Developing Novel Play Spaces in Christchurch

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Executive Summary

Research shows that tamariki experience enhanced Hauora when they are more actively involved in novel play. Novel play can occur in spaces that move beyond traditional playground models and towards innovative, community driven designs. They encourage creative activity, imagination and physical interaction.

In this project with the Christchurch City Council, our aim was to investigate how Hauora of tamariki and whanau can be improved through the encouragement and facilitation of novel play. Wellbeing is explored through the Māori health concept of Hauora exploring holistic themes of mental/emotional, physical, spiritual/cultural and whenua/roots. This research is site-specific and focuses on Hansons Reserve, Riccarton.

A mixed approach of qualitative and quantitative data collection methods was used. This includes interviews with council members, community advocates and development workers. Site observational data was collected, and a survey was distributed to tamariki caregivers. Analysis of spatial features and existing data was applied to the area.

Our research shows eagerness from the Riccarton community to restore Hansons Reserve with Hauora enhancing play spaces. Our recommendations include further investigation into local tamariki needs, establishing regular community events, structural and physical upgrades to the park and further facilitation of novel play interventions.

Introduction

Novel play encompasses new, creative, unstructured forms of play that go beyond traditional playground activities. Developing a novel play space refers to the design and implementation of innovative environments that inspire tamariki to learn, explore and engage in innovative and challenging ways.

This project aims to investigate how hauora of tamariki and whanau can be improved through the encouragement and facilitation of novel play. Through a mixed-method approach using a combination of quantitative and qualitative methods, connections between play, place and holistic wellbeing were examined. The study seeks to discover the practical implications of developing a new space.

The focus of this research is at Hansons Reserve located in Riccarton, Christchurch. The space features large open greenspace alongside and outdated, traditional playground. The site offers a unique opportunity to explore how community spaces can be reimagined into inclusive, inviting and engaging environments.

Literature Review

Methodology and Co-Design

Our methodological approach was grounded in co-design, treating stakeholders as partners and using participatory methods to build trust, ownership and sustain engagement (Rodgers et al., 2020). Guided by Te Whare Tapa Whā', we acknowledged the holistic nature of wellbeing and embedded kaitiakitanga through consultation with mana whenua experts, ensuring that cultural values informed both process and outcome. Collaboration with Christchurch City Council, Sport Canterbury and the Riccarton Toy Library helped refine our priorities around inclusive, safe and active play, directly shaping our survey design, observation framework and analytical focus (Copeland et al., 2022).

A mixed-methods framework connected quantitative and qualitative evidence, allowing us to examine both behaviour and perception within the park setting (Loukaitou-Sideris & Sideris, 2009). Ethical approval from the University of Canterbury supported this process, participants over the age of eighteen provided informed consent in line with university protocols. Structured observations and spatial profiling grounded community perspectives in measurable data, while the co-design process allowed participants to collaborate in knowledge creation. This integrative approach ensured that the research outcomes reflect lived community experiences and provide a foundation for future tamariki-centred design and kaitiakitanga practices at Hansons Reserve (Copeland et al., 2022).

Hauora

Hauora refers to the Māori model of health, a framework unique to Aotearoa New Zealand. It is an approach that recognises the holistic nature of human health going beyond

traditional understandings. It fosters a balanced view of wellbeing through five integrated dimensions.

The hauora model is represented by 'Te Whare Tapa Whā', established by Sir Mason Durie (Heaton, 2016). It resembles a meeting house with four walls. Each wall symbolises a different aspect of health and wellbeing. Taha tinana (physical wellbeing), taha hinengaro (mental/emotional wellbeing), taha whānau (social wellbeing) and taha wairua (spiritual wellbeing). The fifth dimension refers to the groundings of the meeting house known as whenua (land/roots).

The idea behind this concept is that all five dimensions are interconnected. If one wall is to fall, the entire structure is affected. The hauora model therefore emphasises that true wellbeing arises from harmony and unity across all dimensions of life. It highlights the importance of nurturing all areas equally, contributing to the stability and strength of the whole being.

This research uses the hauora model as a determinant to explore the following impacts of novel play. It ensures that wellbeing is viewed not only through individual outcomes but through community and cultural relations that are fundamental to the context of Aotearoa New Zealand.

Physical Impacts

A key dimension of hauora includes taha tinana. Physical novel play can increase motor and regulation skills while impacting health outcomes for communities with a diverse area of age, ethnicity and higher levels of deprivation. The impacts of physical play are more

evident in communities where tamariki are more likely to experience adverse childhood experiences (ACE) like growing up in a high deprivation environment (Wyszyńska et al., 2020). Novel play spaces and regular physical activity help to regulate the body's stress response and encourage social relationships between peers, acting as a buffer between ACE and related impacts (Lee et al., 2020; Yogman et al., 2018).

A lack of play and physical activity disproportionately impacts girls, particularly girls who experience ACE. Play spaces are less frequently created to fulfil the needs of girls due to cultural and social perceptions of safety. This results in minimal opportunity for social bonding and development of fundamental motor skills (FMS) (Biino et al., 2025, Wellington City Council, 2017). Girls' play and physical activity has seen a noticeable decline, contributing to the increase in obesity and obesity-related conditions at any age (Wyszyńska et al., 2020). Tamariki who develop FMS early are more likely to engage in physical activity later in life (Biino et al., 2025), proving the importance of novel play for positive impacts and taha tinana.

Mental/Emotional and Social Impacts

Taha hinengaro and taha whānau are important for tamariki as it contributes to their ability to think, comprehend deeper meanings and express emotions. It is the foundation for forming important relationships, learning social skills and building confidence.

The key findings from the reviewed literature showed consistent positive mental/emotional and social outcomes influenced by novel play. This includes enhanced resilience, creativity, social connection, empathy, emotional regulation and coping skills (Ahmed et al., 2023). These benefits were observed across a range of tamariki with pre-

existing mental/emotional conditions including neurodevelopment concerns, speech/language difficulties and those facing hospitalisation (Francis et al., 2022; Li et al., 2016).

It was found that taha hinengaro is influenced by environmental and demographic factors such as age, income, parental mental health and disability status. Across a range of these influencing factors, the findings continue to indicate positive mental/emotional associations with novel play.

The review suggests that negative play experiences can impede the mental/emotional benefits (Bristow & Atkinson, 2020). This includes lack of sensory equipment, an over-structured set-up, excessive adult control, poorly designed environments and lack of open space with nature.

There is emphasis on educators, caregivers and policy makers to incorporate more play-based learning approaches into mental health promotion schemes for tamariki (Dodd et al., 2022).

Spiritual and Whenua Impacts

Taha wairua is interconnected with whenua, each providing meaningful cultural values and beliefs while maintaining a foundation for identity and belonging. Whenua holds connections through whakapapa, linking individuals to their ancestors and to the environment around them (Eagan, 2000). Taha wairua is a shared experience between spaces, tamariki and whānau. Learning and imposing this relationship develops a sense of purpose and spiritual balance in tamariki. It is important for reducing stress and connecting with inner peace.

Disconnections from whenua disrupt Māori culture and taha wairua among individuals, leading to identity loss and damaged communities (Houkamau & Sibley, 2015). Reconnection of whenua can be supported through novel play when integrated with cultural practices, environmental restoration and interactive education. Engagement with whenua fosters belonging and strengthens taha wairua, contributing to increased compassion, gratitude and resilience within tamariki (Collen et al., 2010). Recognising the significance of taha wairua and whenua within greater hauora model is essential for creating novel play spaces that benefit tamariki.

