education attainment reflects a milieu of social, historical, economic and cultural factors, within which individuals and communities also apply knowledge and agency to determine the desirability, and accessibility, of various education pathways. In Australia a greater percentage of Indigenous students than non-Indigenous students do not complete year 12 or post-secondary qualifications; this is also the case for a greater percentage of Indigenous students from remote areas than Indigenous students from urban areas (Australian Institute of Health and Welfare, 2023; Productivity Commission, 2023; Smith et al., 2015).

Many factors affect both the accessibility of education and the perceived benefit that students attach to education. The list includes, in no particular order, school curriculum; teacher quality; effects of

colonisation and dispossession; linguistic differences between home and school; deficit discourse; parental health, education attainment and support; employment and education levels in the local community; experiences of racism and discrimination; geographic location; socioeconomic status; mental and physical health; experiences of maltreatment; academic self-concept; prior academic attainment; shortages of Indigenous school teachers; and culturally responsive curriculum provision (Anderson et al., 2022; Bodkin-Andrews, Dillon & Craven, 2010; Dadi et al., 2024; Gore et al., 2017; Macdonald et al., 2023; Martin et al., 2021; Maxwell et al., 2018; Moodie et al., 2019; O'Bryan, 2016).

For many students, Western education has been linked to improvements in income, reduced levels of chronic disease and increased longevity (Mirowsky & Ross, 2017). Karmel and Liu's (2011) analysis of Longitudinal Study of Australian Youth (LSAY) data showed that year 12 completion and further education usually create a positive effect on the income and life satisfaction of Australian youth, even where individuals experience limited academic success in secondary school. As people who have completed year 12 become parents, their children are also likely to have better health outcomes and higher engagement with education (Biddle, 2010), compounding the positive effect of education on health over multiple generations (Ross & Mirowsky, 2011).

The contemporary neoliberal political environment emphasises economic arguments for return on educational and social investment (Biddle, 2010; Guenther, 2021; Guenther & Fogarty, 2020; Rutherford et al., 2019), which is ontologically a poor fit for Indigenous ways of knowing and doing (Guenther et al., 2017; Macdonald et al., 2022). Although a social justice argument for education investment supposes that education should reduce cultural, geographic and institutional barriers, this does not always reflect the actual experience of Indigenous students who sometimes find school and tertiary institutions frame Indigenous cultures in deficit language and ignore Indigenous students' cultural, linguistic, geographic and social realities, thus preventing students from experiencing either economic return, or cultural safety and connection (Dadi et al., 2024; Guenther, 2021; Maxwell et al., 2018; Wilks et al., 2020).

We present new findings from a Western Australian mixed-methods study (Macdonald & Gringart, 2022; Macdonald et al., 2018) exploring Indigenous and non-Indigenous secondary school students' ($N = 536$) perceptions of the importance of school completion, and of the future economic benefit of education. We investigate the levels of peer and family support which students experience for education engagement, and explore the degree of difference between schools on measures of educational experiences developed and validated from this study (Macdonald & Gringart, 2022).

Respondents hailed largely from remote or regional Western Australia, although approximately half attended boarding school in Perth or regional towns. All respondents attended Catholic or Independent schools. While our findings contribute new knowledge about factors affecting education engagement and intentions among Indigenous and non-Indigenous students, caution should be taken with applying the results to students in other contexts across Australia.

In reporting this project, we are cognisant of the "Indigenous data paradox" (Walter, 2018, p. 258); the oversupply of data that neither meet the needs, nor recognise the strengths, of Indigenous Australians. Such data typically erase the heterogeneity of Indigenous Australians and are designed to highlight supposed deficits via comparison of Indigenous peoples with a non-Indigenous "norm" (Walter, 2018). As a team of non-Indigenous and Indigenous authors, we approached this project with a firm belief in the strengths of Indigenous peoples who display agency in the face of systemic antagonism. As has been done by other scholars in this field (e.g., Bodkin-Andrews, O'Rourke et al., 2010), we compare Indigenous and non-Indigenous data in this project to "speak back" to deficit discourse and structural racism. And

although we are aware of the large amount of data speaking to socioeconomic inequities (Walter, 2018), there are occasions where socioeconomic data provide necessary context to analyses of structural racism, Indigenous agency and education attainment.

