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Competing tensions: Active transport to school, school choice and policy making

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1. Introduction

Young people are becoming less physically active. Globally, only 19% of school students (ages 11–17) met minimum physical activity (PA) guidelines of engaging in at least 60 min or more of moderate-to-vigorous intensity PA per day (Guthold et al., 2020). Regular physical activity in adolescents is associated with a range of positive outcomes including building confidence, awareness of the local environment, independence and developing mobility norms (e.g. 'walking is good'), which may last into adulthood (Poitras et al., 2016). Active transport to and/or from school (ATS) is promoted as one means to increase PA in young people (Tremblay et al., 2016). In Aotearoa New Zealand, 31% of adolescents aged 13–17 years used ATS (walking, 28% and cycling 3%), 30% were car passengers, and 19% used a combination of public transportation and walking to get to school during the 2010–2014 period (Ministry of Transport, 2015). In Dunedin, New Zealand, 24.2% of the adolescents surveyed used ATS (23.2% walking, 0.9% cycling), 60.1% used motorised transport and 15.7% used a combination of motorised transport and ATS to get to school (Mandic et al., 2016).

The potential of using ATS to increase in PA in young people can be compromised, however, when school choice policies are in place (He and Giuliano, 2018; Van Ristell et al., 2013; Wilson et al., 2007). School choice policies allow students to enroll in a school that may not be in their local school (Thomson, 2010). Internationally, greater school choice has been provided to parents and students through different means including: vouchers, magnet schools, and charter schools (e.g. Chumacero et al., 2011; Makarewicz, 2013). Aotearoa New Zealand has used the flexible construction of school zones and enrolment schemes to increase school choice (Ministry of Education, 2019; Thomson, 2010). Enrolment schemes are designed to prevent overcrowding in popular schools (Webber, 2020). Students have the right to attend any school that does not have an enrolment scheme. Attendance at a school with an enrolment scheme is guaranteed for a student who lives in the geographic zone for that school. Students can also seek enrolment at a school with an enrolment scheme that has space; these places are usually decided by ballot. At the time of our study, 50% of the schools in Dunedin, New Zealand, had an enrolment scheme in place, and less than half of adolescents enrolled in the closest secondary school (Mandic et al., 2018). New Zealand has had school choice policies in place since 1991 (Thomson, 2010).

Policy solutions designed to increase ATS may not be particularly effective in the presence of school choice policies (Yang et al., 2012). A growing body of national and international evidence highlights a strong connection between an increased distance to school and subsequent reduced rates of ATS afforded by school choice policies (Conlon, 2013; He and Giuliano, 2018; Ikeda et al., 2018; Van Ristell et al., 2013; Wilson et al., 2007). Marshall et al. (2010) observed, for example, "school choice can dramatically reduce active travel" (p. 1542). In Dunedin, New Zealand, median home-to-school distance was 4.0 km closer to school among adolescents who enrolled in the closest school compared to their peers who enrolled in the distant school (Mandic et al., 2017). In the same city, the

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number of adolescents living within walking and cycling distance to school was 10 times and 2.6 times higher, respectively, among adolescents who enrolled in the closest school versus their peers that did not (Mandic et al., 2017). Not surprisingly, the rates of ATS were five times higher in adolescents who enrolled in the closest school compared to their counterparts (Mandic et al., 2017). Nevertheless, policy proposals such as taking reasonable walking and cycling distances into consideration when planning the location of new schools (Ikeda et al., 2018), or encouraging students to enrol in their closest school (Conlon, 2013) are unrealistic in the face of parental views that "'getting the right school or education for my child' is worth driving for" (Yang et al., 2012, p. 1870).

