



Community Insights into School Disengagement: Perspectives from a Regional-Rural Australian Context

Michelle Gossner

Central Queensland University
m.gossner@cqu.edu.au

Cassandra K. Dittman

Central Queensland University
c.dittman@cqu.edu.au

Lisa Lole

Central Queensland University
l.lole@cqu.edu.au

Lauren Miller-Lewis

Central Queensland University
l.miller-lewis@cqu.edu.au

Abstract

School disengagement is a significant issue in regional and rural Australian communities. Addressing this issue requires a comprehensive understanding of the relational, individual, and environmental factors that influence disengagement. This study aimed to explore the perspectives of community members who have experience working with disengaged school-aged children. The research applied the bioecological model of development to examine how *Process, Person, Context, and Time* factors contribute to school disengagement. Data were collected through five focus groups with 24 participants from diverse professional backgrounds and sectors within a socioeconomically disadvantaged regional and rural area in Australia. A thematic analysis identified ten key themes within the *Process, Person, Context, and Time* framework. *Process* factors included parent-child and teacher-student interactions. *Person* factors encompassed mental health challenges, diverse learning needs, antisocial behaviours, and personal and interpersonal skills. *Context* factors involved the home environment, parental disengagement, school systems and structures, and broader regional and community challenges. *Time* revealed disengagement to be a cumulative and dynamic process. This study highlights the importance of incorporating local perspectives to better understand school disengagement and calls for tailored interventions that address its complex nature alongside context-specific policies and practices to promote long-term educational engagement. Furthermore, the study emphasises the importance of prioritising teacher professional development and encouraging policymakers to implement reforms in higher education teacher training. These measures should help to equip teachers with the skills needed to support student wellbeing and foster greater engagement in learning.

Keywords: school disengagement, dropout, children, students, qualitative, regional, rural

Introduction

School children in regional and rural Australia are at a higher risk of school disengagement compared to those in urban areas. National data highlights a significant geographic disparity in Year 12 attainment rates, with 79.4% of students in urban areas completing Year 12, compared to 67.6% in regional areas and 69.2% in rural areas (Australian Curriculum Assessment and Reporting Authority, 2022). Maintaining the engagement of regional and rural students is critical, as it increases the likelihood of completing Year 12 (Lovelace et al., 2017), which in turn is associated with better employment, financial, and health outcomes in adulthood (Lansford et al., 2016). In contrast, the long-term consequences of school disengagement are profound, including school

dropout (Henry et al., 2012), which can lead to poorer physical (Vaughn et al., 2014) and mental health (Hetlevik et al., 2018), higher unemployment rates, increased reliance on welfare (Ramsdal et al., 2013), and a heightened risk of substance abuse and criminal behaviour (Lansford et al., 2016). Additionally, school dropout may perpetuate intergenerational cycles of disadvantage, exacerbating socioeconomic inequalities over time (Vauhkonen et al., 2017).

In the Australian context, students in regional and rural contexts face several educational challenges, including disparities in resources, teacher retention, and inclusion support, compared to their urban peers (Halsey, 2018). Despite various political and policy initiatives aimed at addressing these inequities – such as targeted funding for specific programs and community support efforts – the effectiveness of these interventions has been inconsistent (Halsey, 2018). Smyth and Hattam (2004) argue that these educational challenges are deeply intertwined with the broader social and economic conditions prevalent in regional and rural communities, complicating efforts to reduce educational disparities. Therefore, a more comprehensive understanding of the interplay between the factors in regional and rural contexts impeding educational engagement is needed.

Understanding School Disengagement

School disengagement is a multidimensional phenomenon, which can be exhibited by children behaviourally (e.g., problematic absenteeism, antisocial behaviour), cognitively (e.g., lack of persistence), emotionally (e.g., anxiety, frustration, anger) and socially (e.g., poor relationships with teachers, peers; Fredricks et al., 2019; Wang et al., 2019). Disengagement is not an isolated event but rather a gradual process that unfolds over time, varying in terms of pattern (continuous or intermittent) and manifestation (overt or subtle; Fredricks et al., 2019; Wang et al., 2019). For many children experiencing school disengagement, the final stage is school dropout, although some children may alternate between disengagement from formal schooling and periods of re-engagement (Broadhurst et al., 2005; Janosz et al., 2008).

An extensive evidence base has identified the range of factors associated with disengagement outcomes, including school absenteeism and dropout. In one meta-analysis of 75 quantitative studies, Gubbels et al. (2019) identified individual, family, and social risk factors for school disengagement, including child mental health problems (e.g., depression, anxiety), antisocial behaviours (e.g., delinquency, association with truant peers), problems at or with school (e.g., poor teacher-student relationship), parenting challenges (e.g., low parental educational support), and family difficulties (e.g., low parental education, non-nuclear family structures). Further, De Witte et al. (2013) emphasised that disengagement occurs due to a complex interplay of various determinants across multiple contexts over time, including those related to the student, family, school, and community contexts. However, they noted that the reliance on quantitative studies to examine influences on disengagement has produced limited insights into the ways these factors interact. They argued that qualitative research provides a deeper understanding of disengagement by gaining personal accounts of how psychological, social, and contextual influences identified in the quantitative research are experienced. By considering the lived experiences of students, parents, educators, and other stakeholders within their specific social and cultural contexts, qualitative research has the potential to challenge the primarily deficit approach used in quantitative research, which focuses on the identification of ‘risk factors’. Qualitative research should help to elucidate the impact of broader systemic and structural factors on educational outcomes, rather than attributing disengagement solely to individual or family shortcomings (Valencia, 2010).

Although still limited, there is a growing body of qualitative research exploring school disengagement in regional and rural Australia. Qualitative studies with students (Robinson & Smyth, 2015), educators (Allen et al., 2018), and community stakeholders (Watson et al., 2015) have highlighted the impact of complex family environments (e.g., long-term parental

unemployment, domestic violence, housing instability) alongside schooling challenges (e.g., poor teacher-student relationships, ineffective pedagogy) as contributors to disengagement. These challenges were reported to be further compounded by child mental health issues (Robinson & Smyth, 2015) and systemic barriers, such as transportation difficulties to access schools (Allen et al., 2018; Watson et al., 2015). These findings are supported by Guenther et al. (2024), who explored disengagement among Indigenous students through interviews with Indigenous Elders, community members, school staff, and students in remote Australia. The study highlighted that individual factors were likely interwoven with relational and institutional factors, including child wellbeing issues, dysfunctional home environments, school bullying, irrelevant curricula, and cultural obligations.

