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School Connectedness Boosts Mental Health in Indigenous Adolescents With Adverse Childhood Experiences: Mediation Analysis of a Longitudinal Study in Australia

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ABSTRACT

Background: The study examined whether school connectedness mediates the association between Adverse Childhood Experiences (ACEs) and mental health conditions among Indigenous adolescents, and if this mediation varies by school type—Public versus Private/Catholic

Methods: Using data from 13 waves of the Longitudinal Study of Indigenous Children (LSIC) in Australia (2008–2020), the present study examined the potential mediating effects of school connectedness in the association between exposure to ACEs and adolescent mental health conditions (anxiety/depression) in 636 Indigenous adolescents aged 12–17 years. Based on Baron and Kenny's approach, modified Structural Equation Modeling (SEM) techniques were employed to examine the mediating effect. All models were adjusted for covariates including age, sex, location, and socioeconomic position.

Results: The longitudinal analysis revealed that strong school connectedness and no/limited ACE exposure positively influenced mental health, regardless of school type ($p < 0.05$). Mediation analysis indicated that school connectedness significantly mediated the association between ACE exposure and mental health conditions for Indigenous adolescents who attended public schools ($p < 0.05$) but not for those who attended Private/Catholic schools.

Implications for Practice: These results underscore the critical role of school connectedness in supporting the mental health of Indigenous adolescents who have faced early childhood adversity. Notably, it highlights the unique needs of students in different school types and calls for further research to better understand how schools can foster well-being for Indigenous adolescents.

Conclusion: Strengthening school connectedness offers a valuable avenue for promoting mental health among school-going Indigenous adolescents.

1 | Background

Mental health remains essential to overall health and well-being, and it is critical to address mental health throughout the life course [1]. Particularly during adolescence (10–19 years), mental health is crucial as it is a distinctive and formative period for social and emotional development, which establishes the basis for long-term and intergenerational health and well-being [2, 3]. It is estimated globally that one in seven adolescents experience poor mental health conditions, which often remain unacknowledged and untreated [4]. Evidence suggests enhancing adolescents' internal and external resources while safeguarding them from risk factors and adverse experiences significantly influences their capacity for success and their mental health and well-being in adulthood [4, 5]. Prior research also indicates that timely interventions and bolstering resilience for mental and health well-being in adolescence can positively lead to positive health outcomes in youth and adults [4].

The Adverse Childhood Experiences (ACEs) questionnaire was introduced to measure childhood trauma, abuse, neglect, and family dysfunction, due to their correlation with poor mental health outcomes, and now includes questions on domestic violence, substance abuse, parental separation, mental illness, physical punishment, bullying, involvement in the child welfare system, parental gambling, neighborhood safety, and poverty [6, 7]. Evidence suggests that individuals with no or limited exposure to ACEs increase their likelihood of having better educational outcomes, including greater engagement in the classroom, less need for specialized individual education plans, less absenteeism, and less grade repetition than those with exposure to multiple ACEs [6]. It is also reported that positive experiences in childhood can improve mental health in the future, while ACEs are predictive of poor mental health conditions, including anxiety, depression, substance abuse, self-harming, and suicidal behaviors [8, 9].

The incidence of poor mental health conditions such as anxiety or depression is affected by complex experiences, especially for adolescents of diverse backgrounds [10]. In Australia, the Aboriginal and Torres Strait Islander peoples (hereafter, Indigenous Australians) make up 3.8% of the Australian population, and they similarly have an increased rate of poor mental health conditions and are twice as likely to experience multiple ACEs compared to the general Australian population [11, 12]. This is due to historical and current trauma, grief, and loss stemming from the times of colonization [12]. It is essential to prioritize preventing ACEs and promoting Indigenous cultural identity to mitigate negative health outcomes and address health inequities [13]. When given tools to succeed, namely when given autonomy, empowerment, and recognition, communities and individuals have improved well-being [14]. This improved sense of well-being is also heightened with increased exposure to families, communities, and spiritual connections to the land and ancestors [15, 16].