Playground Policy

Playground policy in Aotearoa New Zealand provides the framework for how local councils design, build and maintain play spaces to ensure they are safe and inclusive. The NZS 5828 Playground Equipment and Surfacing Standard sets requirements for safety, surfacing, equipment fall heights and installation (Standards New Zealand, 2015). Councils must comply with these standards for risk reduction and liability management. Additionally, Sport New Zealand's Spaces & Places Framework supports equitable access, provision standards and guides councils on resource allocation (Sport NZ, 2024). These policies are essential for the development of novel play spaces, providing the foundation to ensure innovation happens safely, inclusively and sustainably for tamariki of varying ages, abilities and backgrounds.

Crime Prevention Through Environmental Design

Crime Prevention through Environmental Design (CPTED) is a design tool that attempts to reduce crime and enhance feelings and a sense of safety through the

implementation higher-order design of the built environment (Jeffery, 1971). CPTED, created in the 1970s by C. Ray Jeffery and further developed and conceptualized as a response to Newman's (1972) defensible space, assumes that physical environments can influence human behaviour. The four fundamental CPTED principles listed by the New Zealand Ministry of Justice (2005) are natural surveillance, natural access control, territorial reinforcement, and maintenance. These have been implemented by national and local policy planning, for example, the National Guidelines for Crime Prevention Through Environmental Design in New Zealand (Ministry of Justice, 2005) and the Safer Christchurch Strategy (Christchurch City Council, 2019), which promote the use of CPTED in public space design and management. Christchurch City Council further encourages the utilization of CPTED auditing in parks and reserves to advocate for community safety and positive use of public space (Christchurch City Council, 2024). By enhanced visibility, legitimate use promotion, and the promotion of community ownership, CPTED generates safer, more socially connected and inclusive spaces. Used in the urban green space, these philosophies can assist with promoting community hauora and assisting with supporting perceptions of safety through creative, design-led action.

Our literature review informs our research question of how hauora of tamariki and whanau can be improved through the encouragement and facilitation of novel play by identifying existing knowledge and providing a foundation for the direction of the study.

Hansons Reserve

Place-Based Profile

In order to start to understand Hansons Reserve, we conducted a place-based profile from secondary data from Christchurch City Council, Statistics New Zealand and other spatial data. It identified the transience and cultural diversity factors that affect community usage and attitudes to public space, the difficulties and opportunities to promote inclusion, and local activation. Place-based profiling provides a critical framework through which to analyse the mechanisms by which social and spatial forces impact individuals' engagements with place (Creswell, 2015; Massey, 2005). These principles guided our research path, eliciting responses that reflected the diversity of needs and lived experiences within the community. By grounding our work in this local knowledge, we were subsequently able to engage in locally led research that was socially aware and responsive to the Upper Riccarton community.

Secondary Data

Figure A1 *Hansons Reserve Context Map*

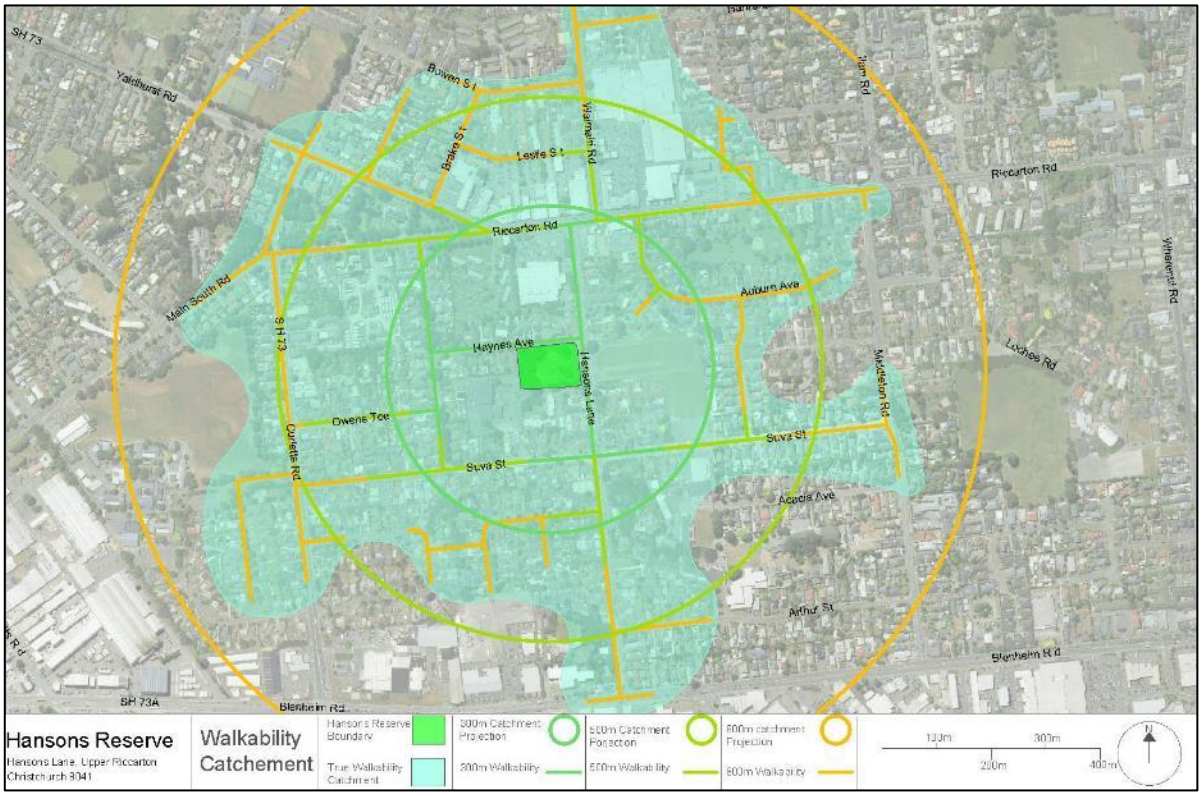

Figure A2 *Hansons Reserve Walkability Map*

The Hansons Reserve context map (see Figure A1) shows its respective location within the Riccarton locality. The walkability map (see Figure A2) defines the actual catchment of Hansons Reserve and shows that a majority of users will have access to it on foot from surrounding residential streets and student accommodation. Its location near homes and schools makes it an everyday park, one that encourages informal recreation and socialising, social bumps that reside within a large walkable catchment from busy hotspots. This aligns with the Christchurch City Council's (2022) Walkable Communities Policy, which aims to encourage equitable access to local services.

