



Supporting the Wellbeing of Those Left Behind: The Impact of Youth Development Programmes on Children in Highly Transient Schools

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Abstract

Schools are important in nurturing social skills and behaviours. Research consistently demonstrates that movement into/out of school (transience/mobility) disrupts positive social skill development, especially for students who frequently move. The impact of attending a highly transient school on *non-mobile* students is not as well-known. The current study explored the impact of values and life skill-based programme, Kiwi Can, on social development and the classroom climate for non-mobile children. Researchers administered surveys to students attending 15 intervention (i.e. Kiwi Can programme; $n=763$) and 9 control ($n=456$) schools in Aotearoa New Zealand. We examined the impact of programme participation by school transience level (high, middle, low) and length of school participation (new, experienced). The results indicate that students attending highly transient schools struggled to build social relationships, feel connected, demonstrate care and compassion to others, and behave in prosocial ways. They also felt less safe at their schools. Students participating in Kiwi Can for more than two years (experienced schools) showed fewer negative effects of transience on social development than less experienced schools. This research highlights the plight of students who are ‘left behind.’

Keywords Transience · School mobility · PYD · Social skills · School programmes · Classroom climate

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Introduction

Positive social relationships and social skill development during childhood are associated with healthy developmental trajectories later in life (Bagwell et al., 2001). School contexts can support positive developmental trajectories by fostering a sense of belonging within schools and providing opportunities for children to develop important social skills and use these skills to bond with others. External forces can undermine a school's ability to foster belonging. For example, poverty is associated with increased school mobility or transience (Hanushek, et al., 2004). Whole school programmes, grounded in positive youth development (PYD) approaches, can enhance school climate and social skill development (Taylor, 2017) and mitigate the negative impact of environmental factors, such as transience (Masten et al., 2008). Research tends to focus on mobile children, and very few studies explore the lived experience of students attending highly transient schools who are not personally mobile. This study aims to assess the efficacy of a school-based PYD programme in supporting the social development of non-mobile children attending highly transient schools through a social cognitive theory lens (Bandura & Daniel, 2003).

Social Cognitive Theory and PYD

A core tenet of social cognitive (and PYD) theory positions young people as active agents in their development, who are influenced by and can influence their environments (Bandura & Daniel, 2003; Lerner et al., 2018). Social skills and prosocial behaviours are enhanced when children's contexts are rich with opportunities to experience and demonstrate care and compassion, social competence, connection to peers and school, and character (Lerner et al.). Thus, school contexts are instrumental in supporting (or hindering) the development of social skills and prosocial behaviours, which enhance PYD.

Schools as Developmental Contexts and Poverty

Schools are unique developmental systems that can support PYD through proximal (e.g. teachers, classrooms) and distal (e.g. school climate) forces (Eccles & Roeser, 2011). Efforts that enhance a positive school climate lead to better student adjustment and positive social behaviours amongst students (Roeser et al., 2000). Positive school climates establish networks and resources that support positive classroom climates (McNeely et al., 2002). In addition, teachers create a positive classroom climate by setting high expectations for learning and behaviour and establishing a warm, caring, and safe environment for students (Frazier et al., 2015). However, external forces can disrupt school and classroom climate and impact a child's ability to engage in the school system.

Murry and colleagues (2011) identify poverty as an ecological context that can negatively impact social development, and the pervasive impact of poverty on

development is well documented (e.g. Cai & Smeeding, 2020). Children living in poverty are more likely to experience instability across multiple domains, including school. One way to examine instability is via school mobility or transience.

Mobility/Transience

School mobility, the frequent movement from one school to another, undermines opportunities for children to experience positive social connections (Lleras & McKillip, 2017). Researchers examine mobility and transience at the individual and school level. In Aotearoa New Zealand (NZ), individuals are deemed mobile if they have attended two or more schools in a year (Ministry of Education, 2021). School transience is determined by the proportion of children who join or leave at nonnormal entry or exit points (Neighbour, 2000).

Changes in family circumstance (e.g. separation or divorce), employment (e.g. new employment opportunities or redundancy), or housing (e.g., better or more affordable housing; Johnson, 2002) influence mobility. Although low levels of mobility can be protective, high levels of mobility can negatively impact children (Susukida et al., 2016).