School choice policies are not the only obstacle to ATS. A range of factors represent barriers to ATS. For example, hilly terrain (Eyler et al., 2008; Timperio et al., 2006), weather (Eyler et al., 2008; Hinckson, 2016), or even school uniforms can hinder ATS when they consist of traditional kilts for female students that can make cycling difficult and possibly unsafe (Hopkins and Mandic, 2017). In addition, safety concerns from school leaders (e.g. principals and deputy principals) and parents are common in the literature, highlighting concerns around walking and cycling infrastructure, traffic safety and personal safety (Eyler et al., 2008; Hopkins and Mandic, 2017; Kerr et al., 2006; Mandic et al., 2020). Nonetheless, there are some policy levers that may support educational leaders in Aotearoa New Zealand to develop school-based policies to encourage ATSATS.

School leaders are accountable for a number of areas including developing student competence in physical activity, and ensuring the safety of students (New Zealand Government, 2004, 2017). These legislative requirements may provide the impetus for policy making that can address the tensions between increased school choice and decreased rates of ATS. Policy making, whether it consists of policies to increase school choice or increase ATS and PA in young people, can be viewed as "a transformation of intentions", where policy aims are converted into procedures aimed at solving a particular problem (Hall and McGinty, 1997, p. 441). Viewing policy making as the transformation of intentions highlights "unanticipated contingencies and unintended consequences" (p. 441), and allows for critical consideration of complicated matrix of policy actors, processes, content and outcomes.

In this article, we explore the complex relationship between ATS, school choice and policy making. We report findings from semi-structured interviews with 12 secondary school leaders from an urban centre in Aotearoa New Zealand exploring their perceptions of ATS, the school neighbourhood environment, and school policy making.

2. Methods

2.1. Context

This study was conducted in the city of Ōtepoti (Dunedin) on Te Wai Pounamu (South Island) of Aotearoa New Zealand (city population: 130,000). Ōtepoti is the main city in the Otago region, an area of roughly 32,000 km^2 that includes the New Zealand Alps and coastal environments. Ōtepoti is the second largest city on Te Wai Pounamu, after Ōtautahi (Christchurch). The city itself is topologically diverse, with a flat urban centre surrounded by hills (an extinct volcano) and the harbour, and in part due to this – as well as its coastal position – has an 'oceanic', temperate climate with significant micro-climates. All 12 secondary schools in the study city were invited to take part in the Built Environment and Active Transport to School (BEATS) Study in 2014–2015 (Mandic et al., 2015; Mandic et al., 2016). The city's secondary schools are all public schools, including 5 co-educational schools, 4 girls-only schools and 3 boys-only schools.

2.2. Participants and procedure

Each school leader (principals, n = 11, or deputy principals, n = 1; 50% females) participated in an individual 45- to 60-min semi-structured, face-to-face interview at their school (Mandic et al., 2016). Participants received written and verbal information about the study and signed written consent prior to the interview. The study protocol was approved by the University of Otago Human Ethics Committee (reference: 13/203). The interviews explored school leaders' perceptions of ATS, school neighbourhood environment, school policies for ATS, and road safety procedures around the school (Mandic et al., 2016). All interviews were conducted by the second author, and most were attended by the last author.

Table 1
Codebook.

Category	Main codes	Sub-codes
Transport to and from school	Active transport	Cycling
	Passive transport	Bus
	Location	
	Transportation barriers	Safety
		Weather
		Uniforms
		Topography
School policy and school policy making	School choice	Competition
	Parental/guardian choice	
	Student choice	
	Policy solution	Not a priority
		School policy active transport

2.3. Data analysis

The interviews were audio-recorded, transcribed verbatim and imported into the qualitative data analysis software HyperResearch. The first author coded the interviews following a general inductive approach (Thomas, 2006). The first round of coding began broadly, with a focus on two main categories: transport to and from school, and school policy and school policy making (See Table 1). As each transcript was coded, main codes and subsequent sub-codes were added to the codebook in HyperResearch as they were identified. The fourth author confirmed the coding through analysis of a random selection of transcripts (Tuckett, 2005). The first author then re-coded the entire dataset with the established codebook. No new codes were identified. The first author then developed the codes into the themes (Braun and Clarke, 2006) discussed in the next section (3.0 Results and discussion, see Table 2) to explore the tensions between school choice policies, ATS and school leaders' willingness to develop school policies aimed at increasing rates of ATS among their students.