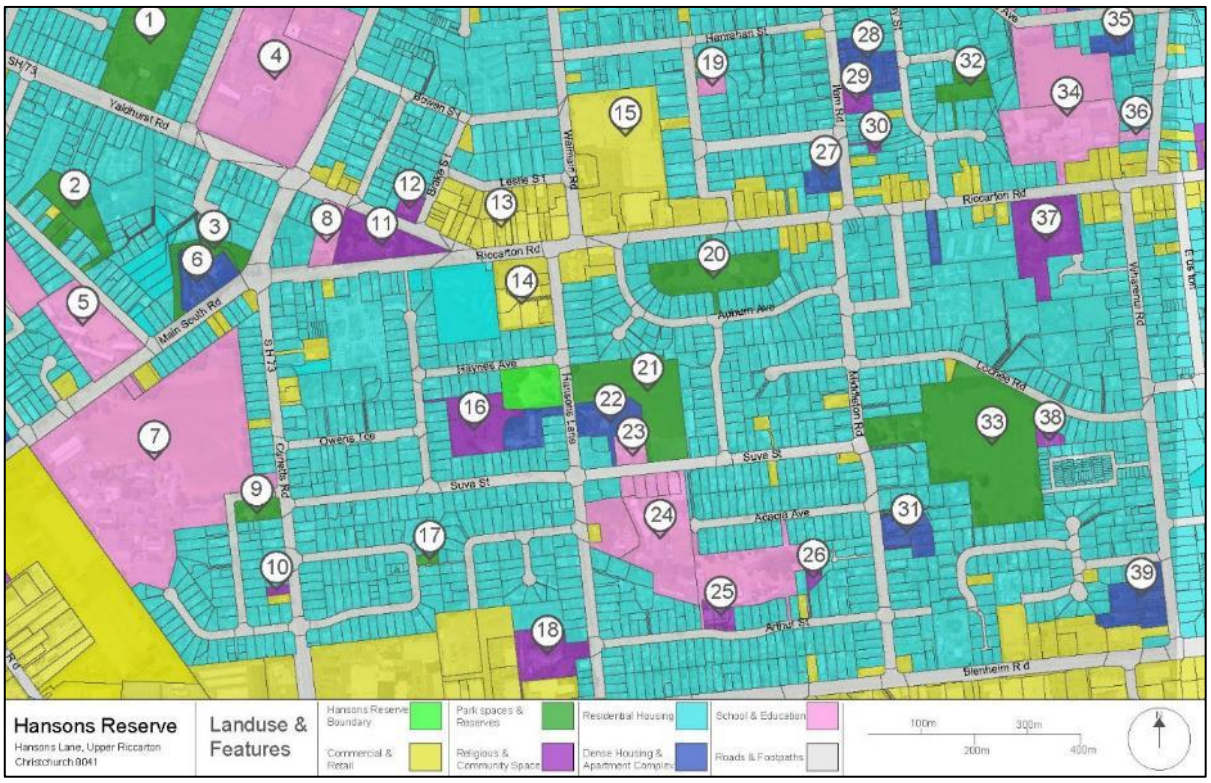

Figure A3 *Upper Riccarton Land Use Map*

Land Use Map Key	
1. Upper Riccarton Domain	21. Rannerdale Sport Field
2. Holmes Park	22. Hansons Village
3. Glebe Reserve	23. Cornerstone Christian Early Learning Centre
4. Vila Maria College	24. Middleton Grange School
5. Riccarton School	25. Equippers Church
6. St Allisa Care & Wellbeing	26. Redemption Church Christchurch
7. Riccarton High School	27. Homesteadcare Ilam
8. St Peter's Anglican Preschool	28. Arvida Ilam
9. Vicki Reserve	29. Ilam Seventh-day Adventist Church
10. Sancta Maria Montessori Preschool	30. Cornerstone Church office and ministry hub
11. St Peter's Anglican Church	31. Elms Court Village
12. Upper Riccarton Methodist Church	32. Milnebank Reserve
13. China Town Market	33. Middleton Park
14. Woolworths Church Corner	34. Kirkwood Intermediate
15. Bush Inn Centre	35. Kirkwood Avenue Hall
16. La Vida Centre	36. Kindercare Learning Centres - Riccarton
17. Hillary Reserve Playground	37. Antonio Hall
18. Consulate-General of the People's Republic of China	38. Every Nation Church
19. Mididream music school	39. Arvida Mayfair
20. Auburn Reserve	

The land use map (see Figure A3) reflects high levels of diversity in its use around the reserve, including large blocks of residential house, high enrolment schools, large shopping centers, and some green space mixed through. This mix is an expression of the dynamic character of Upper Riccarton, where student accommodation, family dwelling, and commercial development coexist. An understanding of this diversity was essential to recognizing the reserve as a common space for diverse user groups.

Figure A4 *Map of Bus Routes in Upper Riccarton*

The map of bus routes (see Figure A4) shows how the reserve is advantageously located between two main public transport routes, Riccarton Road and Blenheim Road, with a bus stop right next to it. This accessibility supports the reserve's role as a connected community node.

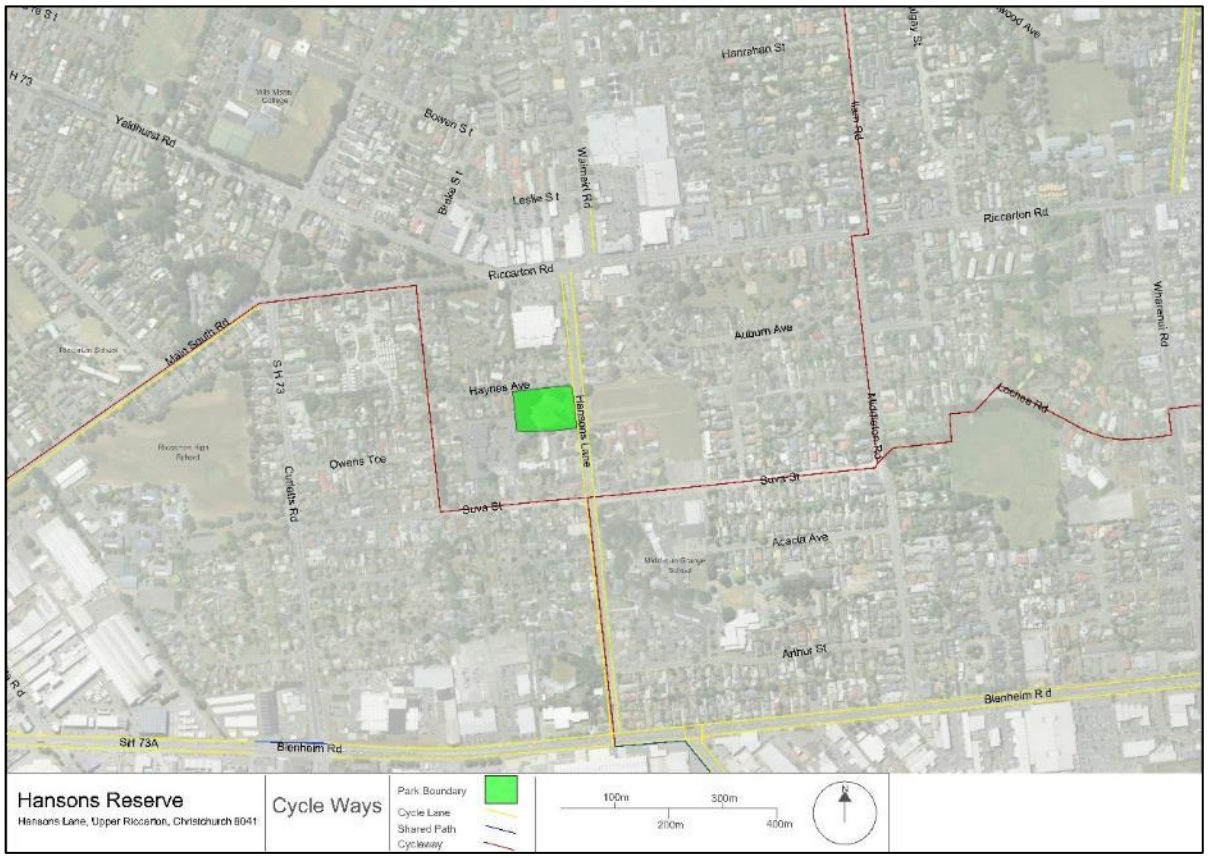

Figure A5 *Map of Cycle Lanes in Upper Riccarton*

The cycle lane map (see Figure A5) complements this, recognizing a key active transport corridor that passes by the reserve and links into the wider cycling network. Together, these transport connections foster inclusivity and sustainable travel.