Interpersonal connections, especially for adolescents, are often formed in spaces such as school, which is also often the site of the first identification of poor mental health conditions [10]. Furthermore, schools are often where students find access to support their well-being, with up to 40% of students seeking support at school for their mental health [10]. School connectedness, defined as the extent to which students feel personally accepted, respected, included, and supported by others in the school social environment [17, 18], has become an area of increased research and action. It has been identified as having a significant impact on the mental health of adolescents [19, 20]. School connectedness encompasses thoughts (perceptions of relationships with classmates and teachers), feelings (acceptance and inclusion), and behaviors (engagement in lessons) [19–21]. A systematic review recommended that school connectedness could serve as a promising target for preventing depression and anxiety regardless of exposure to ACEs in North American children [21]. However, it could not confirm whether enhancing school connectedness supports remission in young people already experiencing these conditions [21]. The potentiality between school connectedness and mental health has led to initiatives aimed at improving connectedness as a means of supporting adolescent mental health in educational settings, with literature indicating that increased school connectedness is associated with a decreased risk of mental health conditions such as anxiety [11, 14].

A report published in 2023 indicates that Indigenous children in Australia are less likely to attend pre-school or private schools compared to previous years and experience higher rates of bullying and racism than their non-indigenous peers [22]. However, there is no data available regarding school connectedness and how this differs by school type—public, private, or Catholic. Another study found that only 33% of Australian Indigenous adolescents felt they had a social support network at school regardless of schooling type [23]. Increasing the number of adolescents who feel connected to school and feel they have an active support network, could improve Indigenous adolescents' mental health. This premise underpins the objective of this study which is to determine if school connectedness plays a role in the mental health of Indigenous adolescents and to determine if differences exist for those who experienced ACEs or for those who attend private/Catholic schools compared to public schools. Schooling, and keeping adolescents in school, whilst keeping them supported, is the single biggest variable identified in improving health outcomes for adolescents in the future [23].

2 | Methods

2.1 | Data Source

Footprints in Time: The Longitudinal Study of Indigenous Children (LSIC), is an ongoing national prospective cohort study, funded and managed by the Australian Government Department of Social Services [24, 25]. This study aimed to investigate factors within Indigenous children and young people's lives that help improve their health and personal lives as they grow. Key research questions underlying the LSIC data collection include: "What do Aboriginal and Torres Strait Islander children and young people need to grow up strong?; What helps Aboriginal and Torres Strait Islander children and young people to stay on track or become healthier, more positive and stronger?; What is the importance of family, extended family and community in adolescence and emerging adulthood?; How can services and other types of support make a difference in the lives of Aboriginal and Torres Strait Islander children and young people?; How do

Aboriginal and Torres Strait Islander children and young people transition into and through adulthood?; and What does it mean to be a young Aboriginal and/or Torres Strait Islander growing up in the 21st century?" [24, 25]. This paper is subsequently analyzed and written using a strengths-based approach, with emphasis placed on these strengths investigated with the LSIC.

LSIC used a non-random purposive sampling design across 11 Indigenous communities in Australia, following the growth, development, and specific outcome measures of 1700 Indigenous families (parents, carers, adolescents) in urban, regional, and remote settings longitudinally [24, 25]. Figure S1 shows the location of participating families in the LSIC. The LSIC interviews and survey began in 2008 and followed two distinct cohorts of Australian Indigenous children stratified by age—younger birth-cohort (B-Cohort) aged 0–1.5 years at baseline ($n = 812$), and older Kindergarten-cohort (K-cohort) comprised children aged 3.5–5 years at baseline ($n = 586$). The same children continued to participate in annual waves of data collection. In-person interviews, conducted by an Indigenous Australian, were carried out with the study participants, including the child, their parent, and their teacher [24, 25].

2.2 | Participants

A flow chart for the selection of the analytical sample is presented in Figure 1. This study utilized data from LSIC Waves 1–13, conducted between 2008 and 2020. The same participants were tracked across waves using unique identifier numbers, incorporating a total of 636 Indigenous individuals from the LSIC database. We included participants who provided complete data on the outcome variable (mental health—anxiety or depression), mediator variable (school connectedness), main

