Left Behind: The impact of transience on children who don't shift

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Source

- Williams, R. A. (2015). *Investigating the implementation and impact of participation in a health promotion programme on the social attitudes and behaviours of children in New Zealand schools* [unpublished Ph.D. dissertation, The University of Auckland]. Auckland, NZ. http://hdl.handle.net/2292/27425

- Supervisors
  - Dr. Pat Bullen
  - Prof. Gavin T L Brown

The problem

- Positive social relationships and social skill development during childhood set the stage for healthy developmental trajectories later in life
- School contexts are important in supporting positive developmental trajectories by providing opportunities for children to form bonds with peers and develop important relational skills through social and emotional learning.
- But
- school's ability to foster a sense of belonging and skill development can be undermined by external environmental forces
  - poverty is associated with increased school-mobility or transience (Hanushek, et al., 2004), and
  - transience is shown to disrupt positive development (e.g., Dixon, 2018).

Solutions

- whole school programs, grounded in positive youth development (PYD) approaches can help build resilience and mitigate environmental challenges (Masten et al., 2008), such as transience, especially within schools located in low socioeconomic status (SES) communities.

School Transience

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- School transience = frequent movement from one school to another
- Individuals are 'transient' if they attend two or more schools in a year (ERO, 2007; NZCER, 2005)
- School transience is determined by the proportion of children who join or leave at non-normal entry or exit points (Neighbour, 2000)
- Aotearoa New Zealand reports one of the highest rates of transience in the OECD (Jelleyman & Spencer, 2008).
  - some children change schools as much as 10 times over their 7 years of primary school (ERO, 2007).
  - In Auckland, Johnson (2002) found that 59 primary schools reported average transience rate of 29%.
  - Neighbour (2000) and Gilbert (2005) reported average rates of school transience = 30% and 25%, respectively
  - lower SES schools reporting the highest rates of transience
    - Decile 1 schools in Auckland experienced a median roll turnover of 30% in 2013 (CPAG, 2014)
    - MOE reported an average, national rate of transience across Decile 1 primary schools of 53% (compared to a rate of 29% in Decile 10 schools).

How does it hurt?

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- Highly transient children experience
  - higher rates of peer rejection (Hartman, 2002),
  - higher rates of bullying (Sorin & Iloste, 2003),
  - higher rates of mental health concerns (Susukida et al., 2016)
  - more likely to act in antisocial ways that adversely affect their ability to form positive social networks (Lleras & McKillip, 2017)
  - transient youth are more likely to report poorer social relationships with neighbors and lower levels of safety (Utter & Denny, 2010).
  - weakens peer relationships and social integration (Gilbert, 2005; Neighbour, 2002),
  - leads to the increased likelihood of dropping out of school during adolescence (Dixon, 2018).
- In a school/ classroom
  - negative classroom climate (Lleras & McKillip, 2017).
  - disrupts established classroom routines and forces teachers to reconfigure classes (Fisher et al., 2002).
  - undermines children's sense of safety or belonging (Bradshaw et al., 2009).
  - negative impact on instructional continuity, upset friendship groups, and disturb existing classroom dynamics (Sorin & Iloste, 2003
  - increased risk of school violence (Khoury-Kassabri et al., 2004), behavioral disengagement (Degroote et al., 2020), and negative school climate (Bevans et al., 2007).

Kiwi Can—A response

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- a values and life skills-based program designed by the Graeme Dingle Foundation,
- delivered in primary and intermediate schools, mostly in low socioeconomic status communities (Graeme Dingle Foundation, 2012).
- At the time of the study, Kiwi Can operated in 64 schools distributed across eight geographically and culturally diverse regions of New Zealand from the very north of the North Island to the southern end of the South Island.
- In each region, a licensed community partner was responsible for program delivery, including the hiring and training of staff. The staff travel from school to school, delivering one Kiwi Can lesson to each class per week. Informed by Learner's Five Cs of PYD (Learner et al., 2010),
- the curriculum is standardized with some flexibility within delivery to be responsive to specific student needs within a particular cohort.