Mobility in NZ schools is a significant issue, with some children changing schools as often as ten times over their seven years of primary school (Education Review Office, 2007). Although the national average mobility rate has declined since 2012, younger students and those attending schools in areas of high deprivation are more likely to be impacted by transience; and the transience rate for decile 1–2 schools (see Footnote 1)¹ is four times greater than that for decile 9–10 schools (Ministry of Education, 2021). Thus, transience is an issue for schools located in low-income communities. In addition, transience at the school level can negatively impact individuals via proximal and distal school systems (Lleras & McKillip, 2017).

The Impact of Mobility/Transience

Student movement in and out of a classroom can negatively affect the classroom climate (Lleras & McKillip). Transience disrupts established classroom routines and forces teachers to reconfigure classes (Fisher et al., 2002). Transience increases anti-social behaviour within the classroom, undermining other children's sense of safety or belonging (Bradshaw et al., 2009). These disruptions negatively impact instructional continuity, upset friendship groups, and disturb existing classroom dynamics (Sorin & Iloste, 2003). Transience also increases school-level destabilisation, where high student mobility rates increase the risk of school violence (Khoury-Kassabri et al., 2004) and a negative school climate (Bevans et al., 2007).

¹ In NZ decile rating reflects the socioeconomic status of families whose children attend the school. Schools receive a rating between 1 and 10. A decile rating of '1' is given to schools whose families fall in the lowest 10% and a rating of '10' in the highest 10% of SES based on most recent census data (Ministry of Education, 2024).

Besides impacting school systems, transience negatively impacts individual students. Highly mobile students experience higher rates of peer rejection (Hartman, 2002), bullying (Sorin & Iloste, 2003), and mental health concerns (Susukida et al., 2016) than less mobile students. They are also more likely to act antisocially, adversely affecting their ability to form positive social networks (Lleras & McKillip, 2017). High mobility is a strong predictor of low social cohesion and networking, and mobile youth in NZ are more likely to report poorer social relationships with neighbours and lower levels of safety (Utter & Denny, 2010). Furthermore, mobility among children weakens peer relationships and social integration (Gilbert, 2005) and increases the likelihood of dropping out of school during adolescence (Dixon, 2018).

Thus, transience can undermine PYD at the school, classroom and individual levels by disrupting social networks and hindering the development of important social skills (e.g. compassion and social competence). However, it is misleading to assume that non-mobile children do not face the same challenges as their mobile peers (Hanushek et al., 2004).

Reynolds et al. (2009) posited unpredictable and unstable in learning environments can disrupt children's active participation in school contexts and lead to negative adjustment. Non-mobile children who attend highly transient schools can experience disruptions to their social networks and social skill development, undermining opportunities for PYD. For example, highly transient school environments are associated with increased drop-out rates (South et al., 2007) and decreased behavioural engagement over time (Degroote et al., 2020). Degroote and colleagues indicate that these negative trajectories may result from a peer contagion effect, where the disruptive behaviours of mobile students become socialised and normalised across the school context. Thus, understanding how transience impacts those left behind and how to best support and promote positive social skills and behaviours in high-transience school contexts is an important area of research.

Current Study

The current study aims to assess the efficacy of a school-based PYD programme on the social development of children attending schools in low SES communities, focussing particularly on the impact of transience rates. The research questions are:

RQ1. Does social development (i.e. prosocial attitudes and behaviours) among students attending low-decile schools in NZ vary as a function of how long the school has participated in the PYD programme?

RQ2. Does social development (i.e. prosocial attitudes and behaviours) amongst students vary as a function of the degree of school-level transience?

The researchers examined these questions within the context of Kiwi Can, a school-based values and life skills-based programme designed by the Graeme Dingle Foundation, a charitable trust in NZ. Programme delivery occurs in primary and intermediate schools located predominantly in low-SES communities (Graeme

Table 1 Kiwi Can programme curriculum

Themes			
Positive relationships	Integrity	Resilience	Respect
Positive Communication	Honesty	Understanding Emotions	For Ourselves
Cooperation	Responsibility	Self-control/Discipline	Respectful Communication
Friendship	Reliability	Dealing With challenges	For Others
Fairness and Fair Play	Making Good Choices	Goal Setting	For Our School
Leadership	Being a Role Model	Problem Solving	For Our Community
Conflict Resolution	Accountability	Perseverance	For Our Environment

Note. The table is adapted from the “Kiwi Can Coordinator Manual” by the Graeme Dingle Foundation (2012, p. 3)

Dingle Foundation, 2012). At the time of the study, Kiwi Can operated in 64 schools across eight geographically and culturally diverse regions throughout NZ. In each region, a licenced community partner was responsible for programme delivery. Staff delivered one Kiwi Can lesson to each class per week.