While these studies provide a strong foundation for understanding school disengagement in regional and rural Australia, there remains a need for further research to deepen insights into the complex interplay of factors and how these may change over time. Expanding this body of knowledge can inform the development of more effective, contextually relevant interventions to support students in these communities. Research suggests that regional and rural areas are characterised by stronger community ties, including higher levels of participation in community networks, neighbourhood connections, and relationships with family and friends, as well as a greater sense of trust and safety (Crommelin et al., 2022; Onyx & Bullen, 2000). These community strengths could offer a valuable foundation for developing tailored interventions that leverage local resources to support student engagement in these regions.

Theoretical Framework

Bronfenbrenner's Process-Person-Context-Time (Bronfenbrenner & Morris, 2006) model served as the theoretical framework for this study. This model highlights the importance of proximal processes, personal characteristics, contextual factors, and the dimension of time in shaping school disengagement. Proximal processes, which take place in the microsystem, refer to the interactions that occur between individuals and the various elements within their immediate environments, which include family members, teachers, and friends, as well as objects and symbols. These interactions are important as they influence how individuals perceive and respond to their environment (Bronfenbrenner & Morris, 2006). Person factors are individual characteristics, including personality traits and emotional states, which interact with proximal processes to influence how individuals engage with their surroundings (Ashiabi & O'Neal, 2015; Rosa & Tudge, 2013). Context factors refer to different environments in which individuals live and interact, including home, school, and community settings. These environments are categorised into four systems: microsystem, mesosystem, exosystem, and macrosystem. Each system presents unique challenges and opportunities that can significantly impact individual experiences and levels of school engagement (Hasselhorn et al., 2015). The time dimension of the *Process, Person, Context, and Time* model highlights that development is influenced by historical and situational contexts that evolve over time (Bronfenbrenner & Morris, 2006). Understanding the role of time is important for examining disengagement, as children may experience shifts in their engagement levels due to changes in life circumstances, societal trends, developmental stages or an accumulation of factors over time.

The Current Study

The study aimed to build upon existing qualitative research by exploring community experiences and perceptions of school disengagement within a regional and rural context. Five focus groups were conducted with community members who had experience working with disengaged children from a regional town in Queensland, Australia and its surrounding rural areas. Based on the Modified Monash (MM) Model, an Australian classification system that measures remoteness and population size, the research setting included a central regional hub (classified as MM2) and

several smaller rural towns (classified as MM5; Department of Health and Aged Care, 2019). Further, the study community is one of the most disadvantaged local government areas in Australia (classified in quintile 1 on the Socio-Economic Indexes for Areas (SEIFA); Australian Bureau of Statistics, 2021b). In this community, educational attainment is lower than the state and national averages, with 29.5% having Year 10 or lower as their highest level of education, compared to 19.2% in Queensland and 18.1% nationally (Australian Bureau of Statistics, 2021a).

Method

Participants

The study followed the Consolidated Criteria for Reporting Qualitative Research (COREQ; Tong et al., 2007). Participants were professionals who had experience working with disengaged children in the study community. Participants were recruited using purposive sampling (Reed et al., 1996) by identifying potential participants through the researchers' network of community contacts. Email invitations containing an overview of the study, its objectives, and expected time commitment were sent to 35 community members, 24 (16 women, 8 men) of whom accepted and participated in the study. Participants were from a diverse range of sectors (see Table 1) including youth community services ($n = 8$), youth justice ($n = 2$), Indigenous services ($n = 2$), education ($n = 5$), health/medical ($n = 2$), local business ($n = 2$), and local government ($n = 3$). This diversity was important to ensure varied perspectives on school disengagement.

Table 1: Breakdown of Focus Groups: Participant Numbers and Professions

Focus Group	Number of Participants	Profession
Focus Group 1 (FG1)	5	1 x youth community services 2 x youth justice 1 x Indigenous services 1 x health/medical
Focus Group 2 (FG2)	6	5 x youth community services 1 x education
Focus Group 3 (FG3)	3	1 x youth community services 1 x education 1 x health/medical
Focus Group 4 (FG4)	6	1 x education 2 x local business 3 x local government
Focus Group 5 (FG5)	4	1 x youth community services 1 x Indigenous services 2 x education

Procedure

Ethics approval was obtained from the authors' university Human Research Ethics Committee, and all participants provided written informed consent. A semi-structured interview protocol was developed for the focus groups based on existing school disengagement literature and the aims of the study. The sessions were conducted at a local community facility between October and

December 2022, with three to six participants in each group. The first and second authors, both females with backgrounds in education and psychology, respectively, co-facilitated the sessions. Each focus group lasted approximately 90 minutes and was audio-recorded for transcription.

Focus groups began with an overview of the session agenda and expectations, emphasising the importance of equal participation and mutual respect among group members (Krueger & Casey, 2000). Participants were then invited to introduce themselves and share their professional backgrounds with the group. A PowerPoint presentation was used to guide the discussion, with prompts delivered both verbally and visually. The prompts included open-ended questions designed to elicit in-depth responses from the participants. Examples of these questions were: “What are your experiences with young people in the region who are not engaged in school, education or further training?”, “What do you think are some of the differences between young people in the region who stick with their education versus those who drop out of school or struggle to stay engaged?”, and “What current opportunities do we have in the region that might help address this issue?” Throughout the discussions, the researchers were mindful of group dynamics, using follow-up questions to encourage participants to expand on their ideas and clarify their points. Open-ended prompts were used to invite quieter participants to share their thoughts, ensuring that all perspectives were heard and valued (Greenbaum, 2000).

Data Analysis

The first author transcribed the audio recordings of the focus groups verbatim. The first and second authors then analysed the transcripts per the reflective thematic analysis procedure outlined by Braun and Clark (2022). They started by reading the full transcripts multiple times to become familiar with the data. Next, they independently reviewed the transcripts, identifying key elements that were of analytical value and compiled meaningful codes. They then discussed the findings to develop initial themes based on common patterns in the data. These themes were checked and refined to ensure they made sense in relation to the coded extracts and the entire dataset. This process was iterative, where themes, codes, and extracts were moved back and forth until a coherent thematic structure represented the insights expressed by the participants in the focus groups. The *Process, Person, Context, and Time* model (Bronfenbrenner & Morris, 2006) was used as an organising framework for the themes.