Kiwi Can Curriculum

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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

adapted from the "Kiwi Can Coordinator Manual" by the Graeme Dingle Foundation, 2012, p. 3.

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Research Goal

- Did high levels of transience have a negative effect on students who didn't move?
- Did Kiwi Can help students who were NON-Transient to cope with the level of transience in the school?

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Rachel's study

- Naturalistic quasi-experimental, pre-post survey design collected data within a single school year using a repeated-measures self-report questionnaire
- Main effect for length of SCHOOL involvement in Kiwi Can

School	Kiwi Can Regions								
	1	2	3	4	5	6	7	8	Total
New				XX	XX	X		XX	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

Variable	*n*	%
School Condition		
Experienced	299	25
New	464	38
Control	456	37
Sex		
Girl	613	50
Boy	606	50
Year Level		
Year 6	371	30
Year 7	573	47
Year 8	273	22
Ethnicity		
Pākeha/New Zealand European	519	42
Māori	455	37
Pasifika	116	9.6
Asian	46	3.8
Other	83	6.8
Total	1219	

Instruments

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- *Positive Youth Development –Social (PYD–S)*.
  - 40 items; inter–correlated 7 factors fit: $\chi^2/df = 4.41$; CFI = .90; RMSEA = .053, 90% CI = [.050, .055]; SRMR= .044; gamma hat = .92
  - scales from
    - *Lerner's 5C's* model of positive youth development
    - *Profile of Student Life: Attitudes and Behavior Survey* (Search Institute, 2012),
    - *Children's Self–Reported Social Skills Scale* (CS^4)
    - Character, [social] Competence, Caring/Compassion, Connection, Social Rules, Likeability, and Social–Ingenuousness
- *Classroom Climate*
  - inter–correlated 4 factors fit $\chi^2/df = 4.24$; CFI = .93; RMSEA = .051; SRMR= .039; gamma hat = .95
  - Canadian *Measure of School Social Climate* k=22 items (Ding et al., 2011).
  - Positive Behavior in the Classroom+Classroom and School Supportiveness; Negative Behavior in the Classroom;; Safety at School; and Enjoyment of School

Data

- 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 error, hence, no further data checking was conducted.
- All questionnaires with more than 10% missing responses were deleted (i.e., T1 19 positive social development [PYD-S], 27 classroom climate [CC] cases; T2 12 PYD-S and 17 CC responses).
- Among the remaining questionnaires, the missing values, which were missing completely at random, were imputed using the expectation maximization (EM) algorithm (Dempster, Laird, & Rubin, 1977).
- After matching T1 and T2 participants, a total of 1219 students had complete responses for both inventories at both times.

School Transience

- school-level transience was adjusted by the official roll of students likely to be in Years 6-8 in each school
  - Total school roll divided by number of years offered, times the number of years surveyed
- The proportion of students who completed only one of the two surveys indicated a level of transience.
- Transient / Estimated Roll = % transience
  - grand average of all schools' in our study transience rates (M = 24.84%; SD = 12.87)
  - Low transient schools had transience rates in the lowest 25th percentile of total scores (<15.20%), 6 control group schools ($n_{students}$ = 178)
  - Middle transience group contained three control, five new, and five experienced schools
  - High transient schools had mean values at or above the 75th percentile (>32.88%), three experienced and two new Kiwi Can schools.

Analysis

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- two transience conditions
  - high [$M = 41.72\%$, $SD = 8.34$; 5 schools, $n_{students} = 113$ versus
  - middle [$M = 23.53\%$, $SD = 5.61$; 13 schools, $n_{students} = 928$)
- two school conditions
  - experienced versus new Kiwi Can
- Differences in mean scores across time were analysed with one-way repeated measure ANOVA
  - Dummy variables were assigned to transience conditions (1 = low to 3 = high)
  - school intervention conditions (1 = Experienced, 2 = New, 3 = Control).
- The number of groups at level 2 was small (< 20) so HLM/MLM may not be appropriate
  - The ICCs, for each scale using the Mixed Linear Model SPSS, were small ($M = 2.59\%$, $SD = 2.82$; min=<.01%, max = 8.87%).
  - values <10% do not cause substantive variation in parameter estimation & more than 90% of the variance is attributable to the level 1 unit
    - (Kianoush, & Masoomehni, 2015; Woltman et al., 2012).