Lerner et al.’s (2018) 5Cs of PYD informed the programme curriculum. Learner and colleagues. argue that embedding children in asset-rich environments increases the likelihood of developing the 5Cs – competence, confidence, connection, caring, and character. Research indicates that school-based PYD programmes can enhance social skills and academic performance and protect against negative behaviours (e.g. drug use) in the short term and increase the likelihood of educational attainment (e.g. complete high school) in the long term (Taylor, 2017). The Kiwi Can curriculum is standardised with some delivery flexibility in response to specific student needs within a particular school. Table 1 shows the curriculum themes and modules. The current study focussed on four of the 5Cs (i.e. competence, connection, character, and caring), as outlined in the curriculum (Table 1). The researchers did not examine confidence because the curriculum did not address this construct.

Method

Study Design

The researchers used a quasi-experimental, pre-post survey design, and a stratified purposive sampling frame to select schools (Table 2). The sampling frame incorporated two Kiwi Can schools and one control school from each of the eight Kiwi Can regions. Control schools were selected at random from a list of all mainstream, coeducational, low-decile, full primary, composite, and intermediate schools located within a 10-km radius of a participating Kiwi Can school. Kiwi Can schools were classified as either new (programme delivered for < 2 years) or experienced (programme delivered for ≥ 2 years).

Table 2 School participation results

School	Kiwi Can regions								Total
	1	2	3	4	5	6	7	8	
New				XX	XX	X		XXX	7
Experienced	XX	XX	XX					XX	8
Control	WD	XX	X	X	X	XX	X	X	9
Total	2	4	3	3	3	3	3	3	24

Note. WD = withdrawn, X = one school, XX = two schools

Procedures

Ethical approval for the research was granted by the University of Auckland Human Participants Ethics Committee (Reference: 2012/8912). Data collection began in the first month of the school year and was repeated in the last month of the same school year. End-of-year (T2) questionnaires ($n = 1520$) were matched to start-of-year (T1) questionnaires ($n = 1740$) using student and school names and grade-level information recorded by the participants. After data entry, 5% of the T1 ($n = 87$) and T2 ($n = 76$) surveys were checked for accuracy, finding just one data entry error; hence, no further data checking was conducted. All questionnaires with more than 10% missing responses were deleted (T1: $n = 46$; T2: $n = 29$). Little's MCAR Test was used to determine if data were missing at random. Given the unequal sample sizes between groups, Hochberg's GT2 post hoc test (Field, 2017) was used to determine whether there were statistically significant differences in the mean responses for surveys with no missing data (0%), 1–10% missing data, and > 10% missing data. The Little's MCAR Test and the ANOVAs' results were non-significant ($p > 0.05$) for the T1 and T2 data sets. Thus, missing values were imputed using the expectation maximisation algorithm (Dempster et al., 1977). After matching the T1 and T2 participants, 1219 students had complete responses for both questionnaires at both times.

Participants

The final data set consisted of 299 students from experienced Kiwi Can schools, 464 from new Kiwi Can schools, and 456 from control schools (Table 3). Approximately half (50.3%) of the participants were female, and under half (47.0%) were in Year 7 (~ age 11). The remaining children were in Years 6 (~ age 10) and 8 (~ age 12). Most children identified as either Pākehā/NZ European (42.6%) or Māori (37.3%). Very few self-identified as being of Pasifika, Asian, or other ethnicity.