Quality Techniques

Measures of quality assurance were implemented to mitigate potential biases. The first and second authors engaged in discussions to consolidate codes into coherent and meaningful themes. Further, they discussed the coding and themes with the third and fourth authors, who were not directly involved in the data collection or analysis, to verify that the codes accurately captured the perspectives of the participants.

Results

Ten themes were collated under the four defining properties of the *Process, Person, Context, and Time* model (Bronfenbrenner & Morris, 2006). The themes reflected participants' insights into the immediate environmental factors contributing to school disengagement (*Process*), traits of disengaged students (*Person*), broader social settings influencing disengagement (*Context*), and their experiences with the pathways to disengagement (*Time*). See Figure 1.

Figure 1. School Disengagement (Process-Person-Context-Time)



Process

The Process dimension refers to the enduring, reciprocal interactions between children and their immediate environments. Participants described student school disengagement as being influenced by two primary interactive processes: parent-child interactions and teacher-student interactions.

Parent-child Interactions. Participants focused on two main aspects of parent-child interactions: *parenting practices* and *the quality of parent-child relationships*.

Across all focus groups, participants noted *parenting practices* they perceived as contributing to disengagement, namely inconsistent home routines, poor supervision, and inconsistent discipline. Several participants reported that children often interpreted inadequate parental supervision as a lack of parental care or interest, with one participant sharing that those children with excessive freedoms often expressed, “Mum and dad don’t care” (FG4). In all five focus groups, ineffective parenting often involved perceptions of inadequate supervision and lax boundaries on children’s technology use (“They go home and spend hours and hours on PlayStation and Fortnite”; FG5). Some participants reflected that excessive screen time led to children being sleep-deprived, which participants believed hindered classroom engagement. Participants also suggested poor monitoring of screen time meant children were more vulnerable to exposure to negative online behaviours, including bullying and sexting, which in turn negatively impacted school engagement.

The second aspect of parent-child interactions was *parent-child relationships*. Participants perceived that ineffective parenting practices reflected low parental involvement in their children’s lives. Professionals in youth services and youth justice emphasised the negative impact of parental drug and alcohol use on these relationships from an early age. Participants also noted

that excessive parental use of technology disrupted the parent-child relationship. One participant shared, *“kids will come and say, ‘oh mum’s on her phone all the time’”* (FG3). A lack of meaningful conversations about children’s aspirations was another concern, with one participant reporting, *“They don’t have parents or good influences to ask all of these important questions”* (FG1). In several focus groups, participants indicated that low parental involvement and poor-quality parent-child interactions eventually left children feeling disconnected and lacking a sense of belonging and connection with their parents. This was described as having an adverse effect on children, leading to behavioural problems and difficulties in forming positive relationships with teachers and peers, ultimately affecting their capacity to engage effectively in school. According to one participant working with community children: *“...when they lose basic trust with their mum and dad. If they can’t even trust the mum and dad, we’ve lost trust with authority. They don’t trust anyone.”* (FG4)

Teacher-Student Interactions. The second proximal process noted was the role of *teacher-student interactions* in school disengagement. Participants focused on the quality of the teacher-student relationship, particularly around relationship building and managing disruptive behaviour. However, perspectives regarding the dynamics of these interactions varied depending on the professional context of the participants.

Participants from non-education sectors generally agreed that teachers often lack an understanding of how trauma and complex home environments influence student behaviour in the classroom. This perceived lack of awareness was seen as limiting teachers’ ability to effectively support students facing such challenges (*“[students] have these needs that teachers just don’t understand”*; FG1). It was noted that this gap in understanding could lead students to feel misunderstood, isolated, and unsupported, which negatively affects teacher-student relationships and contributes to disengagement.

Participants from the education sector offered a different perspective, highlighting the challenges of building relationships with students due to large class sizes and diverse needs, describing schools as *“understaffed and underfunded”* (FG2). Despite these obstacles, they emphasised the importance of building rapport with students and its positive impact on behaviour and engagement. One participant described their interactions with a student: *“When we were able to touch base on a personal level through games involving the Scouts, ... I was able to make some connections there”* (FG5). Another participant from the education sector reflected on the challenges in building connections with students:

[students] need time and that one-on-one thing to be able to develop. That and to be able to do some self-reflecting and have those conversations with people. Whereas a lot of the time we’re just, you know, as you said before, [it’s] just go, go, go up in a classroom and you don’t have time to do that. (FG5)

Person

The *Person* factors revealed unique child characteristics that were perceived to impact school disengagement. Participants described three main patterns of psychological or developmental presentations: mental health problems, diverse learning needs, and antisocial behaviour. They emphasised the complexity of these difficulties, noting significant overlap among the three patterns. Additionally, participants identified a common thread across these presentations: difficulties with personal and interpersonal skills.

Mental Health. In all focus groups, participants reported that mental health issues were common among children disengaging or disengaged from school. Anxiety was the most frequent mental health challenge reported, with participants describing that anxiety resulted in avoidance of school and poor attendance. Participants identified several contributing factors to children’s anxiety, including negative parent-child relationships, parental reinforcement of anxious

behaviour, and unstable home environments marked by domestic violence, drug use, and a lack of external support services. In these cases, anxiety was often seen as a response to trauma within the home. One participant shared that children's anxiety could stem from a desire to protect a parent experiencing partner violence: *"If you do successfully get them [children] to school, they're worrying about the parent, they're distracted all day, they're checking their phone"* (FG2). Another participant from youth services highlighted the interconnectedness of anxiety, avoidance, and other mental health struggles, such as self-harm and suicidal thoughts: *"kids, nine years old, already having suicidal ideas, already self-harming and already refusing to go to school"* (FG2).

Diverse Learning Needs. Participants in four of the five focus groups believed that neurodivergent children with conditions such as attention-deficit/hyperactivity disorder, autism spectrum disorder, or foetal alcohol syndrome were more likely to disengage from school. It was noted that these children had diverse learning needs, which meant they often struggled to meet the structures and expectations of the mainstream education system. This was described as leading to misconceptions, with schools viewing these children as having poor behaviour rather than regulation issues (*"the school system just sees that as poor behaviour. It's that they cannot regulate"*; FG1). While participants acknowledged growing awareness of neurodivergent conditions, they also noted that this awareness could sometimes be counterproductive, with some parents and children using the diagnosis to justify disengagement. At the same time, participants expressed concern that neurodivergent children often felt unsupported due to limited resources and insufficient teacher training on these conditions. Other participants indicated that children with undiagnosed conditions were at a greater risk of disengagement.