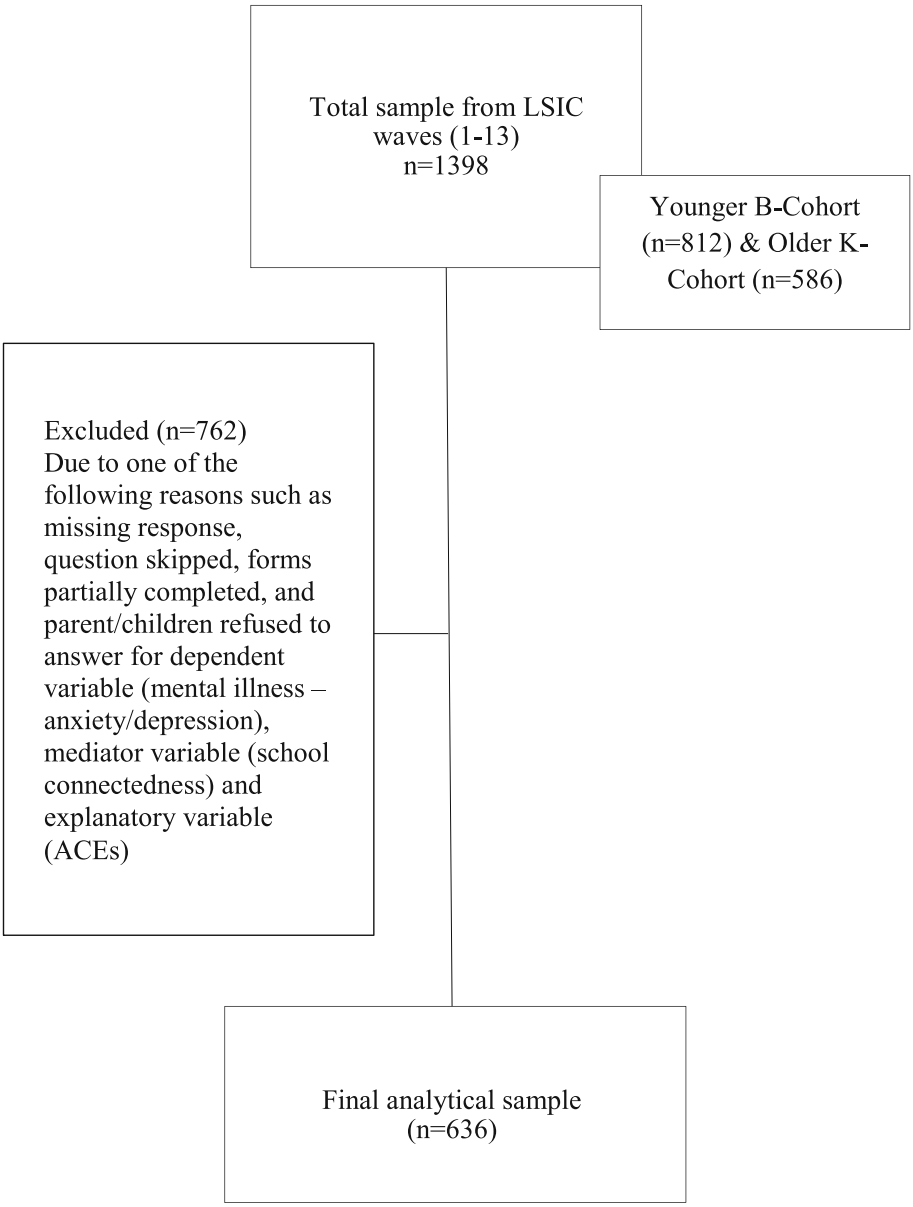

FIGURE 1 | Flow chart for sample selection.

explanatory variable (exposure to ACEs) and potential covariates. We conducted a complete case analysis (CCA), excluding any cases with missing data for one or more variables of interest, as the missing data were likely missing at random. Since CCA generally provides unbiased estimates in regression models, we chose to use the raw data rather than imputing missing values [26]. Consequently, 762 participants were excluded from the analysis, comprising those who did not respond to the outcome variable ($n = 751$) and explanatory variables ($n = 11$).

2.3 | Measures

Sociodemographic variables associated with the social and emotional well-being of Indigenous adolescents aged 12–17 years old were selected utilizing a 'Positive Outcome Approach', where the association between positive factors (e.g., good mental health conditions) and positive outcome variables (e.g., limited exposure to ACEs, strong school connectedness) were measured instead of using risk factors and negative outcomes (i.e., deficit discourse pattern) [27].

We adopted the 'Positive Outcome Approach' because a strengths-based approach is more likely to promote positive change and more accurately reflects community values and principles, in contrast to conventional pathogenic models for Indigenous research. In this study, the following variables are included and coded to be strengths-based to investigate each variable as a protective factor [27].