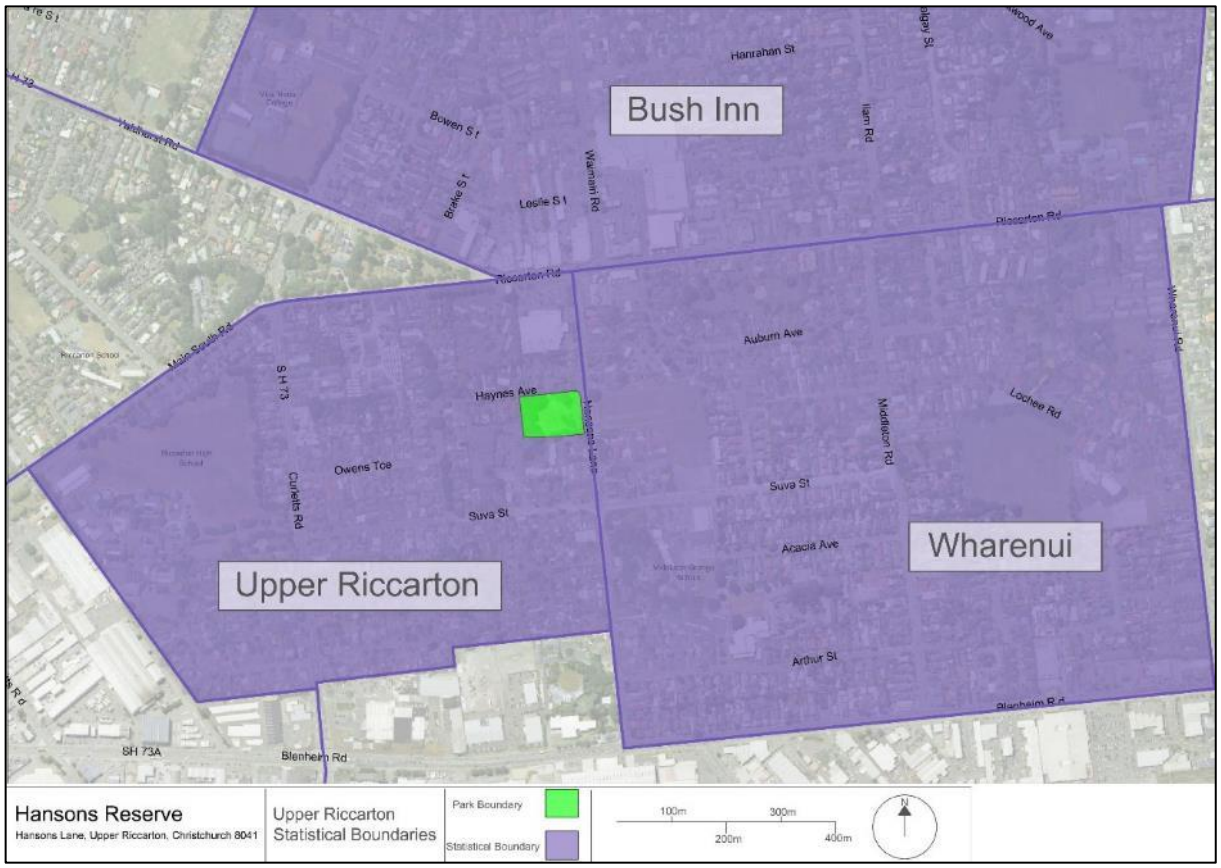

Figure A6 *Statistical Zoning Map*

Table A1 *Upper Riccarton Statistical Table (Stats NZ, 2025)*

Statistics 2023 Census	Christchurch City	New Zealand	Upper Riccarton
Population (count)	412,000*	5,287,500	8,130*
Number of Families (count)	100,563	1,294,503	1,218
Number of business (count)	47,439	649,164	468
Median age (years)	37.5*	38.1	27.7*
European %	75.9	67.8	60
Māori %	11.2	17.8	9.2
Pacific Peoples %	4.3	8.9	4.8
Asian %	17.1*	17.3	32.3*
MELAA %	1.9	1.9	2.6

Regular Smoker %	1.1	7.7	5.7
Employed fulltime %	50.1*	51.2	34.1*
Unemployed %	2.7	3	4.3
Median income ($)	40,400*	41,500	22,600*
Bachelor's Degree or higher	29.2	27.1	22.5
home owned or partly owned %	64.8*	66	33.2*
Median weekly Rent ($)	415	450	420

**Key statistical anomalies*

The statistical zoning map (see Figure A6), as informed by the Upper Riccarton Statistical Table (see Table A1), recognizes a very transient and multicultural community made up largely of students and renters. While such diversity is an asset to the area, it also creates challenges in establishing a constant sense of community and shared stewardship in a transient population. Constant fluidity in the community can limit long-term commitment and collective identity. This creates difficulties in implementing and maintaining place-based initiatives. Such observations highlight the necessity of formulating locally responsive, adaptive strategies that reflect the fluid nature of the Upper Riccarton community.

Methods

Quantitative Methods

This study was formed on a mixed methods research design developed to measure community awareness, park use and perception of play at Hansons Reserve, addressing how novel play supports hauora of tamariki and whānau. To collect our qualitative data, we employed two core instruments: a structured community survey and systematic field observations. The survey was collaboratively developed and refined with supervisor guidance to ensure validity and alignment with our objectives. A pilot test involving ten participants was first conducted to check clarity and reliability; these results were excluded from the final data set. Using a convenience sampling approach, we distributed the final survey via Google Forms to nearby organisations and residents, yielding twenty-four valid responses. Questions captured frequency of park use, awareness, perceived safety (rated on a five-point Likert scale), and preferred play features.

Field observations complemented the survey through direct behavioural recording. Over seven consecutive weekdays, two daily observation windows (8:15 – 9:00am and 2:30 – 3:15pm) captured park activity across ten defined variables. Data were recorded manually and later transcribed into Excel and Jamovi, where descriptive statistics (frequency and mean comparisons) were generated to visualise trends. Census data for Upper Riccarton provided demographic context for interpreting participation. This triangulated, observation-based design increased reliability by combining behavioural and perceptual data within a shared spatial framework (Loukaitou-Sideris & Sideris, 2009).