3. Results and discussion

This section discusses the themes developed from the analysis of the interviews with school leaders. The themes and example quotes are summarised in Table 2.

3.1. School choice and distance travelled

In Dunedin, the ability for students and families to exercise school choice means that many students travel past their local school to attend the school of their choice (Mandic et al., 2017). As observed by one school leader: "Our students now come from all over the city, not just our local area" (A). Although one-third of secondary school students in the study city lived within a reasonable cycling distance to school of 4 km, nearly half were usually driven to school (Mandic et al., 2017). Therefore, it is not surprising that one school leader commented: "There is a great acceptance by parents that transporting students to school is a normal part of family life" (A).

Of course, there might be consequences for the school roll if school leaders were to promote ATS and more students attended their local school. School leaders demonstrated their awareness of the potential effects of emphasising ATS: "I would hate to lose all of those students [who are not attending their closest school] and not gain back the ones that should be in our catchment" (A). In keeping with the school choice landscape, school leaders would only have a discussion with a family about transportation "if parents think they can't attend [our school] because they live far away" (H).

Most school leaders were aware of the effects of school choice on the distances their students travelled to school: "So we do get them from all corners of the compass" (E), "our [students] come from a huge geographic spread" (I), and "parents will send their kid anywhere to get the right place" (G). School leaders explained that students "are so geographically spread … [the lack of active transport is] more of a factor of the distance they live from school, than the specific mode of transport that they choose" (I). The commonly accepted view was that students' school choice constrained ATS, and thus there were few options available: "There's an awful lot of families that are quite happy to drive all over the city" (A).

3.2. School choice and barriers to ATS

All of the school leaders named three or more barriers to ATS in their interviews. The unique topography of the study city, as described in section 2.1, has direct consequences for ATS for many students. For example, "very, very few of our [students] bike and I believe it's a lot to do with where we are on the hill" (I), or "you've got hilly terrain, that's problematic" (E). In addition to the hilly landscape, the city's temperate climate effects all of the students. School leaders observed: "[the city's] weather is a big issue" (I), and "it's a combination of the hill and … the weather" (H). Initiatives or policies designed to increase ATS are unlikely to counteract the topography- and weather-related barriers (Eyler et al., 2008; Hinckson, 2016).

School uniforms can also be a barrier to ATS. In New Zealand, school uniforms are the norm. Generally speaking, each school expects students to arrive at school and leave from school in a full school uniform. However, some students may view that rule as a barrier to ATS, particularly for cycling. As noted by one school leader: "kilts and bikes aren't ideal" (I). At the time of the study, few of the secondary schools offered pants as a uniform option for their female students. Students have noted that the expectation to wear a knee-length kilt formed a barrier to ATS, particularly for cycling (Hopkins and Mandic, 2017).

It is probably not surprising that all 12 school leaders placed a great deal of emphasis on students' safety when it came to ATS. Even

Table 2
Key themes related to school choice, active transport to school and policy making.

Theme	Example quote
School choice and distance travelled	"Our students now come from all over the city, not just our local area" (A)[a].
School choice and barriers to ATS	"It's absolute bedlam out there" (I)
Transportation as family/parental choice	"Parents don't want to be told how to run their lives by the school" (K).
Prioritising competing tensions	It "hasn't been in our field of view" (E).
Initiating change	"Just open [ing] up the dialogue's … going to be good" (E).