- Dependent variable: Mental health conditions (Absence of anxiety/depression coded as 1 and Presence of anxiety/depression coded as 0). Mental health conditions include anxiety and/or depression and were supported by the Strengths and Difficulties Questionnaire (SDQ) Total Difficulties Score and Prosocial subscale score [28].
- Independent variable: ACEs (No/limited ACEs exposure coded as 1, and Multiple ACEs exposure coded as 0). Based on the recently published policy and practice paper on ACEs in 2024 by Joshi and Troung [9], we included the following ACEs that are available in the LIC database—biological parents split up, family violence, parents/close family members mugged/robbed/assaulted, parents/close family members arrested/jailed, and study child bullied because of Indigeneity.
- Mediating variable: School connectedness (Strongly connected coded as 1, and not much connected coded as 0)
- Stratifying variable: School type (Public coded as 0 and Private/Catholic coded as 1)
- Sociodemographic covariates: Age, Sex, Area of residence, Socioeconomic position (measured by The Indigenous Relative Socioeconomic Outcomes (IRSEO) index, which includes socioeconomic outcomes such as employment, education, income, and housing, and is used to measure the socioeconomic status of Indigenous Australians.)

Variables are described in detail in Table S1.

2.4 | Cultural Integrity

This project remains grounded in reciprocity with Indigenous and non-Indigenous authors having the opportunity to work together. It let Noongar/Yamatji Aboriginal co-author TE improve his research abilities and let the group gain from his leadership, knowledge, and thorough awareness of Indigenous cultural integrity. The project also enabled TE to supervise, disseminate, safeguard, and grow his cultural and intellectual legacy using Indigenous ways of knowing, being, and doing, which shaped the research process.

This study used a strength-based quantitative approach and incorporated aspects of the 'Centre of Research Excellence in Aboriginal Chronic Disease Knowledge Translation and Exchange (CREATE)' quality appraisal tool to support cultural integrity where possible [29]. The CREATE quality appraisal tool allowed us to evaluate the quality of studies not only from a scientific standpoint but also from an Indigenous cultural perspective [29]. Moreover, it is worthwhile to mention that the Footprints in Time Steering Committee comprised of Indigenous people and community stakeholders not only manages the whole LSIC study but also provides guidelines on survey design, study planning, data collection methods, community engagement, ethical issues, cultural sensitivity, and data processing and interpretation that prioritizes Australian Indigenous knowledge and cultural traditions [24, 25].

2.5 | Statistical Analysis

Descriptive statistics were first performed using mean and standard deviation for the continuous variable (i.e., age), and frequency (n) and percentages (%) for the categorical variables. To test the hypothesis of whether school connectedness mediates the effect of exposure to ACEs on mental illness, we used the Stata package 'medsem' [30], which is designed for testing mediation with models involving either observed variables and/or latent variables based on Baron and Kenny's (BK) approach [31] modified by Iacobucci et al. [32] using Structural Equation Modeling (SEM) techniques. Figure 2 presents the mediation model. A series of steps are required to conduct mediation analysis following the modified BK approach via SEM.

- Step 1: A statistically significant ($p < 0.05$) coefficient is mandatory for the next step. If no path is significant (3 out of 3 paths), or 2 out of 3 paths are non-significant, there is no mediation. If coefficients are found statistically significant in Path A and Path B, some mediation is indicated and can be progressed to the next step of analysis.
- Step 2: Performing Sobel's test to precisely estimate the relative sizes of the indirect (mediated) versus direct paths. The options are—If the z is significant and path C is not, the mediation is complete; If both the z and the path C are significant, the mediation is partial; If the z is not significant but the direct path C is, the mediation is partial in the presence of a direct effect; and lastly, if neither the z nor the direct path C are significant, the mediation is partial in the absence of a direct effect.

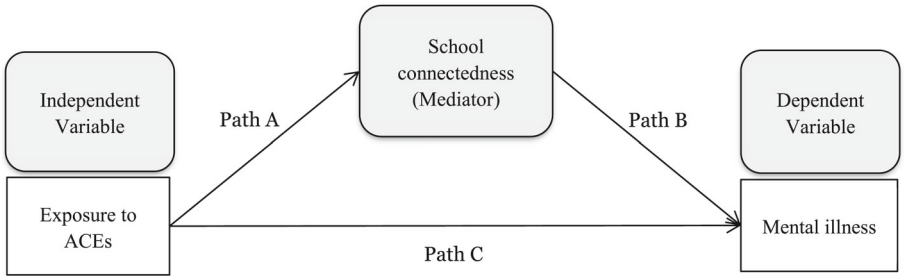

FIGURE 2 | Hypothesized mediation model.