Measures

Positive Youth Development – Social (PYD-S)

Three scales (29 items) from the *Profile of Student Life: Attitudes and Behaviour Survey* (Search Institute, 2012) were used to measure three components of PYD

Table 3 Frequency counts for student participants

Variable	<i>n</i>	%
School condition		
Experienced	299	24.5
New	464	38.1
Control	456	37.4
Sex		
Girl	613	50.3
Boy	606	49.7
Year Level		
Year 6	371	30.4
Year 7	573	47.0
Year 8	273	22.4
Ethnicity		
Pākehā/NZ European	519	42.6
Māori	455	37.3
Pasifika	116	9.5
Asian	46	3.8
Other	83	6.8

– character, caring and connection. Each scale had two subscales containing four to five items (i.e. character [values diversity: 4 items; personal values: 5 items], caring [empathic concern: 5 items; perspective taking: 5 items], and connection [peers: 5 items; teachers: 5 items]). Example items include: “I stand up for what I believe in, even when it’s unpopular to do so” (character [personal values]); “I often feel sorry for other children who are sad or are in trouble” (caring [empathic concern]); and “I get along well with my teachers” (connection [teacher]). These scales demonstrated satisfactory psychometric properties among a sample American youth (Bowers et al., 2011).

Social Competence

The 11-item *Children’s Self-Reported Social Skills Scale* (Danielson & Phelps, 2003) was used to measure social competence. This scale contained three subscales (i.e. social rules [e.g. “I say thank you when someone does something nice for me”], likeability [e.g. “Others like me and have fun with me”], and social-ingenuousness [e.g. “I kick or hit someone else when they make me angry”]). These scales showed high reliability estimates (Jelicic et al., 2007).

Classroom Climate (CC)

Five scales (22 items) from the *Canadian Measure of School Social Climate* (Ding et al., 2011) were used to assess classroom climate. Each scale contained two to five items (i.e. positive behaviour in the classroom [5 items], negative behaviour in the classroom [5 items], classroom and school supportiveness [5 items], safety at school

Table 4 Number of Schools and students by transience category and Kiwi Can status

Kiwi Can status	Transience rate		
	Low (< 15.20%)	Middle (15.21–32.87%)	High (> 32.88%)
Experienced	0; 0	5; 358	3; 63
New	0; 0	5; 386	2; 50
None	6; 178	3; 184	0; 0

Note. Data are frequencies of schools; students

[2 items], and enjoyment of school [4 items]). Example items include: “Students in my class share with others” (positive behaviour); “Students in my class borrow things without asking” (negative behaviour); “Students in my class work together to solve problems” (classroom and school supportiveness); “Students in my school feel safe in all areas of the school building” (safety); and “I like my school” (enjoyment). One item in the enjoyment of school scale (i.e. “I feel safe on the playground and on the school grounds”) was separated into two separate items (“I feel safe on the playground” and “I feel safe on the school grounds”) to ensure differentiation and that each subscale had three or more items.

School Transience

Johnson’s (2002) formula was modified such that school-level transience was adjusted by the actual roll of students in Years 6–8 in each school when the research was conducted. The sum of students who completed only one of the two surveys indicated the level of mobility. Our approach gives the number of mobile students (i.e. disappeared or arrived) as a proportion of the actual students at T1 adjusted by the expected number of students based on each school’s roll.

Based on the grand average of all schools’ transience rates ($M=24.84\%$; $SD=12.87$), schools were classified into one of three categories (Table 4). Low transient schools had transience rates in the lowest 25th percentile of total scores, while high transient schools had mean values at or above the 75th percentile. Because the six control schools were in the low transience condition and were completely absent from the high transience condition, they were removed from further analysis, eliminating the low transience condition from the research. Thus, all interaction results focus on two transience conditions (i.e. high versus middle) and two school Kiwi Can conditions (i.e. experienced versus new).

Data Preparation

Most items in the PYD-S and CC scales used a positively packed 6-point rating scale (i.e. 1 = *Strongly disagree*, 2 = *Mostly disagree*, 3 = *Slightly disagree*, 4 = *Slightly agree*, 5 = *Mostly agree*, and 6 = *Strongly agree*). The four negatively worded items in the social competence scale were reverse scored. The PYD-S and CC statistical

models had full metric and scalar invariance across time and school conditions, meaning comparisons could be made (details available upon request).