Qualitative Methods

There were seven semi-structured qualitative interviews which included nine different participants. The participants had varying backgrounds, each holding different perspectives and areas of expertise. Five participants were from local government bodies: a community recreation advisor, community development advisor, community travel advisor, a councillor from the Riccarton Ward and Sport Canterbury. These participants understand the realistic implications we can impose on Hansons Reserve. The remaining four participants were from community organisations including the Riccarton Toy Library, Oak Development Trust, and La Vida Youth Trust. The community participants were chosen for their close relationship with youth in Riccarton, providing insight into the values and needs as well as describing ways in which they believe a novel play space would enhance hauora of their tamariki. These interviews occurred over the course of six weeks; each interview lasted between one and two hours. Each interview had similar protocols, always giving the community groups the same base of information about the project. We used mixed methods for collecting data, including the use of typed notes or audio recordings in line with participants' comfort and availability of resources. We used two coders and a grounded approach for generating themes and codes to identify overarching and reoccurring ideas.

We explored different avenues of bias. As ethical concerns prevented interaction with those under eighteen years of age, these participants were the gatekeepers to tamariki voices. They do not necessarily represent the whole diverse range of the Upper Riccarton community. To make sure we had strong internal validity, we chose credible sources with direct knowledge of logistics, reserve features, identity demographics and governance of Upper Riccarton and Hansons Reserve. We also used triangulation checking against observational and secondary data sources.

Results and Discussion

Observational Data

Table B1 *Hansons Reserve Observational Data Table*

Day	Time	Uniformed Students	Family engagement	Cyclists	E- Scooters Usage	Bus Stop usage
1	Morning	43	2	5	1	12
2	Morning	76	4	16	1	10
3	Morning	41	4	8	2	5
3	Afternoon	97	5	15	2	8
4	Afternoon	104	2	9	1	1
5	Morning	4	0	10	2	5
5	Afternoon	6	2	12	2	2
7	Morning	45	4	9	2	2

(*Note*. Observational data representing five selected variables: students, families, cyclists, e-scooter riders, and bus users)

The observations revealed valuable insight to usage of Hansons Reserve (see Table B1). Uniformed students consistently comprised the largest user group ranging from 41 to 104 individuals per session. These counts peaked during weekday mornings when schools opened averaging 73.6 students per observation period (SD = 29.2). Families appeared far less frequently, averaging 3.0 per session (SD = 1.7), typically accompanying tamariki for brief visits. Cyclist activity ranged from 5 to 16 per session, while e-scooter use remained steady between 1 and 2 riders. Bus commuters were least common, averaging fewer than 3.0 per count.

The selected variables – students, families, cyclists, e-scooter riders, and bus users – were chosen to capture both stationary and transient users, allowing us to identify behavioral contrasts relevant to the research question. The high proportion of transient movement

indicates that Hansons Reserve functions primarily as a passageway rather than a play destination. This pattern corresponds with our survey results, which show limited family participation. Site observations further revealed poorly positioned seating, faded signage and limited play infrastructure (see Figure B1), the environmental and behavioral data together highlight that the park's current layout facilitates mobility but not engagement, underscoring the need for design interventions that promote stationary play and social interaction.

Figure B1 *Hansons Reserve Playground and Safety Signage* (*Note.* Seating and signage were observed as part of the visual assessment of park infrastructure.)

Survey Results

Twenty-four valid survey responses were collected from parents, caregivers, and teachers across nearby communities. The results suggest moderate awareness of Hansons Reserve, with just over half of respondents indicating familiarity but only a small proportion visiting regularly (see Figure B2).

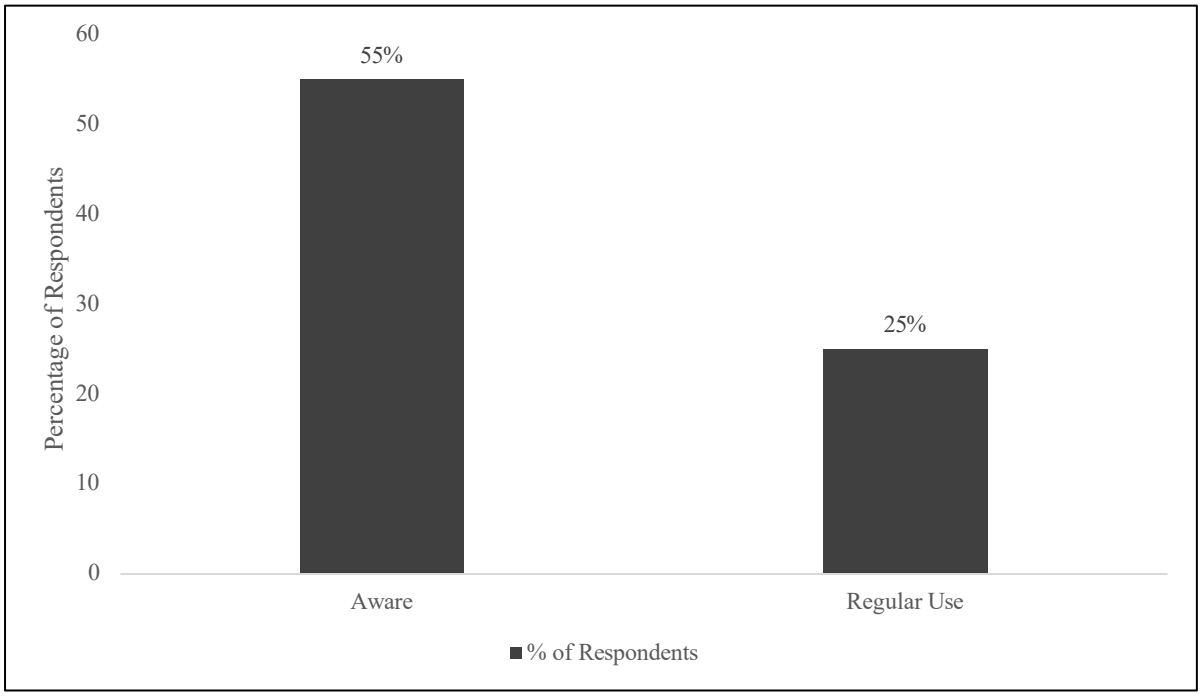

Figure B2 *Awareness and Regular Use of Hansons Reserve (% of respondents)*

This gap between awareness and use reflects limited engagement with the park. Reported outdoor playtime averaged around 45 minutes per day, indicating that while families value outdoor activity, participation remains time-bound (see Figure B3).