- Step 3: Final interpretation — 'no mediation', 'partial mediation' and 'complete mediation'.

All analyses were conducted by using Stata/SE 14.1 (Stata Corporation, College Station, TX, USA) and statistical significance was set to 0.05.

3 | Results

Table 1 demonstrates the data utilized for analysis, with variables, total number within the sample, and proportion of the sample illustrated.

3.1 | Mediation Analysis (Total Sample)

The unadjusted Mediation model for the total sample is demonstrated in Figure 3a. Step 1 results of mediation analysis demonstrated that exposure to ACEs is significantly associated with school connectedness (Path A, $p = 0.010$). School connectedness also yielded a statistically significant association with mental disorders (Path B, $p = 0.002$). However, exposure to ACEs was not statistically significantly associated with mental disorders (Path C, $p = 0.744$). Given the first two paths yielded significant results (Path A and B), the analysis proceeded to Step 2, with a Sobel test being conducted to measure the extent to which direct vs. indirect mediation occurred. The Sobel test yielded statistical significance ($z = 1.974$, $p = 0.048$). From these results, and the modified BK framework via SEM, school connectedness can be identified as having a complete mediating effect on the association between exposure to ACEs and mental disorders in Australian Indigenous adolescents aged 12–17 years old. Figure 3b demonstrates an adjusted mediation model for the total sample. Upon adjustment for covariates (age, gender, area of residence and IRSEO index), school connectedness appeared to partially mediate the relationship between exposure to ACEs and mental disorders. Partial mediation was indicated due to two of three paths yielding statistically significant results (Path A and B), but Path C and the Sobel test were insignificant.

3.2 | Mediation Analysis Stratified by School Type (Public School)

Mediation analysis was also further stratified by public compared to private/Catholic schooling, with the results of analysis for public schooling demonstrated in Figure 4a. This yielded

TABLE 1 | Total sample characteristics ($n = 636$).

Variables	Frequency (n)	Percentages (%)
Age	Mean = 14.07 and SD = 1.47	
Sex		
Boys	229	45.44
Girls	275	54.56
Area of residence		
Major cities	186	36.90
Regional/Remote	318	63.10
Socioeconomic position[a]		
Q1 — Most disadvantaged	36	7.14
Q2	59	11.71
Q3	164	32.54
Q4	158	31.35
Q5 — Most advantaged	87	17.27
School type		
Public	504	79.2%
Private/Catholic	132	20.8%
School connectedness		
Not much connected	106	21.03
Strongly connected	398	78.97
Exposure to ACEs		
Limited exposure to ACE (0–1)	138	27.38
Exposure to multiple ACEs (2–5)	366	72.62
Mental disorders (anxiety/depression)		
Yes	25	4.96
No	479	95.04

Note: Mean and Standard deviation (SD) inserted for continuous variable. Variables were coded to be strengths-based to examine each variable as a protective factor (e.g., no mental disorder coded as 1, and yes to mental disorders coded as 0; similarly; strong school connectedness coded as 1 and not much connectedness to school coded as 0; and limited exposure to ACEs coded as 1, exposure to multiple ACEs coded as 0).

[a]Measured by the Indigenous Relative Socioeconomic Outcomes (IRSEO) index, which includes socioeconomic outcomes such as employment, education, income, and housing, and is used to measure the socioeconomic status of Indigenous Australians living in each Indigenous area of Australia. The lowest IRSEO index (Quintile 1, 0%–20%) represents the most disadvantaged, while the highest IRSEO index (Quintile 5, 80%–100%) shows the most advantaged.