Structural racism experienced by Indigenous students

Structural racism remains a significant cause of inequitable outcomes experienced by Indigenous students within education settings (Anderson et al., 2022; Bodkin-Andrews, O'Rourke et al., 2010; Maxwell et al., 2018; Smith et al., 2015). From historic exclusion and segregation, through to assimilation, stolen wages, and contemporary forms of institutional and interpersonal racism, many Aboriginal and Torres Strait Islander families have experienced multigenerational barriers to attainment of formal education qualifications and economic participation (Jackson-Barrett & Lee-Hammond, 2019; Moodie et al., 2019; O'Bryan, 2016). As well as contributing to education disengagement in the short term, racism and negative experiences at school may significantly impact the lifelong health, wellbeing and economic choices of Indigenous students (Bodkin-Andrews, Dillon & Craven, 2010; Moodie et al., 2019).

Teacher discrimination and deficit discourse are experienced significantly more frequently by Indigenous students than non-Indigenous students in Australia (Bodkin-Andrews, O'Rourke et al., 2010; Maxwell et al., 2018; Moodie et al., 2019). Dandy et al. (2015) reported that non-Indigenous teachers hold lower academic expectations of Aboriginal students than they do of Anglo-background students, a fact which is unsurprising given that the Australian Curriculum positions Indigenous learners in deficit (Maxwell et al., 2018). Many teachers actively avoid teaching Indigenous knowledges and erase students' cultural identities from curricula (Brown, 2019; Macdonald et al., 2024). Students in several studies over the last decade have reported explicit racism from teachers and peers in the form of racist slurs, name-calling, negative stereotyping and erasure of identity (Bodkin-Andrews et al., 2019; Brown, 2019; Macdonald et al., 2018; Mander et al., 2015).

The work of Keddie et al. (2013) in two Queensland schools highlighted the extent to which community-wide deficit discourse infiltrates teacher attitudes. These authors describe a community context where Indigenous youth were stereotyped as criminals, and where schools gained negative reputations within the community when the Indigenous student population grew large. Within this environment, some non-Indigenous teachers expressed the same racism and resentment towards Indigenous student enrolments (Keddie et al., 2013). Even among respondents who worked to be culturally responsive, Keddie et al. (2013) found some teachers "homogenised and inferiorised" Indigenous cultures (p. 100), presuming that lower attendance rates among Indigenous students were evidence that these students did not appreciate the purpose and benefit of formal education. Such educator beliefs demonstrate ignorance of the complex interactions between school environment and historic and socioeconomic factors, which can actively reduce the accessibility and desirability of schooling despite student aspirations for education attainment.

Research question

While there is much research into *what* factors affect Indigenous education engagement, only limited quantitative data exist regarding the experiences and perceptions of education among Indigenous and non-Indigenous students in Western Australia. The current article adds to the scholarly literature by providing empirical evidence towards the following research question: What were the experiences and perceptions of education among Indigenous and non-Indigenous students across 14 Western Australian schools, as measured by the Multi-Dimensional Student Perceptions of School Questionnaire (MSPSQ)?

Methods and data purposes

The decision to measure the effect of school variables (e.g., exposure to role models, homework help, cultural safety) through the lens of student perceptions was deliberate considering critical theory. Munns et al. (2008) recommend that schools should actively examine whether Indigenous students believe themselves to be pastorally and academically supported in their curricular and extra-curricular experiences.

Walter (2018) further highlights the importance of contextualisation in Indigenous data presentation. She provides the example of data that record low school attendance without examining the school environment, geographic situations and economic contexts of students as an example of data processes designed to evidence “the problematic Indigene” (Walter 2018, p. 256). To avoid such error in our project, student perceptions of their schooling experience, as well as some socioeconomic factors, were gathered alongside data on education intentions.

Instrument and data sources

The data reported in the present article were measured using the Multi-Dimensional Student Perceptions of School Questionnaire (MSPSQ), which was developed as a part of a broader mixed-methods project (Macdonald et al., 2018). The development, validation and internal consistency testing of this instrument is presented in an earlier work by the authors (Macdonald & Gringart, 2022). The validated MSPSQ instrument contained 46 Likert-type scalar items, representing the following variables: Positive School Culture, Promotion of Indigenous Culture, Student Self-Efficacy, Pathway Development, Provision of Study Assistance, Family Support, Peer Support, Access to a Suitable Study Environment, Future Aspirations, School Importance and Perceived Benefit of Education. Descriptions of these variables are briefly provided below, with the full conceptualisation and complete list of items available to interested readers via our earlier article (see Macdonald & Gringart, 2022).