[a] Letters (A), (B) and so on refer to individual participants.

school leaders who were supportive of ATS listed traffic safety as a barrier: "We also do have to be aware that we're in quite a busy area, so although we support the idea of active transport, we have to be careful about the safety of our students as well" (C). As noted in the introduction, school leaders have an obligation to address student safety in light of wider legislative requirements. Traffic safety issues included concerns around appropriate infrastructure to make cycling to school safe: "The streets in [city] are relatively narrow … [it] doesn't seem to be really well set up for cyclists … There isn't really a culture of looking out for cyclists [by drivers]" (H). Several school leaders admitted that they would not feel comfortable allowing their own children to cycle to school,

> If I were living in [suburb] I wouldn't want my 14-year-old child on a bike coming from [suburb] through the hurly burly of people getting to work in that early morning traffic. I don't think it would be particularly safe. (B)

Other school leaders noted concerns around traffic congestion, parents parking on yellow lines in front of the school gates, the need for speed bumps in front of the school, and the need for pedestrian crossing lights. One school leader explained: "It's absolute bedlam out there" (I) with reference to school pick-ups and drop-offs. These traffic-related safety issues were also potential barriers to ATS which led some schools to work with the local council to broker a solution,

> We have discussed transport, in the sense of traffic, a lot at school and it's reached board [of trustees] level because of parental concerns around the school at drop off and pick up times. There have been occasions when we've engaged with the city council about those very issues. (B)

School leaders seemed comfortable to address traffic safety as a (potential) barrier to school choice. Creation of safe walking and cycling routes to high schools represents one of the promising avenues for addressing adolescents, their parents and school leaders' concerns about traffic safety in school neighbourhoods and encouraging ATS (Rahman et al., 2020). In keeping with their legislative obligations, some school leaders interviewed in this study worked collaboratively with the local council to address traffic safety issues, a method promoted in the literature (Eyler et al., 2008).

3.3. Transportation as family and/or parental choice

Given the school choice landscape and competition between schools for students, school leaders appeared loath to develop strong policies that might be viewed as 'dictating' to parents. Several school leaders suggested that parents would not wish to be told by the school how to organise the transport of their children to school: "At the end of the day it is a parental decision on how they transport their [child] to school or not … we can't push it any further than that" (C), and "from the Ministry [of Education] perspective and from the school perspective, the decisions around how students get to school lies with the home" (F). Other school leaders suggested it was not necessarily a parental concern:

> [Parents] probably think there are more important issues than how their [child] gets to school, they'll be far more concerned about their [child's] behaviour at school or more concerned about [their child's] grades than whether [their child] … bike[s] … to school. (F)

It is not surprising in a school choice environment where some schools are competing for the same students that school leaders would be cautious about compelling parents and students to use ATS. One school leader suggested: "Parents don't want to be told how to run their lives by the school" (K). Although school leaders have responsibility for promoting student health and physical activity in legislative requirements, there was a tension between advocating for ATS and parental decision-making. School leaders were not comfortable intruding on family decision making: "I think there's a role for the school in terms of promoting physical activity … but I don't think the school … should interfere too strongly with what the parents find the most convenient or the best mode [of transport] for their child" (D). Evidence suggests that interventions to educate and encourage parents to choose ATS for their children have some success (Chillón et al., 2011). For the school leaders interviewed in this study, however, their policy making obligations stopped at the school gate.

3.4. Prioritising competing tensions

School leaders suggested that they had other issues that took priority over students' school travel: "How [students] get to school is not on the top of my agenda to be perfectly honest with you" (F), and "[ATS] is not a big issue … we've got other issues that are bigger to do with health and wellbeing" (K). One school leader explained: "How they get to school, [is] not overly important at all … probably a bigger issue for us isn't transport, it's breakfast" (L). If we view policy making as directed at solving problems (Hall and McGinty, 1997), then one interpretation of these statements is that the school leaders did not view the low rates of student ATS as a problem in need of a solution. One school leader explained: It "hasn't been in our field of view" (E). In other words, they felt that they had bigger problems to solve.