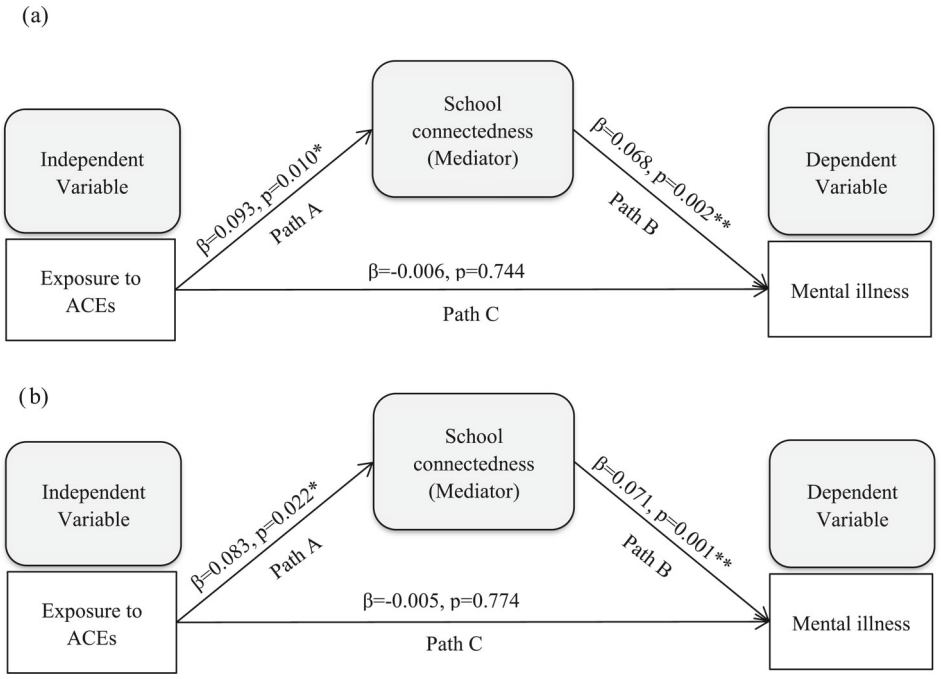

FIGURE 3 | All sample ($n = 636$) mediation model. (3a) Unadjusted model; (3b) Adjusted model adjusted for covariates including age, gender, area of residence, and IRSEO index (Results for covariates are not shown here). Level of significance: $^{**}p < 0.010$, $^{*}p < 0.050$.

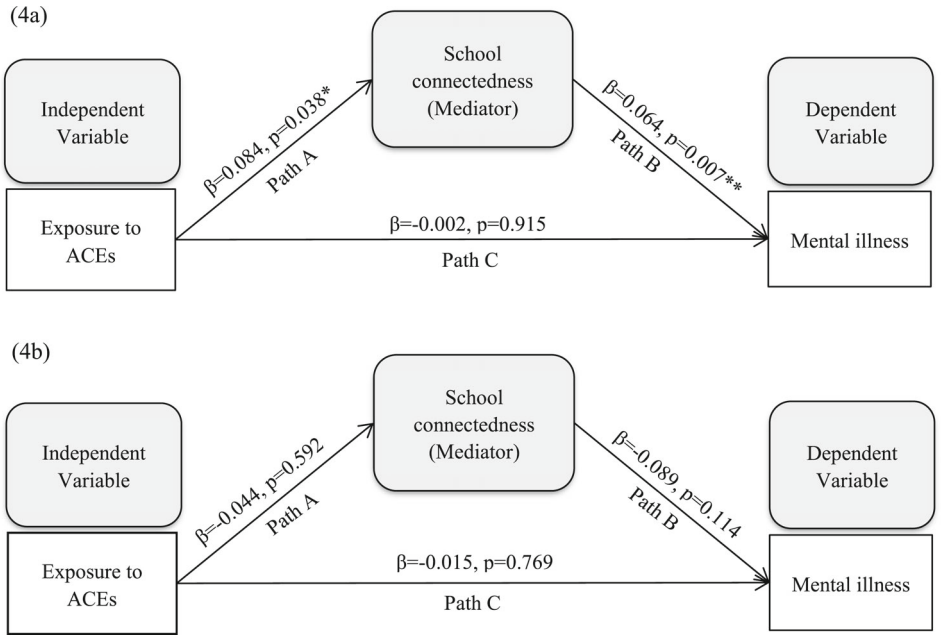

FIGURE 4 | Adjusted mediation analysis, stratified by school type — Public & Private/Catholic. (4a) Adjusted mediation model for children attended public school ($n = 504$); (4b) Adjusted mediation model for children attended Private/Catholic school ($n = 132$). Both models adjusted for covariates including age, gender, area of residence, and IRSEO index (Results for covariates are not shown here). Level of significance: $^{**}p < 0.010$, $^{*}p < 0.050$.

partial mediation of school connectedness on exposure to ACEs and mental disorders. Path A ($p = 0.038$) and Path B ($p = 0.007$) demonstrated statistical significance, whilst Path C demonstrated a lack of statistical significance. Given two of the three paths were significant, a Sobel test was performed illustrating statistical insignificance ($z = 1.646$, $p = 0.100$). This result indicates partial mediation of school connectedness on exposure to ACEs and mental disorders for Indigenous adolescents aged 12–17 years in public schools.