In addition to the above constructs, data were collected to measure the following single-item variables: Exposure to Indigenous Role Models, Computer and Internet Access, Family Education, Staff Admiration, Staff Attendance, Future Plans, as well as demographic data, e.g., School Socioeconomic Index, gender, Indigenous status and school year. All variables are described below.

Variables measured

Positive School Culture contained seven items measuring participants’ sense of belonging and exposure to positive role models at school.

Promotion of Indigenous Culture was measured only for Indigenous respondents. This variable contained three items measuring participants’ sense that Indigeneity was valued and understood at school.

Student Self-Efficacy contained seven items measuring students’ academic self-concept and general sense of agency.

Pathway Development contained seven items measuring participants’ awareness of post-secondary employment pathways and experience of focused transition-to-employment activities.

Provision of Study Assistance contained two items measuring access and perceived usefulness of a study environment provided by the school (e.g., homework classes).

Family Support contained three items measuring participants' perceptions of the importance of school attendance, year 12 completion and employment among their family members.

Peer Support contained three items measuring participants' perceptions of the importance of school attendance, year 12 completion and employment among their peers.

Access to a Suitable Study Environment contained two self-report measures of access to homework assistance and a place to study.

Future Aspirations contained two items measuring the importance participants place on future economic engagement.

School Importance contained three items measuring the importance participants place on school attendance and year 12 completion.

Perceived Benefit of Education contained four items measuring participants' perceptions of the social and employment utility of schooling.

Exposure to Indigenous Role Models, measured only for Indigenous respondents, contained a single Likert-scale item measuring participants' perception that Indigenous staff had high academic expectations of them.

Computer and Internet Access consisted of a single Likert-scale item measuring the frequency with which participants had access to a computer with Internet access to assist with their homework completion.

Family Education consisted of a single categorical item asking students to report the highest education level achieved by a family member.

Staff Admiration consisted of a single dichotomous item asking students whether there was a staff member whom they looked up to in the school.

Staff Attendance consisted of a single dichotomous item asking students "Do you ever come to school just to keep the respect of that person?".

Future Plans consisted of a single categorical item asking students to report their post-secondary education or employment intentions.

School Socioeconomic Index is the Socioeconomic Index of the school, as reported on the My School website (www.myschool.edu.au).

Procedure and participants

Data collection has been described previously by the authors (Macdonald & Gringart, 2022). Ethics approval was granted by Edith Cowan University's Human Research Ethics Committee, the Association of Independent Schools of Western Australia and the Catholic Education Office in Western Australia before individual school principals were approached. In total, 14 Western Australian schools took part in the study, with a total of 536 respondents (Catholic schools: $n = 278$, Independent schools: $n = 258$) from year 8 through to year 12. For nearly all respondents, enrolment at their school required fee payment, scholarship application, and/or family support for the choice of

a private school education. The proportion of respondents by Indigeneity and geographic home region is presented in Table 1. Students completed the survey instrument either through Qualtrics online portal, or in hard copy.

Table 1: Respondents by Indigenous status and geographic home region*

	Kimberley		Mid-West		Perth		Other WA	
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
%	16.8	6.6	3.0	24.8	4.3	5.7	7.0	10.6
<i>n</i>	90	35	16	133	23	31	38	57

*Data on students’ geographic home region was not collected during the pilot stage, hence is presented here for only 423 respondents.

Analyses

Data analysis was conducted using SPSS software (version 26). After the MSPSQ instrument had been validated (Macdonald & Gringart, 2022), the research questions were explored using multivariate and univariate analyses.

The research question was posed to investigate respondents’ experiences and perceptions of education, as well as their family, school and socioeconomic contexts. Our previous article presented descriptive statistics (*M*, *SD*) and difference in means by Indigenous status for the latent variables initially validated as part of the MSPSQ instrument (Macdonald & Gringart, 2022). We complement these data now with descriptive statistics for the complete set of variables, and expansion of inferential statistics to include differences in mean by gender and school, as well as Indigenous status.