Antisocial Behaviour. A third pattern associated with disengagement was antisocial behaviour. Participants described behaviours ranging from conduct problems, disruptive behaviour, and disrespect towards authority (e.g., refusing to follow instructions, calling out in class, swearing) to more serious issues, such as peer victimisation and aggression, criminal offending, illicit drug use, and early sexualised behaviour. They noted that a sense of loneliness and lack of belonging can lead these children to connect with other antisocial peers (*"the kids tend to attract their like kind as well; they track similar kids who've got similar issues, and they tend to feed off that"*; FG5). Most participants characterised these children as coming from dysfunctional households.

Personal and Interpersonal Skills. Participants noted that disengaged children faced challenges in their personal and social functioning. They discussed that these children had difficulties trusting others, which hindered the development of constructive relationships both at school and in the community. Participants also observed that these children were reluctant to seek help when needed and exhibited low confidence and self-esteem (*"most are struggling with their identity around where they fit in society and a bit of shame around not being good enough"*; FG3). Additionally, most participants noted that disengaged children had limited aspirations for their futures, which further impacted their motivation to engage positively in school.

Context

Context relates to various environmental settings, conditions, and circumstances that participants perceived to affect school disengagement. Multiple layers of influence were identified: home environment (microsystem), parental disengagement (exosystem), school systems and structures (exosystem) and regional/rural community challenges (macrosystem).

Home Environment. A major contextual factor identified in all focus groups was that many disengaged children came from unstable, stressful, and complex home environments. Participants perceived that domestic violence in the home was a common risk factor for disengagement (*"I support... 9 to 13 [year olds] with disengagement, and 100% of the families I've worked with are from a domestic violence background"*; FG2). They also noted frequent drug use

in the homes of disengaged children (“... drug use and violence are normalised”; FG1), as well as experiences of child maltreatment and neglect, with involvement in child protective services serving as another risk factor (“A lot of our kids are under orders from child safety – so they’ve got quite a traumatic background”; FG1).

Most focus groups discussed complex family structures as an important factor associated with disengagement. Participants noted that children were more likely to disengage when living in step- or blended families with multiple caregivers, or in families where parents frequently partnered and re-partnered. Several participants highlighted that some children took on the role of caregiver for younger siblings, adding another layer of complexity to the family dynamic. One participant working in community services reported:

A lot of these kids have to be parents at home, and then they come to school, and we expect them to be kids. It's very confusing, because at home they have to be the parent looking after a 3- or 4-month-old baby. Then they come to school and, “no, you'll do as you're told, you're a child.” That's a very complex world for a young person to operate in. (FG2)

Parental Disengagement. Parents’ own disengagement from education, employment, and support services was another significant contextual factor that participants reported as influencing school disengagement. Participants identified factors like intergenerational unemployment, welfare dependency, mental health issues, disability, and both current and historical parental incarceration as limiting parents’ ability to support their child’s schooling. Several participants noted that many parents were unwilling to engage in support services to assist their child (“There is a cohort [of parents] that the schools are aware of that completely don't engage at all”; FG1). Further, participants noted several potential barriers to parental engagement with support services for their children among socially disadvantaged families, including restricted access to services due to financial hardship, fear of judgement in seeking help, no transport, and limited awareness of the risks associated with school disengagement.

Participants in all focus groups observed that many parents experiencing disadvantage held beliefs about employment and education that were shared and modelled to their children. These included negative attitudes towards education, low expectations for their children’s future, and high acceptance of unemployment and welfare dependency. These beliefs, participants noted, led to insufficient educational support from parents, which in turn diminished children's academic motivation and aspirations, contributing to school disengagement. One participant from a community organisation that worked with disengaged children described their experiences with disengaged parents:

I have parents that are sitting on Centrelink [welfare] that can be working, they could be working, and they decide that they don't want to take the kids to school. So, all the kids, they get to stay home for the day because they [the parents] don't want to get out of bed and then the kids fall behind in school. It's just a cycle then. (FG5)

School Systems and Structures. Participants perceived several school-related factors to impact disengagement, including conflicting educational priorities, rigid school structures, the inability to meet diverse learning needs, and lack of teacher training and preparedness. Participants commonly described the education system as having conflicting priorities, with teachers under growing pressure to address the complex needs of students (“every teacher is expected to differentiate and cater to the whole spectrum of kids”; FG5), while being largely governed by academic performance benchmarks (“... school has become more about the targets that the teacher has to meet”; FG3) and standardised assessment (“[teachers] are moderating different kids to the same standards”; FG5). One participant reflected on how these conflicting priorities made it challenging for teachers to balance addressing student needs with meeting the expectations of the education system (“as you move up these chains, you’ve got different priorities... I think that [schools] are becoming overburdened by bureaucracy rather than thinking

about what's happening in the classrooms"; FG5). Some participants argued that by requiring teachers to prescribe to the current educational system, they were forcing students to conform to a 'one-size-fits-all' model ("[students] are just being forced through this machine"; FG5). One participant from the education sector acknowledged the impact on children when they did not meet the academic expectations of the model:

I cannot blame them. If I had gone to school for three, four years or whatever and I constantly failed, I would have no self-efficacy. I wouldn't be too motivated. I'd probably [be] doing something to avoid that as well. (FG5)

In all focus groups, participants expressed concerns about whether the schooling system met the needs of all students. Four out of five groups questioned the relevance of the curriculum and its real-world applicability, while two groups raised concerns about the lack of Indigenous cultural inclusion and cross-cultural practices in schools (*"We refer students to alternative schools for Indigenous culture"; FG1*). Participants also noted a shortage of specialist staff to support students with complex needs. While it was acknowledged that some schools in the region employed psychologists, there was a consensus that more support was needed (*"we probably need it on a huger scale"; FG2*). Others criticised what they saw as outdated approaches to managing problem behaviours, such as detentions and suspensions, which they felt failed to address the social and emotional challenges faced by many students (*"Our system is failing these kids"; FG2*).