Mean Change

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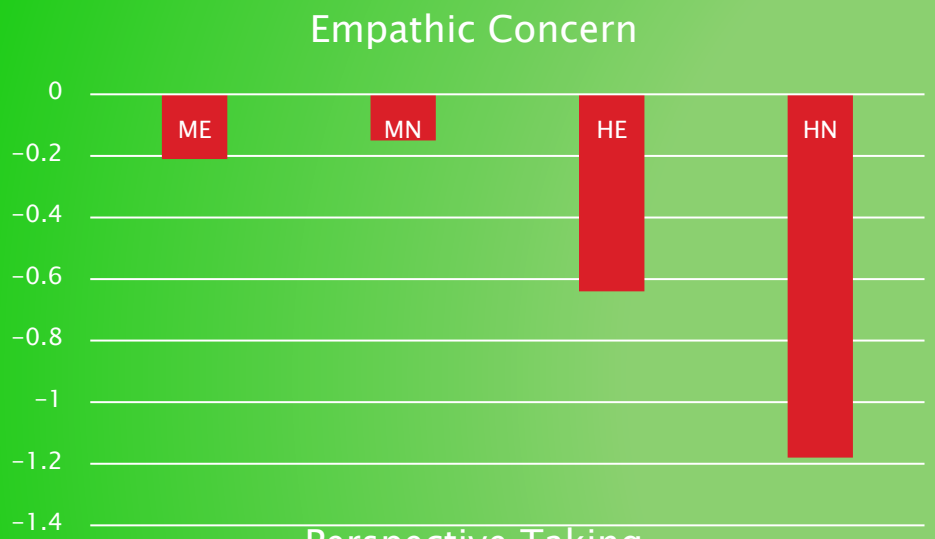