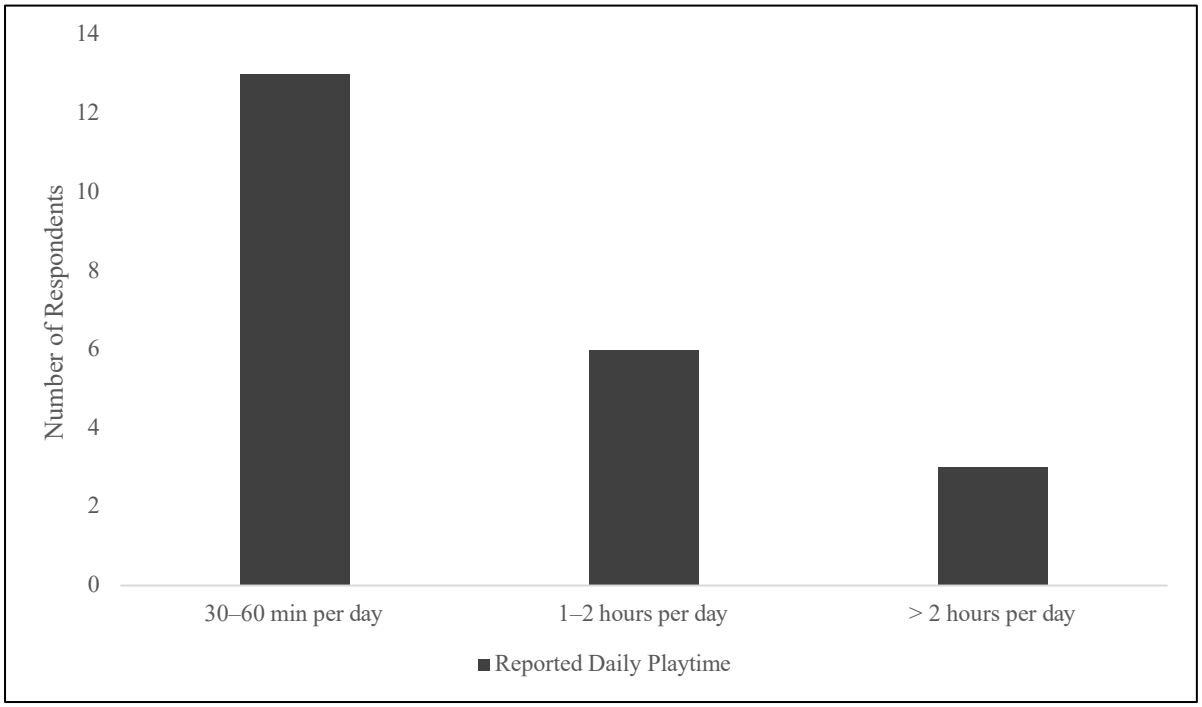

Figure B3 *Average Daily Playtime* (Number of respondents)

Mean scores across the five-point Likert scale showed high enjoyment (M = 4.0) and playground safety (M = 3.8), contrasted by a notably lower rating for overall park safety (M = 3.0) (*see Figure B4*).

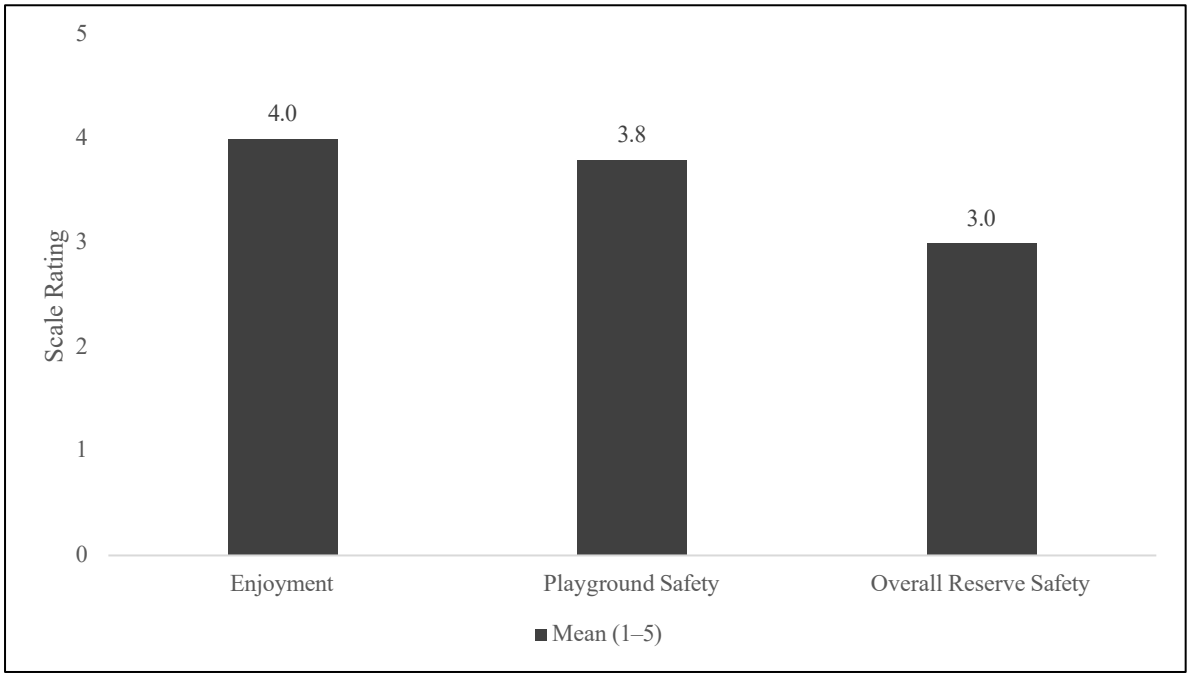

Figure B4 *Mean Safety and Enjoyment Ratings* (1 = Low, 5 = High)

This pattern highlights safety as the central factor limiting sustained use. Preferences for future development concentrated on obstacle courses, multi-purpose courts and climbing structures, pointing to a desire for more dynamic, adaptable play environment (see Figure B5). This data emphasises that design and safety conditions directly shape community engagement with the reserve.

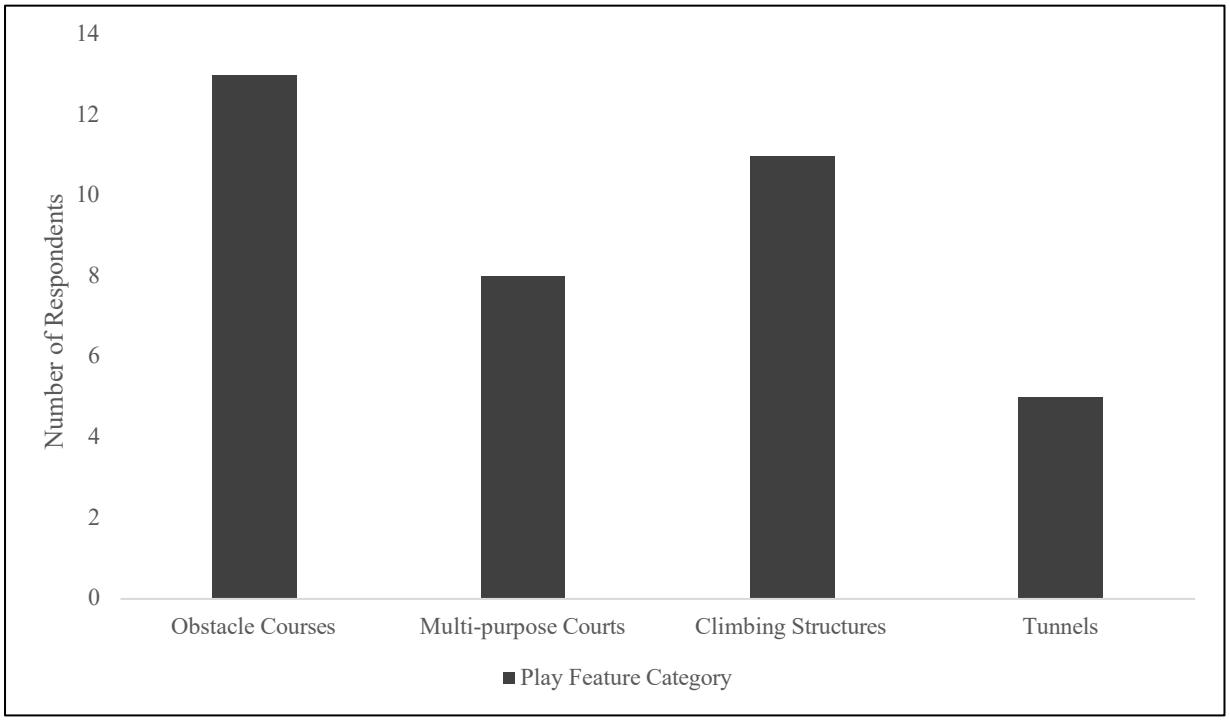

Figure B5 *Preferred Play Intervention* (Number of Respondents)

The statistical trends illustrate that Hansons Reserve is recognised but underutilised, with participation constrained by both physical design and perceived safety. The gap between awareness and use reflects a behavioral threshold in which environmental quality and comfort influence decisions to stay or leave. The average safety rating of 3.0 highlights the impact of lighting, visibility, and maintenance on visitor confidence, while high enjoyment ratings indicate untapped potential for greater use if environmental barriers are addressed. These associations suggest that the reserve's function as a transit route rather than a community hub is not a reflection of disinterest, but of spatial limitations that fail to sustain engagement.