For the PYD-S scales, an unconstrained model of seven intercorrelated factors had acceptable to good fit statistics ($\chi^2/df=4.41$; CFI=0.90; RMSEA=0.053, 90%CI=[0.050,0.055]; SRMR=0.044; gamma hat=0.92). All standardised regression weights were statistically significant and robust ($\beta>0.41$). The correlations between latent factors were moderate to large, ranging from $r=0.42$ (empathic concern-connection to peers) to $r=0.91$ (perspective taking-personal values). For the CC scales, the positive behaviour and classroom and school supportiveness factors merged, and an intercorrelated four-factor model had the best fit ($\chi^2/df=4.24$; CFI=0.93; RMSEA=0.051; SRMR=0.039; gamma hat=0.95). Mean scores were computed for the PYD-S and CC subscales by finding the average response for all items contributing to each factor at T1 and T2. Differences in mean scores across time were evaluated using one-way repeated measures of analysis (RM-ANOVAs), with dummy variables for transience conditions (1=*low* to 3=*high*) and Kiwi Can intervention conditions (1=*Experienced*, 2=*New*, 3=*Control*). An advantage of RM-ANOVA is that it is robust against the requirement of sphericity (i.e. variances and correlations are equal across times) expected in mixed-model ANOVA (O'Brien & Kaiser, 1985).

The RM-ANOVA approach was used rather than hierarchical or multilevel linear modelling (HLM) for two reasons. First, the number of groups at level 2 (<20) was so small that there were concerns that HLM would not detect significant differences at the group level. Second, the ICCs, computed separately for each scale using the mixed linear model feature in SPSS, were small ($M=2.59\%$, $SD=2.82$; min<0.01%, max=8.87%). While there is no definitive value for an ignorable ICC, values < 10% do not cause substantive variation in parameter estimation (Vajargah & Masoomnikbakht, 2015) and indicate that more than 90% of the variance is attributable to the level 1 unit (Woltman et al., 2012).

Results

Scale Scores over Time

Contrary to the expectation of general benefit from the *Kiwi Can* programme, the mean scores for all seven PYD-S and four CC subscales decreased over time and in the two *Kiwi Can* school conditions (Table 5). Three shifts were not statistically significant (i.e. two for new schools, one for experienced schools).

Transience/Mobility

Table 6 includes the mean score changes by scale for each of the four interactions of interest (i.e. length of experience in *Kiwi Can* by degree of transience). Inspection of 95% confidence intervals revealed that perspective taking had no statistically significant change in any group, diversity changes were also not

Table 5 Descriptive time 1 to time 2 change statistics for PYD-S and CC subscales by intervention category

Scale	Intervention	<i>n</i>	ΔM	<i>SD</i>
PYD-S subscale (<i>n</i> = 1219)				
Empathic concern			-.20	.88
Perspective taking			-.07	.89
Social rules and politeness			-.11	.68
Connection to school			-.24	.85
Connection to peers			-.19	1.00
Values diversity			-.08	.85
Personal values			-.10	.81
Kiwi Can condition				
Empathic concern	Experienced	299	-.34	.96
	New	464	-.19	.87
Perspective taking	Experienced	299	-.03 ^{ns}	.97
	New	464	-.09	.82
Social rules and politeness	Experienced	299	-.16	.74
	New	464	-.07	.61
Connection to school	Experienced	299	-.33	.92
	New	464	-.16	.79
Connection to peers	Experienced	299	-.21	1.01
	New	464	-.15	1.00
Values diversity	Experienced	299	-.15	.94
	New	464	-.08 ^{ns}	.82
Personal values	Experienced	299	-.15	.91
	New	464	-.12	.74
CC subscale (<i>n</i> = 1219)				
Positive behaviour and classroom and school supportiveness			-.25	.86
Negative behaviour			.35	1.15
Safety at school			-.11	1.04
Enjoyment of school			-.37	1.12
Kiwi Can condition				
Positive behaviour and classroom and school supportiveness	Experienced	299	-.24	.87
	New	464	-.24	.86
Negative behaviour	Experienced	299	.20	1.23
	New	464	.40	1.10
Safety at school	Experienced	299	-.14	1.15
	New	464	-.03 ^{ns}	1.14
Enjoyment of school	Experienced	299	-.50	1.36
	New	464	-.30	1.04

Note. ns = not statistically significant

Table 6 Mean change statistics for PYD and CC scales by tranescence level and Kiwi Can condition