3.3 | Mediation Analysis Stratified by School Type (Private School)

After stratified analysis was conducted for students attending public schools, private/Catholic schooling was also analyzed as demonstrated in Figure 4b. In step one of the analyses, it was evident that there was no mediation present with Path A ($p = 0.592$), Path B ($p = 0.114$), and Path C ($p = 0.769$), lacking statistical significance. As such, a Sobel test was not performed, and one was

able to conclude that there is no mediating effect of school connectedness for Aboriginal and Torres Strait Islander adolescents exposed to ACEs and with mental disorders in private/Catholic schools.

4 | Discussion

4.1 | Summary of Key Findings

A mediating variable (school connectedness) explains at least one of the ways the independent variable (in this case, "exposure to ACEs") affects the dependent variable ("mental health conditions – anxiety/depression"). School connectedness acts as a conduit, illustrating how or why such an effect occurs. Here, the relationship between "exposure to ACEs" and "mental health conditions" is mediated by "school connectedness." This means that "exposure to ACEs" is associated with changes in "school connectedness," which in turn influences "mental health conditions." Upon completion of the mediation analysis, several findings were elicited regarding the mediating effect of school connectedness on exposure to ACEs and mental health conditions. Most importantly, school connectedness was found to be a complete mediator in the relationship between ACEs and mental health conditions (anxiety/depression) in the total unadjusted sample. After adjusting for potential covariates including age, gender, area of residence and socioeconomic position, a partial mediation effect remained. However, once the mediation analysis was stratified by school type (Public vs. Private/Catholic), it became apparent that there was no significant mediation of school connectedness in Indigenous adolescents attending Private/Catholic schools, but considerable mediation of school connectedness in public schools. These results spark an important question, why does school connectedness act as a protector against poor mental health conditions among Australian Indigenous adolescents who experienced ACEs only in public schools, and not in Private/Catholic schools?

4.2 | Comparison With Previous Studies

Broadly, the findings of this study support previous literature suggesting that school connectedness has a protective impact against mental health conditions [17, 21, 22]. Although literature regarding school connectedness as a mediating variable is not as well studied, the results of this study also suggest that school connectedness exists as a mediating variable in the association between exposure to ACEs and mental health conditions among Indigenous adolescents in Australia. A 2023 study conducted among Chinese adolescents found that school connectedness acted as a mediating variable in the relationship between childhood maltreatment and suicidal ideation [33]. The Chinese study found similar results to our study, in that school connectedness was found as a mediating variable between exposure to ACEs and a symptom of poor mental health. Our study is an important contribution to our knowledge of these factors—building methodologically and in a different population as the Chinese study was cross-sectional, not prospective like the current study, was conducted with Chinese adolescents in China, and did not focus on Indigenous adolescents [34]. Further, a paper using the data from the Millenium Cohort Study in the UK found that school connectedness is positively associated with good mental health conditions among adolescents aged 11–14 years and who reported childhood adversity before the age of 5 years [35]. School connectedness as a mediating variable was also investigated among American adolescents [23, 36], which revealed school connectedness acts as a mediating variable to reduce the risk of aggressive behavior in adolescents who have experienced childhood maltreatment.

Moreover, the mediation analysis in the current study reveals that ACEs are not the predictor of mental health conditions such as anxiety/depression among Indigenous adolescents. This result is consistent with previous literature [35, 37, 38] that has identified ACEs as a risk factor among adolescents for externalizing problems (i.e., Oppositional defiant disorder, conduct disorder, ADHD, substance use disorders, and antisocial personality disorder) [39, 40] but not for the internalizing problems such as Anxiety, depression [39, 40].

The prohibitive cost of Private/Catholic schooling has shown a division between the proportion and demographic of adolescents who attend Private/Catholic school and those who participate in public school [28]. School connectedness having a mediating role in public schools and not in private schools yields a surprising result. As low-income status is associated with increased odds of childhood ACEs, our study showing school connectedness as a mediating factor in public schools is significant [41]. This could be due to several factors. Given the lack of an entry cost to attending public school, the student population often has more diversity, with more Indigenous adolescents participating in the public system [22]. This extends beyond ethnic divisions, with increased variation in socioeconomic status also being present in public schools [36]. Private/Catholic schools lack this same amount of diversity and are less economically aligned [42]. This diversity in public schools could increase community and school connectedness due to having more students with similar life experiences to Indigenous adolescents, both ethnically and socially. There are also more Indigenous adolescents within public schools, which could foster increased community and kinship, a known protective factor against poor mental health conditions. These factors could explain the lack of school connectedness in Private/Catholic schools compared to public schools, and ultimately why school connectedness does not mediate the relationship between ACEs and internalizing mental health conditions such as anxiety/depression in Private/Catholic schools for Indigenous adolescents.