In terms of validity, the survey demonstrates moderate internal reliability. Response consistency across questions indicates clear interpretation, and the pilot phase helped minimise ambiguity. However, as a small convenience sample (n = 24), the results carry limited external validity and cannot be generalised to a wider population. Sampling error and

self-selection bias are also possible, as participants who already value recreation or community spaces may have been more motivated to respond. Despite these limitations, the triangulation of survey and observational data strengthens reliability by connecting perceptions with observed behaviour. The coherence between both datasets confirms that safety and design concerns are genuine community issues rather than measurement limitations of the measurement approach.

These findings provide important guidance for future policy and design. Strengthening partnerships between local schools and the council could transform the reserve from commuter space into an active environment for play and learning. Initiatives such as after-school programs, student-led design projects, and recurring community events would enhance inclusivity and increase daily use. While CPTED principles remain important, they should complement, not replace, strategies that promote social participation and cultural connection. Overall, the data suggests that novel play environments informed by community collaboration can revitalise Hansons Reserve and foster stronger engagement, wellbeing and local identity.

Interview Results

Our qualitative interviews provide valuable insights on how the hauora of tamariki and whanau can be enhanced through the encouragement and facilitation of novel play. This process enabled us to develop a deep place-based understanding, drawing upon local knowledge and lived-experiences to discover the perspectives, needs and desires of the Riccarton community. These findings can be categorised into four themes.

1) **The Nature of Hansons Reserve**

We discovered that Riccarton is a transient area with higher levels of social deprivation due to the prevalence of student and social housing. There is a *"very diverse ethnic mix in the area"*, as reflected by an early learning centre that noticed over thirteen different ethnicities across its enrolments. In the past, the reserve was well-used by the community, particularly for events and recreational activities such as volleyball. Following an unfortunate death in 2012, perceptions of safety declined, potentially shaping increased incidences of anti-social behaviour, homelessness, vandalism and rubbish dumping.

2) **Park Design Improvements**

Interview participants consistently expressed the importance for safety and functional design at Hansons Reserve. This includes *"some sort of fencing that makes it safe but does not inhibit access"* highlighting that a physical barrier *"doesn't have to be a big, just a deterrent"*. Safety was identified as *"paramount when you've got young kids."* This reflects a community preference for design features that enhance security and support caregiver confidence while maintaining the park's sense of accessibility and openness.

Design improvements such as more innovative seating, regular maintenance and enhanced lighting is highly sought after. One participant encouraged *"better lighting so that everyone is visible, everything is visible, no matter what time of day"*, reinforcing that movement sensored lighting could be effective. The inclusion of bike and scooter parking was viewed as a *"great idea"* to positively promotes accessibility and support active travel.

3) **Novel Play Interventions**

We determined what the community wanted novel play interventions at Hansons reserve to look like. There was a clear desire for the space to be innovative, inclusive and inviting. Suggestions varied from incorporating a sport such as pickleball, volleyball, basketball, badminton or cricket to activities such as climbing features, water features, an obstacle course, BMX tracks and bike paths.

One participant reflected that *"the park historically has been designed in the old way of a swing, a slide, very traditional"* and emphasised the need for more contemporary, modern and creative play interventions. It was expressed that a structure would ideally be well thought after for multi-use purposes that appeal to a range of ages and abilities. It should also be *"long-standing, lasting the test of time".* Another participant described an example of an existing play structure which is built form large tyres that could rock and move in different directions, allowing children to invent creative games, challenge themselves and interact collaboratively. They believe its *"exactly what we need"* at Hansons Reserve as it encompasses the meaning of novel play.

Participants emphasised the importance of cultural inclusivity communicating that *"ethnic communities see space differently, treat it differently, so it's how do we engage and connect with that."* This highlights the need to consider diverse cultural values, practices and relationships to place when developing a space, ensuing sense of belonging for all community members.

4) Community Opinions

We discovered significant support and commitment from the community for transformation to occur in the park. One describing it as *"a really good spot, it's got so much*

potential". Participants believed that introducing dynamic play interventions and improving the park design would increase park use and community engagement. Another participant stating, *"I definitely think with enhancement, use of it will increase substantially."* Greater activity and social presence were expected to encourage regular community events, reduce negative behaviors, and develop positive associations.

A professional participant stating the realism of implementation, *"if you see something aspirational"* then *"don't hold back on any monetary problems*", *"if there's a will, there's a way".*

Overall, the community expressed a clear desire for change, recognising the potential for enhancing hauora through connection and play. One participant powerfully summarising *that "any form of outdoor connection, connection to other people, and to just being physical is hugely good for their [tamariki and whanau] wellbeing".* This reflects the holistic essence of hauora where developing novel play spaces will strengthen wellbeing in all dimensions of life.

Recommendations

Environmental Recommendations

1) Environmental and CPTED Safety

Recommendation one, is to enhance park safety through CPTED principles to reduce anti-social behavior, foster autonomy and encourage community use. This can be done by implementing features.

1.1 Seating and infrastructure such as picnic tables, built and designed by the local community. This increases activation and provides opportunities to utilise the park in other ways than play. It helps to create a more inclusive reserve and increase social bump opportunities among people and different communities.

1.2 Introducing a small low-roped fence, with multiple clearly labeled, wide and accessible entrances to Hansons Reserve to create a boundary. The fence creates difficulty for cars to drive into the reserve prevents and deters tamariki from leaving the park.

1.3 Install sensor security lighting. Sensor lights help deter anti-social behavior and make people feel safer. These would activate when the park is in use during darker hours. They prevent light pollution and distribution to surrounding neighborhoods and communities during the night.

1.4 Introducing bike and scooter parking for reserve users' storage and safety is especially critical, it gives the option of active transport to the reserve and utilisation of the adjacent cycle lanes.

2) Educational Opportunities

Another environmental recommendation is to introduce educational materials that encourage respectful behaviour while fostering belonging and connection to Hansons Reserve.

2.1 Install way-finding materials like playful signage (eg. painted outline of hopscotch or native birds and their names). These can be located at entrances to guide park users in (see Appendix C, Figure C1).

2.2 Create way-finding materials communicating to expectation to park users. This educates on taking rubbish home or keeping dogs on a lead. This manages an effective balance between allowing pets in the reserve and making communities feel safer around pet dogs (see Appendix C, Figure C2).

2.3 Implement signs introducing and showing the history (whakapapa and whenua) of Hansons Reserve to users to in both Te reo Māori, English and Braille. As well as highlighting current and ongoing events in the reserve.