Some school leaders appeared to be more willing and/or able to address the policy problem of health, "we should be more proactive trying to promote physical activity" (D). However, the relationship between health and ATS decision making was not always articulated, with other leaders observing, "I don't think there is much conscious thought that goes into the health benefits of the form of transport [to and/or from school] that's chosen" (I). Depending on how it was framed, a focus on healthy lifestyles for students could be viewed as legitimated by the school curriculum (Ministry of Education, 2007): "We have a very good year 9 and 10 health programme that runs here and they talk around a whole range of issues … diet … and health and fitness is part of that" (H). However, school leaders were acutely aware of the tensions involved in policy making efforts directed at 'problems' that could be viewed as slightly outside of their remit.

> The roles … and … what you have an influence on is quite massive and it gets blurred all the time … where we are actually involved in things that we don't want to be involved in all of the time, but you have to because it's for the greater good … you always want to encourage more healthy behaviour, but … I guess your priorities at times as well … Do we want to be telling their parents how they are getting their kids [to school]? (L)

This school leader wrestled with the tensions of getting involved with issues 'for the greater good', setting priorities and 'telling parents' what to do. As described earlier, many school leaders did not want to be seen as dictating to parents and viewed school travel as a family decision.

School leaders noted that not only did they feel uncomfortable directing parents, they had no way to enforce any school policies developed to encourage ATS.

> I think we could have the conversation but I don't think we could set a policy because if you do that, then you have to enforce it and we have absolutely no power of enforcement. So, everything we would do would be educative and making suggestions, [like ATS] would reduce … the traffic jams at the end of the school day … or … if your [child] isn't involved in sport … then [ATS] might be something you might like to discuss with your [child] at home … but we couldn't say 'you can't drive your child to school' … we would just be fighting a losing battle. It wouldn't be the right way to go about it. (K)

The school leader's proposal that schools could be 'educative' is supported by studies that worked alongside parents to encourage ATS (e.g. Chillón et al., 2011). The same school leader also noted schools cannot enforce any policies with regard to ATS: "We have no legal standing [to say to students do not bring their car to school] … so we just have to put it in the nicest possible terms and encourage them to come other ways" (K). While school leaders might be able to develop school policies to educate students and families and encourage ATS, the tension remains between school travel policies and school choice policies:

> Frankly, I'd have other battles to fight before that one (laughs) … there has to be compelling evidence for people to make changes and to see the benefits … How is that going to affect … schools like mine, I've got people coming in from far and wide. (E)

One clear result of school choice policies has been an increase in the average distance to school (Mandic et al., 2017; Van Ristell et al., 2013; Wilson et al., 2007; Yang et al., 2012). The school leader's observations that schools have 'no power of enforcement' highlights the vacuum in school policy-making related to ATS in Aotearoa New Zealand, as well as the "unintended consequences of activity within the policy process" (Hall and McGinty, 1997, p. 441). Whose role is it to develop school policies encouraging ATS in an education policy environment where school choice is taken-for-granted?

3.5. Initiating change

In the previous sections, this article has uncovered the complexities of and barriers to dealing with ATS for school leaders. We now turn our attention to potential opportunities for change, and question how change might be initiated given the barriers to ATS and the school choice policy landscape.

Some school leaders focussed on positive initiatives, rather than just the difficulties involved with school policy enforcement as described in section 3.4 above. For example,

> I am sure we could do more, I guess … There would never be a way that we could do it that would incorporate all of the [students] … I am sure we could increase the number of [students] who use active transport to get to school … I am sure there is some promotion and things we could do … It would be impossible to expect that all [students] would be able to do that, because of where they live. (I)

While this school leader felt they 'could do more' to promote ATS, nonetheless the barrier of distance remained for some students. Another school leader suggested they could consider incentives: "I'm just thinking off the top of my head here, if you said to [students] or parents … the [students] can walk to school and we will provide them with breakfast" (F). These sorts of proposed changes suggest a school-initiated positive approach, often referred to as 'carrots' in the wider active transport literature (Piatkowski et al., 2019). Given the complexity of the school choice landscapes, other methods in conjunction with 'carrots' may be needed to encourage ATS among adolescents.