4.3 | Implications for School Health

This study illustrates that school plays an important role in Indigenous adolescent mental health. Our study also reveals how a potentially modifiable factor such as school connectedness positively influences mental health among Indigenous adolescents, and whether it varies in the different education systems (i.e., public vs. private school). School connectedness could be in the form of increasing community involvement within school, increasing parental involvement in school, and schools' engagement with public agencies, to make students feel that their school and their lives are more connected regardless of school type—public or private [43]. Evidence suggests that

heightened school connectedness correlates with reduced anxiety/depression, while elevated anxiety/depression linked with diminished school connectedness signifies the importance of school against mental health among adolescents. Moreover, it is also recommended that culturally grounded education programs (e.g., addition/changes in educational curriculum to include Indigenous perspective) and culturally tailored school-based interventions (e.g., media campaigns promoting Indigenous language and cultural identity) are the potential methods of engaging Indigenous adolescents in school regardless of school type [44, 45]. Efforts to reduce racial discrimination, experienced by 42% of Indigenous adolescents, within schooling may also improve students' feelings of connectedness at school [46]. This paper supports increased investment in the public education sector as a harm minimization strategy to address the increasing burden of poor mental health in Australia. Indigenous children, when given a supportive and connected environment, are shown to do better, perform better, and subsequently contribute more to society with changes focused on their schooling [16, 18, 43].

4.4 | Strengths and Limitations

Though this study follows a strong longitudinal study design with a unique sample population [24, 25], this study has some limitations. First, although the sample size of the current study is reasonable ($n = 636$), some participants of the overall cohort could not be included due to missing responses or loss to follow-up, which increases the risk of selection bias and can potentially skew final data by overestimating a mediating effect. There also may be challenges regarding the risk of social-desirability bias and recall bias as the variables studied within the LSIC are self-reported and potentially subjective. Furthermore, even though this study tends to fill a research and knowledge gap about the non-educational outcomes comparing Public and Private/Catholic schooling, these findings should be interpreted with caution as previous research [47] has shown that self-reported information (e.g., ACEs, school connectedness and mental health conditions) can often provide under/overestimation of the true prevalence. In addition, previous research has suggested that ACE scores do not account for all childhood adversities like financial insecurity, loss of a relative, or food insecurity. It is especially important to consider how ACE scores may not be representative of adversities faced by Indigenous populations such as intergenerational trauma [48]. Future research should focus on how to make ACE scores more culturally representative of indigenous populations. Additionally, the sample included in the study is representative only of Indigenous populations and cannot be generalized to the broader Australian population, including non-Indigenous groups and other age categories such as adults or young adults. Moreover, the individuals studied were not from Indigenous Protected Areas (IPAs), where conditions might differ from those in other parts of Australia. To rectify this, further research is needed regarding the mental health of students attending public, private and Catholic schools.

5 | Conclusions

This study addressed the importance of school connectedness as a mediating variable in the relationship between ACEs and mental health conditions such as anxiety/depression among Indigenous adolescents aged 12–17 years. The current study also highlights the promotive role of school on the future mental health of Indigenous adolescents. Given these results, identifying ways to improve school connectedness is paramount to future interventions to improve the lives of Indigenous adolescents, and consequently Indigenous community as a whole.

Acknowledgments

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Ethics Statement

The study received approval from the Footprints in Time Steering Committee and the Human Research Ethics Committee of the Australian Institute of Aboriginal and Torres Strait Islander Studies (Ethics code: AIATSIS) for its content and fieldwork. The authorship team was granted access to the LSIC dataset for this research and publication by the Australian Data Archive Dataverse (Application reference no. 440644). Moreover, written informed consent was obtained from all participants involved in the study for data collection, research, and publication.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data that support the findings of this study are available from https://ada.edu.au/. Restrictions apply to the availability of these data, which were used under license for this study. Data are available from https://dataverse.ada.edu.au/dataverse/lsic with the permission of https://ada.edu.au/.

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Supporting Information

Additional supporting information can be found online in the Supporting Information section. **DATA S1.** Supporting Information.