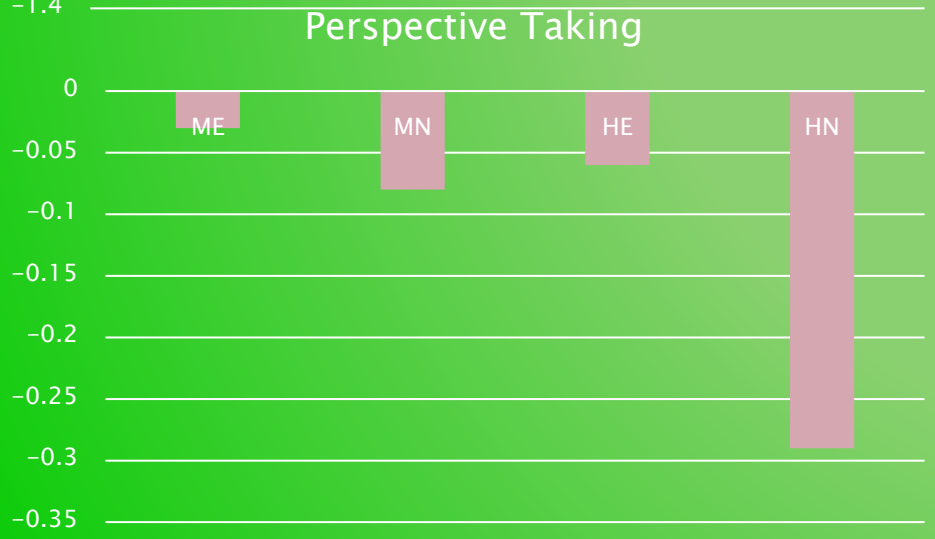

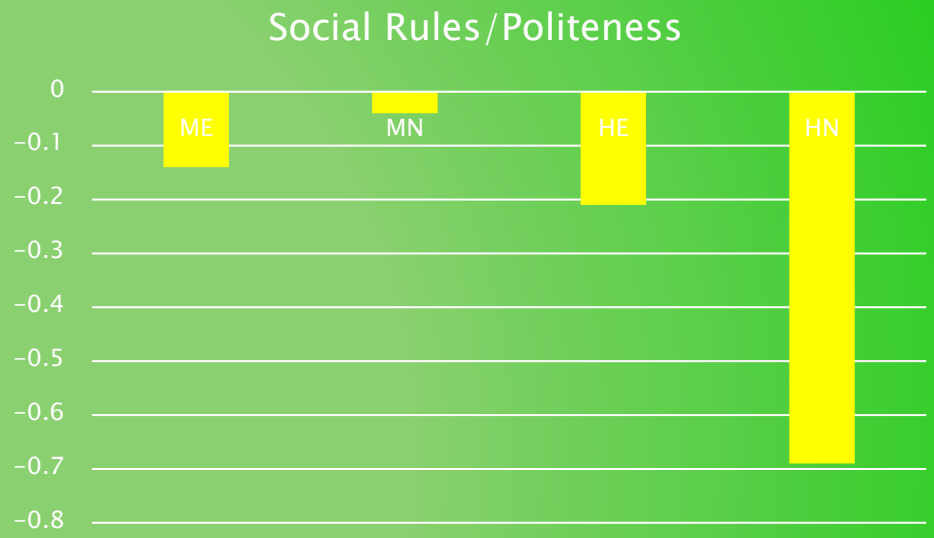

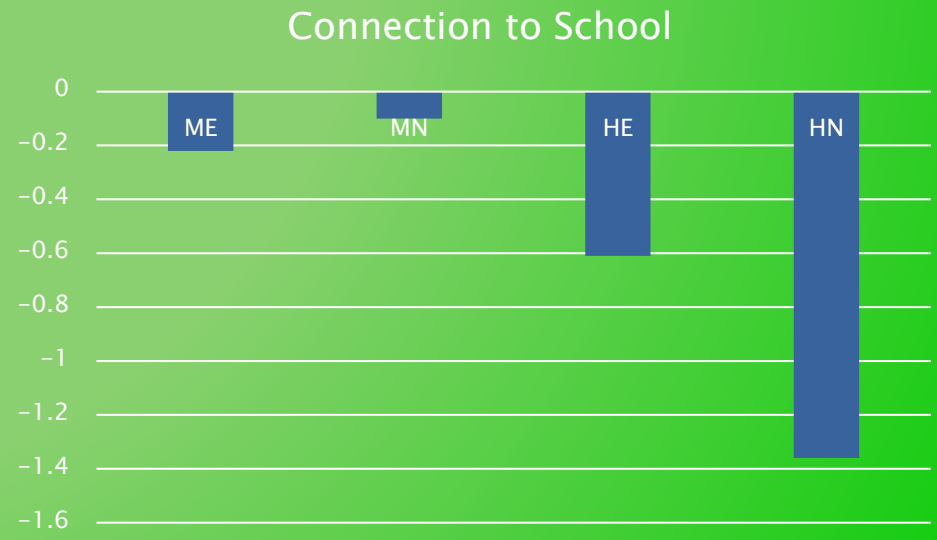