Choices regarding the most appropriate statistical tests were made with reference to the decision tables presented by Cohen et al. (2007). The large sample size increased the likelihood that small effect sizes would achieve statistical significance. For this reason, discussion of significant findings also reports Cohen’s η^2 as a measure of effect size, with $\eta^2 > .14$ considered a measure of large effect (Cohen et al., 2007). Throughout the article, *p* values are presented exact to three decimal places. Because multiple parametric tests were carried out, a Bonferroni adjustment was applied. Hence, statistical significance is determined by $p < 0.001$.

Results and findings

Although results presented in an earlier article (Macdonald & Gringart, 2022) provided some indication of the experiences of students in this study, we present here four new findings, which provide noteworthy indicators of Indigenous and non-Indigenous students’ experiences, aspirations and perceptions of schooling. Table 2 presents the descriptive statistics for interval variables as well as results of the independent sample *t*-tests. Table 3 presents the results of the chi-square tests for categorical variables by gender, school and Indigenous status.

Table 2: Descriptive and inferential statistics, for all interval measures

Variable		<i>M</i>	<i>Mod</i>	<i>SD</i>	Gender		Indigenous Status		School	
					<i>t</i>	<i>p</i>	<i>t</i>	<i>p</i>	<i>F</i>	<i>p</i>
<i>Positive School Culture</i>	<i>Indigenous</i>	3.59	3.50	.85						
	<i>Non-Indigenous</i>	3.48	4	.73						
	<i>Total</i>	3.52	4	.79	2.28	.024	1.64	.101	6.19	.000***
<i>Promotion Indigenous Culture¹</i>	<i>Indigenous</i>	2.99	3.00	.84	1.42	.158	N/A	N/A	3.78	.000***
<i>Student Self-Efficacy</i>	<i>Indigenous</i>	4.04	4	.59						
	<i>Non-Indigenous</i>	3.99	4	.59						
	<i>Total</i>	3.99	4	.60	-.09	.928	.79	.430	3.08	.000***
<i>Pathway Development</i>	<i>Indigenous</i>	3.12	4	.96						
	<i>Non-Indigenous</i>	2.98	3.58	.89						
	<i>Total</i>	3.03	4	.93	4.21	.000***	1.74	.083	8.50	.000***
School Socioeconomic Index	<i>Indigenous</i>	1022.2	1043	83.6						
	<i>Non-Indigenous</i>	1006.9	1068	80.3						
	<i>Total</i>	1009.2	1068	83.4	.611	.542	-1.96	.051	N/A ²	N/A ²
<i>Indigenous Role Models¹</i>	<i>Indigenous</i>	4.08	5.00	1.67	-1.43	.156	N/A	N/A	5.39	.002
<i>Provision of Study Assistance</i>	<i>Indigenous</i>	3.21	1	1.75						
	<i>Non-Indigenous</i>	2.74	1	1.41						
	<i>Total</i>	2.96	1	1.60	-1.47	.142	2.87	.004	5.75	.000***
<i>Family Support</i>	<i>Indigenous</i>	4.57	5	.60						
	<i>Non-Indigenous</i>	4.59	5	.50						
	<i>Total</i>	4.56	5	.56	-.19	.849	-.50	.619	1.96	.022
<i>Peer Support</i>	<i>Indigenous</i>	3.70	3.67	.83						
	<i>Non-Indigenous</i>	3.88	4	.70						
	<i>Total</i>	3.79	4	.77	-.70	.485	-2.74	.006	4.01	.000***

Macdonald et al.		Desiring education, exhibiting agency, experiencing systemic obstacles								
<i>Study Environment</i>	<i>Indigenous</i>	3.66	4	1.04						
	<i>Non-Indigenous</i>	3.49	3.50	.92						
	<i>Total</i>	3.56	4	1.00	-.397	.691	1.92	.055	7.43	.000***
Computer Access	Indigenous	3.42	5	1.66						
	Non-Indigenous	4.25	5	1.11						
	Total	3.85	5	1.45	.149	.882	-6.45	.000***	26.91	.000***
<i>Perceived Benefit</i>	<i>Indigenous</i>	4.13	4	.54						
	<i>Non-Indigenous</i>	3.99	4	.59						
	<i>Total</i>	4.05	4	.57	1.62	.106	2.39	.017	35.9	.000***
Future Aspirations	Indigenous	4.44	5	.83						
	Non-Indigenous	4.28	5	.72						
	Total	4.34	5	.81	-2.46	.014	2.25	.025	1.92	.026
<i>School Importance</i>	<i>Indigenous</i>	4.59	5	.52						
	<i>Non-Indigenous</i>	4.38	5	.64						
	<i>Total</i>	4.46	5	.61	-1.74	.091	3.67	.000***	31.5	.000***