Other structural issues raised by participants included school scheduling and homework. Some noted that secondary school timetabling hindered teachers from building meaningful relationships with students (*"at high school, that teacher gets a kid once a week for one hour and they're not building those intimate relationships"; FG4*) or preparing them for real-world work experiences (*"that's part of the problem with high school, is that it's supposed to be setting you up for a work environment, but I don't know any work environment where I have a different boss every 40 minutes"; FG4*). Finally, several participants raised concerns regarding the impact of homework on child mental health, with one participant from the community services sector reflecting:

at school, they're saying, "so, you go to school", and then outside of school, you've got more school to do. So, you're not setting them up with real work practices. In the real world, they realise that you can't do that cause [sic] you burn people out when you make them work outside of their working hours. (FG2)

Regional and Rural Community Challenges. Participants described several regional and rural circumstances that were perceived to impact school disengagement, including limited access to services and widespread social disadvantage. The discussions highlighted the complex interplay between various contextual challenges and the consequences on student educational experiences.

Participants described support systems for families, parents, and children facing complex issues as fragmented. All focus groups expressed concern about the lack of child specialists (e.g., psychologists, psychiatrists, paediatricians etc.) in the region and the lengthy wait times (*"It's about an 18-month wait for children [to see a Paediatrician]" FG2*). These delays, participants noted, worsened children's problems, negatively affecting their mental health and school engagement. Several participants highlighted poor communication between services, particularly between schools and government agencies. Furthermore, several participants argued that children with complex needs often *"fall through the cracks"* (FG1) in the system due to strict eligibility criteria for government-funded services. Three focus groups also raised the lack of culturally appropriate services, with one participant stating, *"We don't have a great cultural representative with services, even around Indigenous, Torres Strait Islander... we don't cater well to the cultural family needs"* (FG3).

A contentious issue among the participants was the influence of family social disadvantage on school disengagement. Several participants acknowledged the low socioeconomic status of the region (“*[name of town] has always been known as low socioeconomic*”; FG4) and cited factors such as financial difficulties, food insecurity, and housing instability as key contributors to school disengagement. However, others disagreed, arguing that socioeconomic status had little influence on disengagement, stating, “*It doesn’t seem to matter what social background [students] come from*” (FG3).

Time

Participants agreed that school disengagement was a dynamic process influenced by a gradual accumulation of individual experiences and various factors over time. However, perspectives varied regarding the onset of this process. Some suggested that disengagement typically starts during transitional phases, like the move from primary to secondary school, while others argued that signs of disengagement can appear as early as primary school. One participant noted, “*by the time they get to us at nine, 10, 11 years old, they’re at the extreme ends of things and already looking at disengaging*” (FG2). Nevertheless, participants emphasised that disengagement begins early and results from the gradual accumulation of risk factors.

Discussion

This study built on existing qualitative research by examining school disengagement through the perspectives of community members with experience working with disengaged children in a diverse regional and rural Australian community. It examined community experiences, perceptions of its higher prevalence in these areas, and the interplay of contributing factors. Using the *Process, Person, Context, and Time* model (Bronfenbrenner & Morris, 2006), the study analysed how Process, Person, and Contextual factors interacted over Time to shape disengagement. The findings suggest that while Process and Person factors are likely universally relevant, some Contextual factors appear more specific to regional and rural settings (Flavel et al., 2024; Robinson et al., 2017), compounding over Time and contributing to poorer educational outcomes.

Process

Participants perceived several process factors as influencing school disengagement, including parent-child and teacher-student relationships. These findings align with a large quantitative review (Gubbels et al., 2019), which also identified low parental support and poor teacher-student relationships as key risks for disengagement. This study deepened these insights by revealing contextual challenges faced by educators, such as large class sizes and increasing student diversity, which hinder efforts to foster positive relationships. These challenges appeared to reflect classroom dynamics and broader systemic issues, including inadequate professional development for teachers and limited parental support services. Thus, rather than attributing these challenges to a lack of effort or commitment from teachers or parents, it is essential to consider how educational policies, resource allocation, and support systems can be restructured to better address these issues.

Furthermore, the study identified parenting behaviours within families of disengaged children as another process factor believed to contribute to disengagement. These behaviours included challenges such as lack of structure, poor boundaries, inconsistent discipline, and inadequate limit-setting, which aligns with Marlow and Rehman's (2021) meta-analytic findings. However, understanding these parenting challenges requires considering the broader context and systems in which these families are situated. Historical (e.g., parents’ own negative school experiences), socioeconomic (e.g., financial hardship, unemployment, working long hours), and systemic barriers (e.g., poor access to institutional support, limited community resources) likely influence

their ability to establish a stable home environment that supports the learning and wellbeing of their children. Without adequate resources and support systems, parents may struggle to create consistent expectations and reinforce positive behaviours, making it more difficult to counteract disengagement. These findings highlight the need to consider the complex interplay between family dynamics and broader social and economic factors when developing strategies to address school disengagement.

Another parenting practice participants identified was poor parental monitoring of children's social media and online gaming habits. These habits were linked to sleep deprivation and exposure to negative influences online (e.g., cyberbullying), which participants noted negatively impacted children's ability to engage in school. Past research suggests that excessive technology use can lower academic performance, reduce school connectedness (Sampasa-Kanyinga et al., 2022), and contribute to school burnout (Salmela-Aro et al., 2017). While further research is needed to understand the role of technology in school disengagement, the findings of the current study suggest a potential pathway where parenting practices may moderate the association between child technology use and school disengagement. However, it is important to recognise that this issue is multifaceted, with structural and contextual factors – such as access to digital literacy education, external pressures, social influences, and the broader digital landscape – also playing a significant role (Silcock et al., 2016; Wang et al., 2022).

Person

At the person level within the *Process, Person, Context, and Time* model, participants discussed what they perceived to be common characteristics among disengaged children and those at risk of disengagement. They noted that these children often experience a variety of social, emotional, neurodevelopmental, and behavioural challenges, which tend to be interconnected and not mutually exclusive. However, rather than viewing these challenges as inherent risk factors, it is crucial to consider how school environments, teaching practices, and access to support services influence students' ability to engage. This perspective aligns with existing research suggesting that factors like neurodevelopmental disorders (Nordin et al., 2023) and emotional and behavioural challenges (Parker & Hodgson, 2020) can influence school experiences, particularly when accommodations and supports are lacking.