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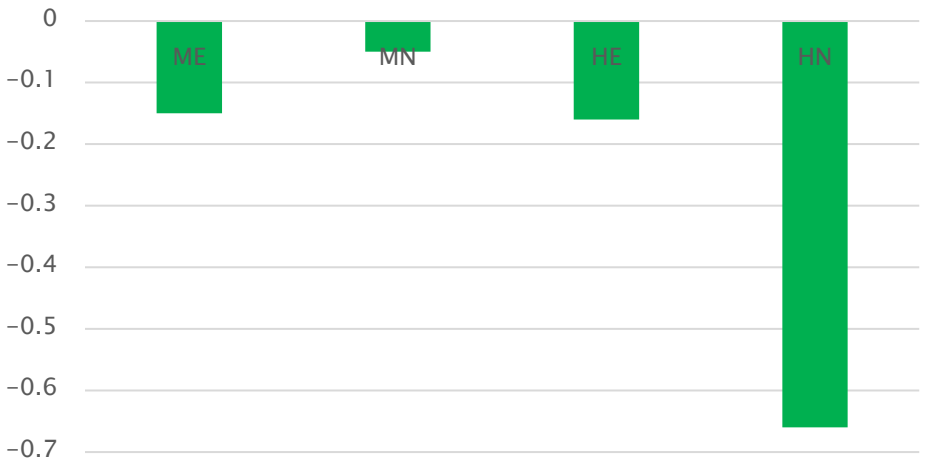
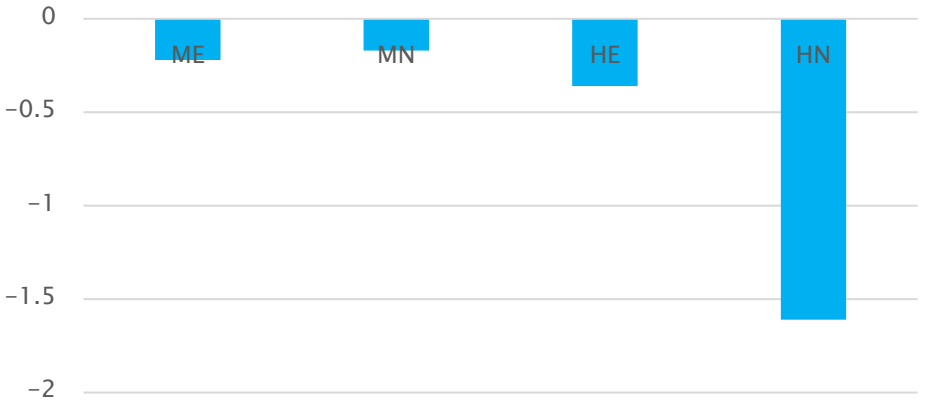
Values Diversity