Note: All statistics reported in Macdonald & Gringart, 2022 are reprinted in *italics*.

***Significant at the 0.001 level.

¹ The variables Promotion of Indigenous Culture and Exposure to Indigenous Role Models were only measured for Indigenous respondents.

² ANOVA cannot be calculated for Index of Community Socio-Educational Advantage (ICSEA) data as there is no within school difference.

Table 3: Chi-square test for difference in distributions, for categorical variables

Variable		Gender		Test of Difference in Distribution across:			
		<i>t</i>	<i>p</i>	Indigenous Status		School	
				χ^2	<i>p</i>	χ^2	<i>p</i>
Family Education	Total	.26	.795	29.0	.000***	6.04	.000***
Staff Admiration	Total	-2.27	.024	.044	.834	34.2	.001***
Staff Attendance	Total	-.105	.916	34.0	.000***	58.6	.000***
Future Plans	Total	-4.10	.000***	26.1	.000***	20.7	.078

***Significant at the 0.001 level.

The key findings from these results are presented below.

Finding 1: Indigenous students and non-Indigenous students reported statistically equivalent, positive responses to the variables Perceived Benefit of Education, Student Self-Efficacy, Family Support, Future Aspirations and Staff Admiration. Indigenous students reported a statistically significant *higher* mean on the variable measuring perceived School Importance compared with non-Indigenous students; however, Indigenous students less frequently reported an intention to go immediately on to tertiary education.

The students in this study reported statistically equivalent, positive responses on five variables measuring their (and their families') perceptual, personal, familial and aspirational views towards schooling and future employment. These variables were Perceived Benefit of Education ($p = \text{ns}$, Indigenous: $M = 4.13$, $SD = 0.54$; non-Indigenous: $M = 3.99$, $SD = .59$), Student Self-Efficacy ($p = \text{ns}$, Indigenous: $M = 4.04$, $SD = 0.59$; non-Indigenous: $M = 3.99$, $SD = .59$), Family Support ($p = \text{ns}$, Indigenous: $M = 4.57$, $SD = 0.60$; non-Indigenous: $M = 4.59$, $SD = .50$), Future Aspirations ($p = \text{ns}$, Indigenous: $M = 4.44$, $SD = 0.83$; non-Indigenous: $M = 4.28$, $SD = .72$), and Staff Admiration ($\chi^2 = .044$, $p = \text{ns}$).

Indigenous students reported slightly higher responses to School Importance ($t(383) = 3.67$, $p < .001$, $\eta^2 = .030$, Indigenous: $M = 4.59$, $SD = 0.52$; non-Indigenous: $M = 4.38$, $SD = .64$), although the effect size was small. Indigenous students were significantly less likely to express an intention to go immediately on to further education beyond year 12, as measured by Future Plans ($\chi^2 = 26.1$, $p < .001$) (see Table 3 and Table 4).

Table 4: Post-secondary pathway plans, percentage of respondents by Indigenous status

After I finish high school, I plan to:	Find a job	Study at TAFE or university	Do an apprenticeship, internship or traineeship	Don't know	Other
Indigenous	28.3	38.9	13.3	13.7	6.0
Non-Indigenous	14.0	51.9	20.5	10.5	3.1

Finding 2: Differences between schools in student perception and experience were greater than differences between Indigenous and non-Indigenous students. Schools varied significantly in the homework, career and social support they were perceived to provide students, as well as in the sense of belonging reported by students.

The results in Table 2 reveal large statistical differences between schools on their ability to provide students with academic and educational support through Provision of Study Assistance ($F(11, 371) = 5.75, p < .001, \eta^2 = .146$) and Pathway Development opportunities, e.g., access to work experience and university transition programs, ($F(13, 513) = 8.50, p < .001, \eta^2 = .177$).