Other school leaders looked to consultation and collaboration with the students and/or the wider community, noting: "Just open [ing] up the dialogue's … going to be good" (E). For instance, one school leader noted: "We do an annual survey, we could throw in there … targeted questions around transport to school" (E). Another school leader suggested a multi-sector approach in which the school could discuss cycleway options with the local council, opening the discussion up to community consultation about ways to encourage students' ATS. Student representatives on the school board presented another avenue to explore, "we're very open to suggestions" (K), and "they'd [school board] be prepared to listen for sure" (F). One school leader explained:

> So, we try and encourage that, that … we want to hear their voice[s] … We have a student council, who will often come up with stuff. And that's very representative … of the year group, so if things around active transport came up and they had a good, proposal we'd certainly look at it … [So] you want to say to them 'hey look, you've got ideas, we want [you] to know this is your school' … I think we probably don't give kids enough credit for their creativity and what they can do, because it's something that we present as adults, and think that would be a good idea … *but it's better that it comes from them* … because … they feel then empowered and that they've got some mandate in the school to … be part of it. (E, emphasis added)

Greater consultation with and involvement of students themselves seems a very important way forward to increase ATS for high school students. Research on New Zealand school travel plans found "high school students needed to be engaged differently, and

student ownership of the travel plan was an essential element for the programme to be successful in these schools" (Faulkner and Hinckson, 2018, p. 209). Other researchers suggest students can play a powerful role as ATS "champions", acting as role models to encourage and motivate other students (Buttazzoni et al., 2018).

In addition to adolescents, parents also play an important role in decision making regarding how adolescents' travel to school (Mandic et al., 2020) and the use of private vehicles for adolescents' school-related travel, often as part of the broader trip-chaining practices within the family (Keall et al., 2020). Moreover, one school leader believed: "It would have to have the cooperation of all schools" (A). While cooperation of all schools in one city/area may not be possible in a highly competitive environment, it may be possible to collaborate widely with school leaders, city council, and most importantly the students themselves and their parents (Buttazzoni et al., 2018; Faulkner and Hinckson, 2018). The inclusion of parents in the process may facilitate obtaining the buy-in from the parents as opposed to the feeling of "being told how to run their lives by the school" (K).

Although school leaders identified school uniforms and traffic safety as barriers to ATS, school leaders did not discuss potential initiatives for addressing those ATS barriers. Since the time of the study, four out of nine of the study schools with female students have revised their uniform policies to include trousers. In addition, a number of cycling and pedestrian infrastructure changes have taken place in Dunedin, initiated by the local council. An upcoming natural experiment will explore associations between changes in school uniforms for female students and cycling behaviours, as well as relationships between changes in the built environment, percpetions of traffic safety and ATS (Mandic et al., 2020).

3.6. Implications

Our findings speak to policy-makers and researchers interested in increasing ATS within a school choice policy context, and question how we can place policy making aimed at increasing ATS within the 'field of view' for school leaders given the tensions we have reported here. As described in the introduction, policy making is aimed at solving problems (Hall and McGinty, 1997), yet there is no simple policy solution when trying to navigate the tensions between school choice policies and ATS (Mandic et al., 2018). Importantly, any proposed interventions will need to take the particular tensions of the local context into account (Buttazzoni et al., 2018; Faulkner and Hinckson, 2018; Rothman et al., 2018). Schools already have in place a number of structures and mechanisms such as regular surveys and student members on the school board that can provide powerful avenues to develop dialogue, initiatives and policy related to ATS. Our findings suggest future initiatives to develop plicies to encourage ATS will need to involve students themselves as participants, and even champions, to support school leaders to negotiate the competitive school choice policy context. The literature locating students as powerful players in the development and implementation of ATS policies supports the school leader's suggestion that "it's better that it comes from them" (Buttazzoni et al., 2018; Faulkner and Hinckson, 2018).