Our findings suggest that school disengagement often stems from unmet support needs rather than individual shortcomings. This highlights the critical role of specialised school-based resources, interventions, and support services in addressing this issue. Consistent with our findings that teachers often lack knowledge and skills in trauma-informed practices, existing research also indicates that many Australian teachers feel inadequately trained to manage and respond to student wellbeing concerns (Gunawardena et al., 2024). This gap in teacher preparation highlights the need for targeted professional development and reforms in higher education training to equip teachers with the necessary skills and knowledge to support students effectively. Strengthening teacher training in these areas could help create more inclusive educational environments where students feel valued, supported, and engaged in their learning (Allen et al., 2023). Research further demonstrates that such educational practices and support mechanisms are closely linked to school engagement (Allen & Boyle, 2022).

Contextual

At the context level, the study identified several factors influencing disengagement, including dysfunctional home environments and parental disconnection from education and employment. These findings are consistent with prior research linking non-nuclear family structures, DV, parental substance abuse, welfare dependency, and child neglect to school disengagement (Maple et al., 2019; Robinson & Smyth, 2015). Regional and rural communities tend to have more complex family structures, lower parental educational attainment, higher unemployment rates, and greater social disadvantage compared to urban areas (National Rural Health Alliance, 2023).

These contextual factors may contribute to ongoing cycles of disengagement and social disadvantage over extended periods of time, thereby exacerbating existing disparities in educational outcomes (Vauhkonen et al., 2017).

Another contextual factor highlighted by participants was issues within the mainstream schooling system that they perceived as exacerbating student disengagement. One major concern from the community perspective was the reliance on standardised assessments and academic benchmarks set by governing bodies to gauge student engagement and progress. Participants argued that these rigid standards fail to account for students' diverse abilities and backgrounds, making it harder to address their individual needs. They contended that standardised assessments impose a one-size-fits-all approach to education, a perspective supported by previous research (e.g., Datnow & Park, 2018). These findings suggest that current educational policies may need to be reconsidered, particularly the emphasis on standardised testing as a primary measure of student success.

Furthermore, participants noted that schools within the region frequently lacked specialist staff, such as counsellors and psychologists, who are widely considered essential for addressing the complex needs and mental health challenges faced by many children. This shortage was seen as a critical issue, particularly given the higher prevalence of complex challenges in regional and rural areas (Lawrence et al., 2015) and the study community (Australian Bureau of Statistics, 2021b). Compounding this problem, participants spoke about the disjointed and limited support services that are currently available in these communities.

They also highlighted the lack of Indigenous support services, which are crucial for addressing the unique needs of Indigenous students and their families (Smith et al., 2017). Participants stated that the absence of cohesive and culturally appropriate support systems further hindered children's ability to engage in school, as they were unable to receive the necessary help and resources to thrive academically and personally. National statistics show that access to healthcare and mental health professionals decreases with remoteness (Australian Institute of Health and Welfare, 2024). Therefore, addressing these systemic issues is crucial for fostering a more inclusive and supportive educational environment that can better accommodate the diverse needs of students in regional and rural communities.

Time

Finally, participants in this study described school disengagement as a gradual process rather than a sudden event, with indicators of disengagement occurring several years before children eventually stop attending school. The findings identified two critical periods when disengagement began to manifest: early in primary school and during the transition to secondary school. These insights align with previous qualitative (Broadhurst et al., 2005) and quantitative (Janosz et al., 2008) research, which also emphasised various trajectories to disengagement. Therefore, understanding these critical periods and the gradual nature of disengagement is key to the development of early interventions and targeted support strategies to address student disengagement effectively.

Limitations

A limitation of this study is that participant demographic information (e.g., age, education, cultural background, length of residency in the community) was not collected. Although this may have constrained insights into potential biases, efforts were made to contextualise the participants' professional backgrounds throughout the results section. Additionally, the focus on a single community may impact the generalisability of the findings. Future research could expand the scope to include multiple communities.

Conclusions

This study builds upon previous qualitative research on school disengagement by exploring the experiences and perspectives of community stakeholders in a socioeconomically disadvantaged regional and rural area, highlighting the interconnected nature of the factors influencing disengagement. Despite the challenges in these communities, there was a notable sense of community cohesion and a collective commitment to supporting students, a feature found to be prominent in regional and rural communities (Crommelin et al., 2022; Onyx & Bullen, 2000; Watson et al., 2022). A strong sense of dedication was apparent among participants, who appeared to be doing their utmost to assist students within the constraints of available resources. The use of focus groups enabled meaningful interactions among stakeholders from various sectors and disciplines, bringing together diverse perspectives and backgrounds. This collaborative approach encouraged the exchange of insights and viewpoints that might not have been found through individual interviews or surveys alone. Thus, focus groups offered a more comprehensive understanding of the interconnected factors influencing school disengagement and highlighted the significant role of *Process*, *Person*, and *Contextual* factors on disengagement over *Time*.

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References

- Allen, K.-A., Berger, E., Reupert, A., Grove, C., May, F., Patlamazoglou, L., Gamble, N., Wurf, G., & Warton, W. (2023). Student-identified practices for improving belonging in Australian secondary schools: Moving beyond COVID-19. *School Mental Health*, 15(3), 927-939. <https://doi.org/10.1007/s12310-023-09596-9>
- Allen, K.-A., & Boyle, C. (2022). School belonging and student engagement: The critical overlaps, similarities, and implications for student outcomes. In A. L. Reschly & S. L. Christenson (Eds.), *Handbook of research on student engagement* (pp. 133-154). Springer International Publishing. https://doi.org/10.1007/978-3-031-07853-8_7
- Allen, J. M., Wright, S., Cranston, N., Watson, J., Beswick, K., & Hay, I. (2018). Raising levels of school student engagement and retention in rural, regional and disadvantaged areas: Is it a lost cause? *International Journal of Inclusive Education*, 22(4), 409-425. <https://doi.org/10.1080/13603116.2017.1370737>
- Ashiabi, G. S., & O'Neal, K. K. (2015). Child social development in context: An examination of some propositions in Bronfenbrenner's Bioecological Theory. *SAGE Open*, 5(2). <https://doi.org/10.1177/2158244015590840>
- Australian Curriculum Assessment and Reporting Authority. (2022). *Year 12 certification rates by geolocation*. <https://www.acara.edu.au/>
- Australian Bureau of Statistics. (2021a). *Census all persons quickstats*. <https://www.abs.gov.au/>