Measures of student belonging also differed significantly between schools. Differences in Positive School Culture were significant, with a large effect size ($F(13, 527) = 6.19, p = .000, \eta^2 = .136$). Even larger effects were found for student experience of the Promotion of Indigenous Culture ($F(13, 235) = 3.78, p < .001, \eta^2 = .173$). Although many Indigenous students felt they had experienced positive Exposure to Indigenous Role Models ($M = 4.08, Mod = 5$), the effect of the school was significant and large ($F(12, 228) = 5.390, p < .001, \eta^2 = .221$).

There were also significant differences between schools on variables measuring Student Self-Efficacy ($F(13, 511) = 3.08, p = .000, \eta^2 = .073$), Perceived Benefit of Education ($F(9, 405) = 4.42, p < .001, \eta^2 = .098$), and perception of School Importance ($F(9, 401) = 3.43, p = .001, \eta^2 = .075$).

Finding 3: Indigenous students and non-Indigenous students in the present study attended schools of equal socioeconomic status, although Indigenous students were less likely to have regular access to a computer and the Internet in their place of residence and reported lower levels of formal education qualifications in their families.

This research canvassed students from a wide range of schooling environments. These included rural and remote schools, as well as elite urban schools, where Indigenous respondents were generally boarding students. Table 2 revealed that Indigenous respondents, on average, attended schools of equal Socioeconomic Index to non-Indigenous respondents. Despite attending schools of equal socioeconomic advantage (often via a residential environment), the variable Computer Access (see Table 2) revealed that Indigenous respondents were less likely than non-Indigenous respondents to report having regular access to a computer and the Internet in their residence ($t(472) = -6.45, p < .001, \eta^2 = .572$, Indigenous: $M = 3.42, SD = 1.66$, non-Indigenous $M = 4.25, SD = 1.11$). This effect size was very large.

Table 3 indicated that Indigenous respondents reported significantly lower levels of Family Education ($M = 2.73/\text{year 12}$, $SD = 1.28$) than did non-Indigenous respondents ($M = 3.31/\text{TAFE}$, $SD = 1.04$); $\chi^2(4) = 29.0$, $p < .001$. Table 5 below reveals that over one-third of Indigenous students in the study reported having no family members with post-secondary qualifications, compared with one-fifth of non-Indigenous students.

Table 5: Highest level of education in the family*, by Indigenous status

	In my family, the highest level of education someone has is:				
	< Yr 12	Yr 12	TAFE	University	Other
Indigenous	15.4	20.9	17.9	40.1	5.1
Non-Indigenous	7.1	12.6	16.5	67.5	1.6

*The survey tool contained an instruction that "'Family' means all the people who are related to you, even if they do not live with you".

Finding 4: Indigenous and non-Indigenous students reported similar frequencies of respectful relationships with staff, however, Indigenous students were far more likely to relate respectful staff relationships with motivation to attend school.

Students who affirmed that there was a staff member they respected at the school (Staff Admiration, see Table 3) were asked a follow-up question regarding how this affected their attendance decisions through the item Staff Attendance (see Table 3). Although Indigenous and non-Indigenous students reported similar results on the variable Staff Admiration, the difference between the two groups on the variable Staff Attendance was significant and large ($\chi^2(1) = 34.0$, $p < .001$). The actual results of item Staff Attendance are reported in Table 6 below, showing that Indigenous students were almost twice as likely as non-Indigenous students to indicate that they would attend school to maintain the respect of a staff member whom they admired.

Table 6: Student attendance due to respectful relationships with a staff member, by Indigenous status

(If there is a staff member whom you really look up to) Do you ever come to school just to keep the respect of that person?	Yes	No
Indigenous	73.4	25.1
Non-Indigenous	42.1	57.9

Discussion

The current study investigated experiences and perceptions of education among Indigenous and non-Indigenous students across 14 Western Australian schools. While a few significant differences were identified, these differences were generally larger between students grouped by school, than grouped by Indigenous status. Further, the lack of statistically significant difference between Indigenous and non-Indigenous students on a number of variables is interesting and valuable, and points to future research foci.