2.4 Create a QR code that leads to a digital website introducing the park, its history and events which is available in different languages. This makes education more

accessible for non-English and Te reo Māori speakers as well as vision impaired users (see Appendix C, Figure C3).

2.5 Colourful murals painted by local communities that showcase different cultures, languages and communities in Upper Riccarton foster a sense of belonging and connection to the whenua (see Appendix C, Figure C4).

Kaitiakitanga Recommendations

1) Community Engagement Event

Our Kaitiakitanga recommendation is designed to facilitate co-design and engagement for enhancing play opportunities, fostering community connection and empowering autonomy, contributing to reserve activation.

1.1 Holding a community engagement event to find out the desired play opportunities and events. Holding an event will also help create activation of Hansons Reserve within the community.

2) Consistent Community Events

Hold regularly scheduled community events in Hansons Reserve. This helps to boost park use, play, safety, and community pride.

2.1 Connect with local community groups to provide regular events like run clubs and playgroups to activate the reserve area. This increases community surveillance and reduces anti-social behaviours.

2.2 Provide larger annual celebrations to encourage and celebrate diversity in the community. This increases community cohesion and appreciation (see Appendix C, Figure C5).

Cultural Competency Recommendations

1) **Further Consultation with Minority and Vulnerable Communities**

Engage with minority and vulnerable communities to foster inclusion and a sense of belonging.

1.1 Seeking regular consultation to make sure events and activities are inclusive and accessible to all. This will help to identify and remove barriers that exclude certain groups.

1.2 Seeking consultation with vulnerable communities on novel play opportunities for girls, ethnic communities and people with disabilities ensures diverse perspectives. Appropriate consultation with vulnerable communities increases equitable participation, stronger community relationships and social bump opportunities.

Play Recommendations

1) **Novel Play Interventions**

Implement innovative, inclusive, multi-use novel play designs in Hansons Reserve. This will provide educational and interactive play opportunities that support safe risk-taking,

motor skill development and social connection for all ages. These novel play interventions are drawn from the results of this study.

1.1 A multipurpose half court with a basketball hoop, volleyball net and football goals to increase social and physical activity (see Appendix C, Figure C6).

1.2 A multi-age obstacle course that allows tamariki, particularly older children (> 10 years of age) to safely take risks, challenge themselves and expand motor skills (see Appendix C, Figure C7).

1.3 Novel climbing structures that are innovative and organic features (such as climbing logs, tyres or ropes) encourage risk taking play and confidence building within tamariki (see Appendix C, Figure C8).

1.4 A small bike track will be positively welcomed by the community. It should replicate road to teach road safety (see Appendix C, Figure C9).

Conclusion

This research investigated how the hauora of tamariki and whānau can be enhanced through the encouragement and facilitation of novel play, using Hansons Reserve, Upper Riccarton, Christchurch. Guided by Te Whare Tapa Whā', the study recognised wellbeing as a holistic framework portrayed by taha tinana (physical wellbeing), taha hinengaro (mental/emotional wellbeing), taha whānau (social wellbeing) and taha wairua (spiritual wellbeing) and whenua (land/roots). Through a mixed-method approach using observations, a survey, interviews and secondary data, our findings revealed that although Hansons Reserve is underutilised, it holds a strong sense of community with high potential for positive change.

The research highlights major community support for the development of inclusive, engaging and culturally responsive novel play interventions. This innovative play equipment was recognised as important for enhancing hauora by promoting creativity, physical activity, social connection and belonging. Recommendations emphasised environmental upgrades, CPTED-based safety improvements, cultural competency and innovative novel play interventions to reflect a prosperous community identity.

The study possesses limitations that are to be acknowledged. Due to ethical concerns the ability to interact with those under the age of eighteen years was not granted. This prohibited the direct voice of tamariki and caused reliance on adults' secondary perspectives. Time constraints were a limitation that hindered the research. Time constraints can result in inaccurate decision making, lowered quality and increased errors. However, to ensure the upmost reliability of the research, triangulation between multiple data sources, data organisation and articulate analysis were undertaken.

Overall, this study demonstrates that developing a novel play space extends beyond traditional designs. It is about developing experiences for tamariki and whānau through cultural identity and social cohesion. With continued collaboration, we believe that Hansons Reserve will progress to be a hauora-enhancing space for all.

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Appendices

Appendix C

Figure C1

Picture of way-finding materials

Note. Picture by Van Tongeren, n.d.

Figure C2

Picture of way-finding material indicating users to take rubbish home

Note. By Emmjay, 2025

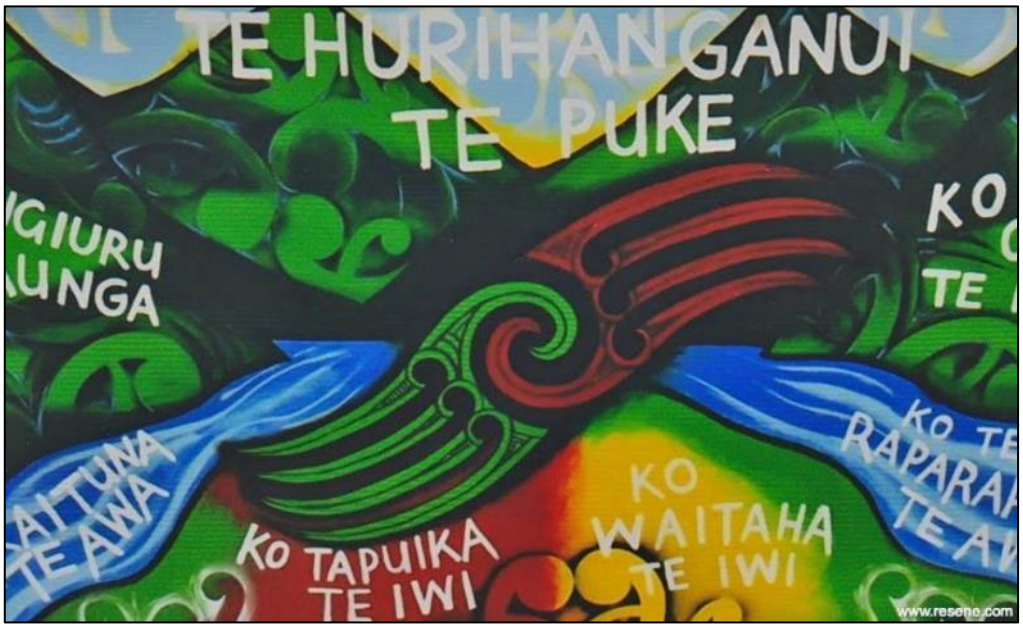
Figure C3

Picture of a QR code sign that shows historical information of a park

Note. By Kadin & Kadin, 2021

Figure C4

Picture of a colourful mural showcasing different cultures



Note. By Resene, 2020

Figure C5

Picture of Matariki Community Event

Note. By Best Family Friendly Matariki Events, 2022

Figure C6

Picture of multipurpose court with basketball hoop and net

Note. By Versacourt, n.d.

Figure C7

Picture of multi-age obstacle course

Note. By HAGS, n.d.

Figure C8

Picture of novel climbing structure to encourage risk taking play

Note. By Ladenburg, n.d.

Figure C9

Picture of small bike track replicating the road and road signage

Note. By Kellie & Kellie, 2020