- Australian Bureau of Statistics. (2021b). *Census of population and housing: Socio-Economic Indexes for Areas (SEIFA), Australia, 2021*. <https://www.abs.gov.au/statistics/people/people-and-communities/socio-economic-indexes-areas-seifa-australia/latest-release>
- Australian Institute of Health and Welfare. (2024). *Rural and remote health*. Australian Government. <https://www.aihw.gov.au/reports/rural-remote-australians/rural-and-remote-health>
- Braun, V., & Clarke, V. (2022). *Thematic analysis: A practical guide*. SAGE.
- Broadhurst, K., Paton, H., & May-Chahal, C. (2005). Children missing from school systems: Exploring divergent patterns of disengagement in the narrative accounts of parents, carers, children and young people. *British Journal of Sociology of Education*, 26(1), 105-119. <https://doi.org/10.1080/0142569042000292743>
- Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In R. M. Lerner & W. Damon (Eds.), *Handbook of child psychology: Theoretical models of human development* (Vol. 1, pp. 793-828). John Wiley & Sons.
- Crommelin, L., Denham, T., Troy, L., Harrison, J., Gilbert, H., Dühr, S., & Pinnegar, S. (2022). *Understanding the lived experience and benefits of regional cities* (AHURI Final Report No. 377). Australian Housing and Urban Research Institute Limited. <https://doi.org/10.18408/ahuri7126301>
- Datnow, A., & Park, V. (2018). Opening or closing doors for students? Equity and data use in schools. *Journal of Educational Change*, 19(2), 131-152. <https://doi.org/10.1007/s10833-018-9323-6>
- De Witte, K., Cabus, S., Thyssen, G., Groot, W., & Maassenvandenbrink, H. (2013). A critical review of the literature on school dropout. *Educational Research Review*, 10, 13-28. <https://doi.org/10.1016/j.edurev.2013.05.002>
- Department of Health and Aged Care. (2019). *Modified monash model suburb and locality classification*. Australian Government. <https://www.health.gov.au/resources/publications/modified-monash-model-mmm-suburb-and-locality-classification-home-care-subsidy>
- Flavel, J., Kedzior, S., Isaac, v., Cameron, d., & Baum, F. (2024). Regional health inequalities in Australia and social determinants of health: Analysis of trends and distribution by remoteness. *Rural and Remote Health*, 24(1). <https://doi.org/10.22605/RRH7726>
- Fredricks, J. A., Ye, F., Wang, M.-T., & Brauer, S. (2019). Profiles of school disengagement: Not all disengaged students are alike. In J. A. Fredricks, A. L. Reschly, & S. L. Christenson (Eds.), *Handbook of student engagement interventions: Working with disengaged students*. (pp. 31-43). Elsevier Academic Press. <https://doi.org/10.1016/B978-0-12-813413-9.00003-6>
- Greenbaum, T. L. (2000). *Moderating focus groups: A practical guide for group facilitation* (1st ed.). Sage Publications.
- Gubbels, J., van der Put, C. E., & Assink, M. (2019). Risk factors for school absenteeism and dropout: A meta-analytic review. *Journal of Youth and Adolescence*, 48(9), 1637-1667. <https://doi.org/10.1007/s10964-019-01072-5>

- Guenther, J., Oliver, R., Ober, R., & Holmes, C. (2024). Remote school retention in Australia: Why do First Nations students disengage and drop out? *Australian and International Journal of Rural Education*, 34(3), 73-91. <https://doi.org/10.47381/aijre.v34i3.743>
- Gunawardena, H., Leontini, R., Nair, S., Cross, S., & Hickie, I. (2024). Teachers as first responders: Classroom experiences and mental health training needs of Australian schoolteachers. *BMC Public Health*, 24(1), 268-213. <https://doi.org/10.1186/s12889-023-17599-z>
- Halsey, J. (2018). *Independent review in regional, rural and remote education: Final report*. Department of Education and Training. <https://www.education.gov.au/quality-schools-package/resources/independent-review-regional-rural-and-remote-education-final-report>
- Hasselhorn, M., Andresen, S., Becker, B., Betz, T., Leuzinger-Bohleber, M., & Schmid, J. (2015). Children at risk of poor educational outcomes: In search of a transdisciplinary theoretical framework. *Child Indicators Research*, 8(2), 425-438. <https://doi.org/10.1007/s12187-014-9263-5>
- Henry, K. L., Knight, K. E., & Thornberry, T. P. (2012). School disengagement as a predictor of dropout, delinquency, and problem substance use during adolescence and early adulthood. *Journal of Youth and Adolescence*, 41(2), 156-166. <https://doi.org/10.1007/s10964-011-9665-3>
- Hetlevik, Ø., Bøe, T., & Hysing, M. (2018). GP-diagnosed internalizing and externalizing problems and dropout from secondary school: A cross-sectional study. *European Journal of Public Health*, 28(3), 474-479. <https://doi.org/10.1093/eurpub/cky026>
- Janosz, M., Archambault, I., Morizot, J., & Pagani, L. S. (2008). School engagement trajectories and their differential predictive relations to dropout. *Journal of Social Issues*, 64(1), 21-40. <https://doi.org/10.1111/j.1540-4560.2008.00546.x>
- Krueger, R. A., & Casey, M. A. (2000). *Focus groups: A practical guide for applied research* (3rd ed.). Sage Publications.
- Lansford, J. E., Dodge, K. A., Pettit, G. S., & Bates, J. E. (2016). A public health perspective on school dropout and adult outcomes: A prospective study of risk and protective factors from age 5 to 27 years. *Journal of Adolescent Health*, 58(6), 652-658. <https://doi.org/10.1016/j.jadohealth.2016.01.014>
- Lawrence, D., Johnson, S., Hafekost, J., Haan, K. B. D., Sawyer, M., Ainley, J., & Zubrick, S. R. (2015). *The mental health of children and adolescents: Report on the second Australian child and adolescent survey of mental health and well-being*. Department of Health. <https://apo.org.au/node/56473>
- Lovelace, M. D., Reschly, A. L., & Appleton, J. J. (2017). Beyond school records: The value of cognitive and affective engagement in predicting dropout and on-time graduation. *Professional School Counseling*, 21(1), 1096-2409. <https://doi.org/10.5330/1096-2409-21.1.70>
- Maple, M., Pearce, T., Gartshore, S., MacFarlane, F., & Wayland, S. (2019). Social work in rural New South Wales school settings: Addressing inequalities beyond the school gate. *Australian Social Work*, 72(2), 219-232. <https://doi.org/10.1080/0312407X.2018.1557229>