Perceptions of the benefit of education among Indigenous and non-Indigenous students, and their families

Perhaps the most important finding above, was the extent of variables for which there was *no significant difference* between Indigenous and non-Indigenous respondents. The literature review discussed the deficit discourse experienced by Indigenous parents and families at the hands of policymakers and school staff, who often attribute differences in education outcomes to perceived deficits in Indigenous students' aspirations for schooling or access to family support (Anderson et al., 2022; Keddie et al., 2013; Mander et al., 2015; Moodie et al., 2019). Yet, we identified that Indigenous students in our study were *more likely* than non-Indigenous students to express belief that attending school and completing year 12 was important. Indigenous and non-Indigenous respondents reported that their families attributed equivalent levels of importance to school attendance and completion, even though actual family education levels were lower among Indigenous respondents. This corroborates O'Bryan's (2016) work exploring Indigenous boarding, where students' family members reported a keen desire for "access to quality education for their children" (p. 116). Furthermore, there was no statistically significant difference in the current study between Indigenous and non-Indigenous students when it came to their beliefs that schooling contributed to better economic and life outcomes (Perceived Benefit of Education), nor their desire to attain those better outcomes (Future Aspirations), or their belief in their own agency (Student Self-Efficacy).

Indigenous students in Australia continue to experience racism and prejudice through discriminatory teacher perceptions that Indigenous students do not care about school attendance and completion, do not have self-efficacy, or that Indigenous families are disinterested in providing support (Anderson et al., 2022; Keddie et al., 2013; Moodie et al., 2019). Our findings above provide a counter-narrative to such deficit discourse and suggest instead that the causes of disengagement lie within education system deficits, rather than within Indigenous families.

It is particularly worth noting that these findings occurred in a sample where, although attending socioeconomically equivalent schools, Indigenous students were significantly more likely than non-Indigenous students to experience socioeconomic challenges, such as lower levels of formal education qualification in the family and less consistent access to a computer and the Internet. Previous studies have shown that these factors influence actual year 12 completion and post-secondary enrolment (Polidano et al., 2013; Rutherford et al., 2019; Smith et al., 2015), however, our research suggests that these factors do not significantly influence *desirability and perceived importance* of year 12 completion. Such findings reinforce the importance of policies that address resource inequity, that is, through provision of tuition support, ICT access, adult education classes, and scholarships or funding towards high-quality education opportunities for Indigenous students.

Our study, congruent with previous research, identified that year 12 Indigenous students are less likely than non-Indigenous students to aspire to a tertiary education (Behrendt et al., 2012; Gore et al., 2017; Harwood et al., 2015; Rutherford et al., 2019; Smith et al., 2015). Where previous research has reported that such results occur even among high-achieving students, our research adds to scholarly knowledge that this lower desirability of higher education among Indigenous students is evident in a sample where both students and their families hold positive perceptions of the importance of secondary education and have positive self-efficacy. Taken together with the work of other scholars, this suggests that other, inter-related factors contribute significantly to Indigenous students' perceptions of the desirability and accessibility of higher education. Some of these factors are geographical or cultural, but all are structural in the way they reflect education services and policy in Australia. In light of Indigenous students' positive

perceptions of the importance of secondary education, and rates of self-efficacy, we suggest that addressing the structural obstacles to higher education would result in increased higher education rates among Indigenous students in Australia.

The schooling experiences of Indigenous and non-Indigenous students

Schools exhibited significant differences in their provision of a positive school environment, Indigenous cultural support, career knowledge and preparation, homework support and computer access (for residential students), positive staff–student relationships, and homework assistance to students. In fact, there were a greater number of variables where student experience differed significantly when grouped by school, than variables where student experience differed significantly when grouped by Indigenous status. That is, the school attended by students accounted for more variability in student experience than did Indigeneity. Some of these differences reflect school size, geographic location and Index of Community Socio-Educational Advantage (ICSEA) value, however, they also reflect teacher quality and school responsiveness.

Much has been made in the last decade of differences in funding between public and private sector schools in Australia (Australian Education Union, 2024; Gonski et al., 2011; Productivity Commission, 2022). In the present study, Indigenous and non-Indigenous respondents attended private schools of equivalent socioeconomic status. Yet, in Australia, 83% of Indigenous students attend government schools – which are on average less well funded (Australian Education Union, 2024; Gonski et al., 2011; Productivity Commission, 2022) – compared with 66% of non-Indigenous students (Australian Bureau of Statistics, 2020). Thus, the results of this study may present a positive skew on the school experiences of Indigenous students in comparison with non-Indigenous students across Australia.