Dependent variable	Tranescence level-programme condition	<i>n</i>	ΔM	<i>SD</i>
Empathic concern	Middle-experienced	197	-.21	.93
	Middle-new	373	-.15	.86
	High-experienced	96	-.64	.91
	High-new	97	-1.18	.96
Perspective taking	Middle-experienced	197	-.03 ^{ns}	.93
	Middle-new	373	-.08 ^{ns}	.83
	High-experienced	96	-.06 ^{ns}	1.04
	High-new	97	-.29 ^{ns}	.94
Social rules/politeness	Middle-experienced	197	-.14	.75
	Middle-new	373	-.04 ^{ns}	.61
	High-experienced	96	-.21	.71
	High-new	97	-.69	.55
Connection to school	Middle-experienced	197	-.22	.88
	Middle-new	373	-.10	.77
	High-experienced	96	-.61	.85
	High-new	97	-1.36	.93
Connection to peers	Middle-experienced	197	-.19	1.05
	Middle-new	373	-.11	.98
	High-experienced	96	-.28	.85
	High-new	97	-1.13	1.23
Values diversity	Middle-experienced	197	-.15	1.01
	Middle-new	373	-.05 ^{ns}	.79
	High-experienced	96	-.16 ^{ns}	.81
	High-new	97	-.66 ^{ns}	1.28
Personal values	Middle-experienced	197	-.12 ^{ns}	.86
	Middle-new	373	-.10	.74
	High-experienced	96	-.25	.98
	High-new	97	-.65	.60
Positive behaviour and classroom supportiveness	Middle-experienced	197	-.22	.88
	Middle-new	373	-.17	.84
	High-experienced	96	-.36	.74
	High-new	97	-1.61	.80
Negative behaviour	Middle-experienced	197	.10 ^{ns}	1.19
	Middle-new	373	.38	1.10
	High-experienced	96	.43	1.30
	High-new	97	.92	1.00
Safety at school	Middle-experienced	197	-.06 ^{ns}	1.20
	Middle-new	373	.00 ^{ns}	1.01
	High-experienced	96	-.31	.98
	High-new	97	-.77	.74
Enjoyment of school	Middle-experienced	197	-.36	1.36
	Middle-new	373	-.27	1.04
	High-experienced	96	-.79	1.29
	High-new	97	-1.18	.93

Note. *ns* = not statistically significant

statistically significant for all groups except middle-experienced, while negative behaviour was not significant for just middle-experienced, and safety at school

Table 7 One-way RM-ANOVA output for the effect of the interaction between school condition and transience level on changes in PYD and CC mean scores

Scale	$F_{(3, 759)}$	η^2	Cohen's f^2
Positive social development (PYD-S)			
Connection to school	21.94***	.08	.09
Values diversity	10.22***	.04	.04
Empathic concern	7.97***	.03	.03
Social rules/politeness	7.13***	.03	.03
Connection to peers	6.29***	.02	.02
Perspective taking	5.59**	.02	.02
Personal values	3.32**	.01	.01
Classroom climate (CC)			
Positive behaviour and classroom supportiveness	16.56***	.06	.06
Enjoyment at school	7.99***	.03	.03
Negative behaviour	4.74**	.02	.02
Safety at school	2.44 ^{ns}	.01	.01

*** = $p < .001$; ** = $p < .01$; * = $p < .05$; ns = not statistically significant

was not significant for both middle-experienced and middle-new groups. The decreases in mean were consistently stronger in the high transience category and appeared to be greater in the new category of Kiwi Can experience. The average change for each group across all variables, in descending order, was high-new = -0.78, high-experienced = -0.30, middle-experienced = -0.15, middle-new = -0.06. The greatest decline occurred in the high-transience schools, with worse results for schools with the least experience of Kiwi Can.