Adolescents' school travel is often located within broader family travel practices, therefore involving parents in any transport to school policy and decisions making is important to ensure their buy-in. Moreover, the schools might consider a more integrated and systemic approach to ATS by incorporating it into the physical education and health curriculum as part of a comprehensive school physical activity prgoramme (Hunt and Metzler, 2017). A wholestic approach could represent a (small) step toward wider cultural change. Finally, schools could work with government authorities at different scales to entice adolescents to use public transport for school travel, where relevant Mindell et al., 2020(). Increasing public transport use as an alternative to travel by private vehicles can be challenging in a car-dominated society but represents an opportunity to incorporate walking and/or cycling as part of the school journey and contribute to increasing physical activity levels even among adolescents who live beyond walking and/or cycling distance to their school Mindell et al., 2020().

3.7. Study strengths and limitations

Study strengths include the use of qualitative methods to explore the complexity of local contexts (Smith and Sparkes, 2017). Qualitative methods allow researchers to develop a rich portrait of complicated issues. While a number of studies have identified the impact of school choice policies on ATS as increased distance to school and decreased rates of ATS Mandic et al., 2017(; Marshall et al., 2010) using quantitative methods, this study highlights the particular tensions involved in developing school-specific policies from the point of view of school leaders. Another strength of this study was a 100% participation rate of secondary school leaders in one city representing co-educational and single-sex schools, thus adding to the depth and detail of findings in a particular context.

Some might consider a lack of generalisability as a limitation of a focused and detailed approach using qualitative methods (Smith, 2018). Strictly speaking, from a statistical-probability stance our findings from interviews with 12 school leaders in one study city are not generalisable. However, we encourage readers to reassess generalisability, and instead consider how our findings may "resonate" (Tracy, 2010) to other settings. Researchers may find our findings useful if they can transfer them into their own context. Nonetheless, future studies could compare different cities within the same country to further examine the tensions between school choice policies, ATS and policy making and, extend our understandings of how these tensions play out in different contexts.

4. Conclusions

School choice policies in countries like Aotearoa New Zealand have had a direct impact on ATS, with clear consequences of increased distance to school, decreased rates of ATS, and development of an environment where motorised (mostly private vehicle) transport is the norm for families. For better or worse, these policies will not be changing in New Zealand any time soon. This article reported findings from the interviews with secondary school leaders in Ōtepoti (Dunedin), New Zealand related to their perceptions of

ATS, the school environment, and school policy making. School leaders identified distance travelled to school, the city's unique topography, weather, school uniforms, and traffic safety concerns as barriers to ATS in the study city. School leaders positioned the school travel decision-making as a function of a family, rather than the school; thus, firmly locating the 'problem' of ATS beyond the scope of the school and school policy making. This article also described tensions between school policies that could be used to encourage healthy lifestyles, including ATS, and school choice polices. This tension creates a policy vacuum where school leaders did not view ATS as within the scope of their policy-making duties. School leaders were willing to intervene to address barriers to school travel (including ATS) when it comes to students' safety, but they were reluctant to introduce rules that might impact on student/parental choice, and therefore potentially decrease student numbers at their school. As a result, policies concerning students' ATS have not been in their 'field of view'. Capitalising on structures already in place in schools, future efforts to develop policies for promoting ATS should involve secondary school students and their parents in the process, and consider comprehensive approaches that span in and out-of-school initiatives.

Author statement

All authors have made significant contribution to the manuscript, were involved with the study design, participated in the writing and revising of the manuscript and approved the final version of the manuscript. Associate Professor Mandic (4th author) has full access to all the data in the study and along with Associate Professor Sandretto (1st author) takes responsibility for the integrity of the information presented in this manuscript.

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