The finding that Indigenous students were highly likely to report that admiration of a teacher would positively impact their school attendance is worthy of future exploration. This finding could reflect differences in cultural attitudes to the importance of a relational approach (Macdonald et al., 2024), as well as the effect of high-expectations relationships (Sarra, 2020). The existence of a positive relationship with one staff member does not preclude concurrent negative experiences with other staff or peers, however, this finding suggests that an avenue to increasing Indigenous attendance rates in secondary school could involve improving the quality of relationships that teaching staff develop with Indigenous students.

Limitations and strengths

The findings presented here compare Indigenous students with non-Indigenous students but, critically, neither Indigenous nor non-Indigenous students are a homogenous group. Differences in first language, remote domicile, parental education and socioeconomic status create very real differences in the return which students may expect from education (Guenther, 2021).

It was not possible to access government schools for this study, which has placed limitations on the ability of this research to explore the experiences of a wider range of students in Western Australia. Additionally, the study relied on self-report data regarding intentions of students to complete school. The actual education attainment, and long-term outcomes, for participants of this study remains unknown. Furthermore, the study canvassed students who were engaged with schooling. Results may be very different for those young people who have disengaged from schooling.

Yet, the current study canvassed a large sample of schools across the breadth of Western Australia. The moderate sample size allowed for the more powerful parametric analysis of difference in means and also effect size. Our study presents quantitative evidence of the positive perceptions of school and family support which Indigenous students experience, despite experiencing systemic discrimination and socioeconomic challenges to education engagement. The research team of Indigenous and non-Indigenous colleagues provides for a robust discussion of data and supports Indigenous data sovereignty.

Future research should continue to understand the factors that enable Indigenous students' intentions to complete school to be realised. Further research should also explore the factors that ensure both secondary and tertiary education hold realisable benefits to Indigenous students from diverse walks of life, and understand the factors that increase desirability and accessibility of tertiary education.

Conclusion and implications

In Australia, education systems are geared toward students who reside in urban areas, have higher family education and income levels, experience social support for education, and have easy access to ICT, education infrastructure, and community financial capital (Guenther et al., 2017; Guenther & Fogarty, 2020; Polidano et al., 2013; Wilks et al., 2020). Considering that these factors are directly impacted by historic and contemporary systemic racism and by policy decisions that direct funding towards socioeconomically advantaged schools (Gonski et al., 2011), many contemporary Indigenous students continue to be impacted by the legacy of institutional racism which has excluded Indigenous Australians from educational achievement over successive generations (Jackson-Barrett & Lee-Hammond, 2019). In addition to legacies of historical racism, many Indigenous students face ongoing discrimination in the form of deficit discourse and discriminatory teacher expectations which have been shown to negatively impact school engagement (Bodkin-Andrews, O'Rourke et al., 2010; Keddie et al., 2013).

Harwood et al. (2015) argue that Indigenous students do not need engagement strategies to assist them in developing aspirations to educational achievement, but rather, they need government policies and educator practices that enable their current aspirations to be achieved successfully. Policy and funding for Indigenous secondary education should ensure that such students have access to epistemologically inclusive and well-resourced schools, high-expectations relationships that promote post-secondary education aspirations, opportunity to achieve meaningful employment in their home community as a result of their education pursuits, and access to homework support and ICT infrastructure for the duration of their studies.

The findings of this study demonstrate that Indigenous students work to succeed despite experiencing a system that is antagonistic to their academic self-concept. Indigenous students perceive benefit from schooling and experience family support for school attendance and completion. Furthermore, Indigenous students experience self-efficacy at equitable levels with non-Indigenous students, suggesting that their educational decisions are an exercise of agency. The prevalence of deficit discourse, then, is evidence of the superficial understanding that many teachers have (and broader society has) of the way education engagement is shaped by social, cultural, historical and economic contexts as well as by interpersonal teacher-student relationships. Breaking down structural and teacher discrimination is essential to levelling the playing field for all students in Australian schools.

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