RM-ANOVAs (Table 7) evaluated the statistical and practical significance of differences in subscale change scores for the interaction between school transience level and programme condition. There was a statistically significant but small effect ($f^2 = 0.02$ to 0.09) on the mean change in six PYD subscales. The effect was largest for connection to school, with weaker effects for all other scales. Three classroom climate subscales had statistically significant effects, with the largest effect ($f^2 = 0.06$) seen for positive behaviour and classroom supportiveness. The mean decrease in scores was consistently greater in the high-new-transience schools than for the three other conditions. Thus, the established presence of the Kiwi Can programme mitigated, to a small extent, the impact of transience on the prosocial attitudes and behaviours of students in low socio-economic schools that experience high transience. Nonetheless, notwithstanding the effect of Kiwi Can, score decreases were greatest in schools with the highest transience.

Discussion

Through a naturalistic experiment, this study clearly answers the research questions posed. The longer a school participates in Kiwi Can, the less transience or mobility impacts students' social development (RQ1). Second, the degree of school-level transience does negatively impact social development (RQ2). Our findings point to an important, relatively unexplored phenomenon: how transience impacts the social development of non-mobile children. This study shows the negative impact of transience on the life experiences of non-mobile children. As noted by others, highly transient school environments result in an increased risk of school violence, behavioural disengagement, and a negative school climate (Bevans et al., 2007; Degroote et al., 2020; Khoury-Kassabri et al., 2004). The current study indicates that whole-school PYD programmes may minimise the negative impact of school transience by building social skills and mitigating possible contagion effects (Degroote et al., 2020). Other studies demonstrate that students who participate in school-based programmes grounded in PYD gain important transferable skills and behaviours, such as enhanced social and emotional skills and attitudes, positive social behaviours, academic performance, and decreased conduct problems, emotional distress and drug use (Taylor et al., 2017).

While the Kiwi Can programme could have been more powerful against the level of transience, longer established programmes had greater impact. There were moderating benefits to having the Kiwi Can programme in highly transient school settings. Sustained participation in the programme was associated with smaller decreases in social skills and classroom climate, as reported by students who remained behind. This aligns with Catalano et al.'s (2004) finding that multi-year interventions with a structured curriculum increases programme efficacy. The current study indicates that schools must be engaged in the programme for at least two years for their students to realise benefits.

The most notable implication is the need to pay attention to the negative effect of school transience on children who stay in place throughout the school year, generating multiple implications for practice. First, programmes must support the needs of mobile children, while also attending to the needs of those who are not mobile. Second, the programme curriculum must address how children feel about and cope with the sudden absence of classmates and the continual introduction of new classmates in their classroom. Lifelong friendships formed in school are important, but difficult to establish when other children leave and arrive throughout the school year. The programme curriculum must also help schools overcome the negative impact of school transience on school climate by minimising the socialisation and normalisation of disruptive behaviours. Finally, schools need long-term PYD programmes to ensure change.

Challenges

Absence at the second time of data collection does not automatically mean the student was no longer at the school, rather simply absent. Hence, our measure of transience is contaminated with other causes of absence. Consequently, future studies should carefully distinguish transience from absenteeism. Understandably, the study could not track whether students changed schools that had different levels of mobility. A longitudinal analysis that tracks school attendance would be needed to better control for the impact of school environments. In addition, future research should collect data from more schools so that the impact of school characteristics can be better estimated. Multiple time points during a year anchored to time points when greater transition events take place would reveal whether the impact is greater for losing a friend or having a stranger arrive in the class. These data are school averages, but they are based on individual responses; hence, implications from school patterns may not apply to specific individuals. It is not clear which children are most likely to be negatively impacted by transience in their schools; another matter for research. Although the reported effects were small, it is likely that these self-reported scores obscure profound psychological impacts on individuals. Hence, from a clinical perspective, schooling in a transient context may have substantial emotional and behavioural challenges for the students, their teachers, families, and schools.

Significance

This study presents evidence that high levels of school transience negatively impact the social development of children left behind. The current study draws attention to the plight of the non-mobile students, a topic rarely covered in the literature. The findings raise important questions about how to address the negative and disruptive effects of transience and highlight the need for additional work to be undertaken to further understand and elucidate the social impacts of non-mobile children in highly transient school communities. The findings also show mediating the negative effects of transience takes time. To reap benefits, PYD programmes, such as Kiwi Can, require ongoing funding.

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Data availability Data available on request from the authors.

Declarations

Conflict of interest The authors declare no conflicts of interest. The authors also affirm that this paper has not been published elsewhere nor is the manuscript under consideration by any other publisher.

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