- Marlow, S. A., & Rehman, N. (2021). The relationship between family processes and school absenteeism and dropout: A meta-analysis. *Educational and Developmental Psychologist*, 38(1), 3-23. <https://doi.org/10.1080/20590776.2020.1834842>
- National Rural Health Alliance. (2023). *Rural health in Australia: Snapshot 2023*. <https://www.ruralhealth.org.au/rural-health-australia-snapshot>
- Nordin, V., Palmgren, M., Lindbladh, A., Bölte, S., & Jonsson, U. (2023). School absenteeism in autistic children and adolescents: A scoping review. *Autism*, 28(7). <https://doi.org/10.1177/13623613231217409>
- Onyx, J., & Bullen, P. (2000). Measuring social capital in five communities. *The Journal of Applied Behavioral Science*, 36(1), 23-42. <https://doi.org/10.1177/0021886300361002>
- Parker, R., & Hodgson, D. (2020). 'One size does not fit all': Engaging students who have experienced trauma. *Issues in Educational Research*, 30(1), 245-259.
- Ramsdal, G., Gjerum, R. G., & Wynn, R. (2013). Dropout and early unemployment. *International Journal of Educational Research*, 62, 75-86. <https://doi.org/10.1016/j.ijer.2013.06.011>
- Reed, J., Procter, S., & Murray, S. (1996). A sampling strategy for qualitative research. *Nurse Researcher*, 3(4), 52-68. <https://doi.org/10.7748/nr.3.4.52.s6>
- Robinson, J., & Smyth, J. (2015). 'Sent out' and stepping back in: Stories from young people 'placed at risk'. *Ethnography and Education*, 11(2), 222-236. <https://doi.org/10.1080/17457823.2015.1040430>
- Robinson, L. R., Holbrook, J. R., Bitsko, R. H., Hartwig, S. A., Kaminski, J. W., Ghandour, R. M., Peacock, G., Heggs, A., & Boyle, C. A. (2017). Differences in health care, family, and community factors associated with mental, behavioral, and developmental disorders among children aged 2–8 years in rural and urban areas — United States, 2011–2012. *MMWR. Surveillance Summaries*, 66(8), 1-11. <https://doi.org/10.15585/mmwr.ss6608a1>
- Rosa, E. M., & Tudge, J. (2013). Urie Bronfenbrenner's theory of human development: Its evolution from ecology to bioecology. *Journal of Family Theory & Review*, 5(4), 243-258. <https://doi.org/10.1111/jftr.12022>
- Salmela-Aro, K., Upadaya, K., Hakkarainen, K., Lonka, K., & Alho, K. (2017). The dark side of internet use: Two longitudinal studies of excessive internet use, depressive symptoms, school burnout and engagement among finnish early and late adolescents. *Journal of Youth and Adolescence*, 46(2), 343-357. <https://doi.org/10.1007/s10964-016-0494-2>
- Sampasa-Kanyinga, H., Hamilton, H. A., Goldfield, G. S., & Chaput, J. P. (2022). Problem technology use, academic performance, and school connectedness among adolescents. *International Journal of Environmental Research and Public Health*, 19(4). <https://doi.org/10.3390/ijerph19042337>
- Silcock, M., Payne, D., & Hocking, C. (2016). Governmentality within children's technological play: Findings from a critical discourse analysis. *Children & Society*, 30(2), 85-95. <https://doi.org/10.1111/chso.12123>
- Smith, S., O'Grady, L., Cubillo, C., & Cavanagh, S. (2017). Using culturally appropriate approaches to the development of KidsMatter resources to support the social and emotional

- wellbeing of Aboriginal children. *Australian Psychologist*, 52(4), 299-305.
<https://doi.org/10.1111/ap.12284>
- Smyth, J., & Hattam, R. (2004). 'Dropping out', drifting off, being excluded: Becoming somebody without school (Vol. 22). Peter Lang.
- Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*, 19(6), 349-357. <https://doi.org/10.1093/intqhc/mzm042>
- Valencia, R. R. (2010). *Dismantling contemporary deficit thinking: Educational thought and practice*. Routledge.
- Vaughn, M. G., Salas-Wright, C. P., & Maynard, B. R. (2014). Dropping out of school and chronic disease in the United States. *Journal of Public Health*, 22(3), 265-270.
<https://doi.org/10.1007/s10389-014-0615-x>
- Vauhkonen, T., Kallio, J., Kauppinen, T. M., & Erola, J. (2017). Intergenerational accumulation of social disadvantages across generations in young adulthood. *Research in Social Stratification and Mobility*, 48, 42-52.
<https://doi.org/https://doi.org/10.1016/j.rssm.2017.02.001>
- Wang, C., Zhang, J., & Lee, M. K. O. (2022). Time flies when chatting online: A social structure and social learning model to understand excessive use of mobile instant messaging. *Information Technology & People*, 35(7), 2167-2192. <https://doi.org/10.1108/ITP-09-2020-0624>
- Wang, M.-T., Fredricks, J., Ye, F., Hofkens, T., & Linn, J. S. (2019). Conceptualization and assessment of adolescents' engagement and disengagement in school: A multidimensional school engagement scale. *European Journal of Psychological Assessment*, 35(4), 592-606. <https://doi.org/10.1027/1015-5759/a000431>
- Watson, J., Wright, S., Allen, J. M., Beswick, K., Hay, I., & Cranston, N. C. (2015). *Listening to the community on student retention* [Paper presentation]. Australian Association for Research in Education (AARE) Conference 2015, Western Australia.
<https://files.eric.ed.gov/fulltext/ED593842.pdf>
- Watson, J., Wright, S., Allen, J. M., Hay, I., Cranston, N., & Beswick, K. (2022). Increasing students' social capital through community involvement in rural and regional education. *Australian and International Journal of Rural Education*, 27(3), 142-157.
<https://doi.org/10.47381/aijre.v27i3.128>



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