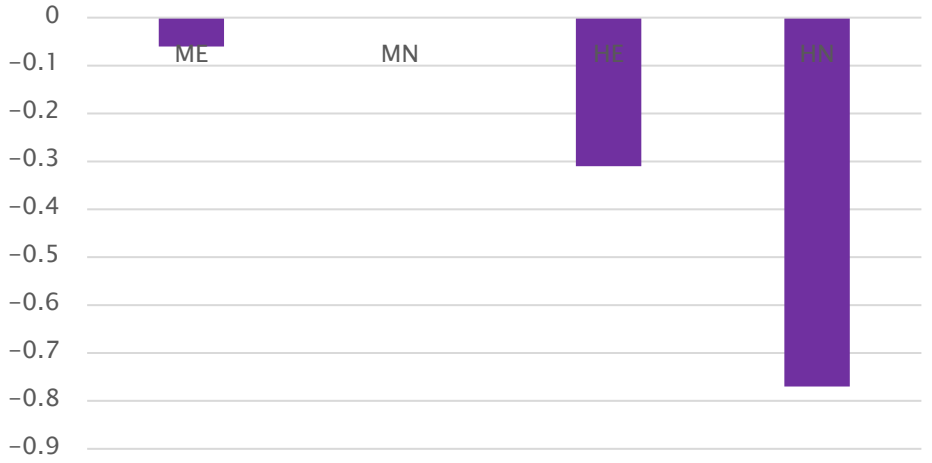


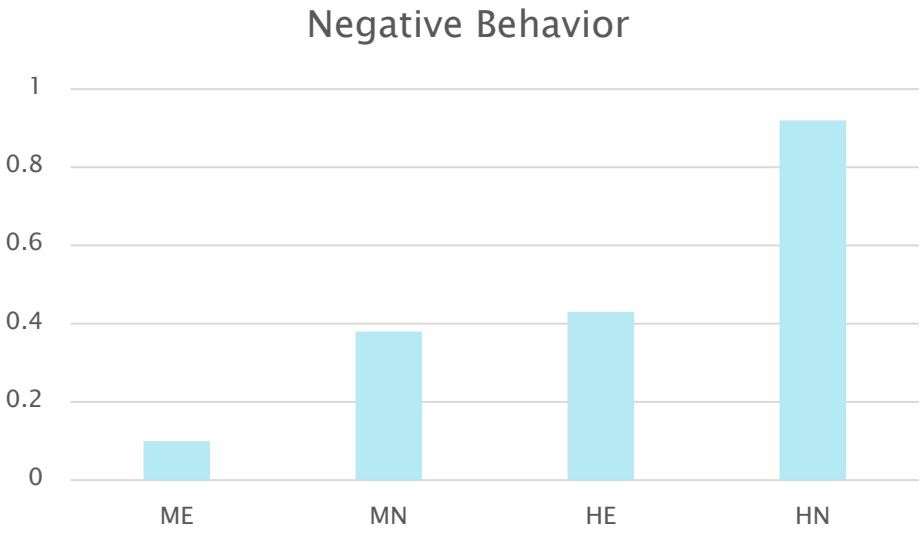
Personal Values

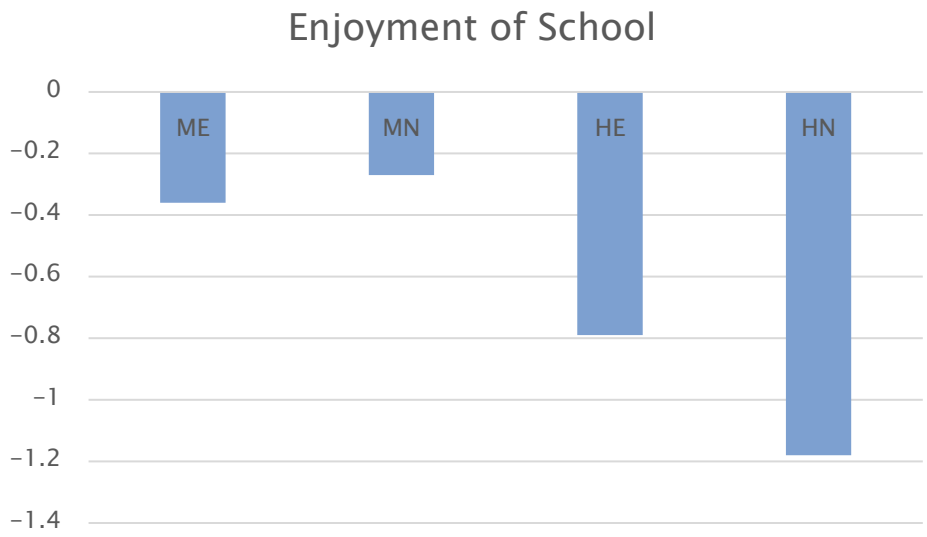
Positive Behavior and Classroom Supportiveness



Safety at School







Experience with Kiwi Can reduces negative impact of transience
High transience values generally give kids who remain negative outlook

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Effect Size

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 Behavior and Classroom Supportiveness	16.56***	.06	.06
Enjoyment at School	7.99***	.03	.03
Negative Behavior	4.74**	.02	.02
Safety at School	2.44^{ns}	.01	.01

The mean decrease in scores was consistently greater in the high-new transience schools than for the middle-new, middle-experienced, and high-experienced transience schools

Discussion

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- Kiwi Can HELPS (with time)!
- non-transient children in highly transient environments
  - struggle to forge healthy social relationships, feel connected to their peers or schools, behave in prosocial ways, or
  - show caring and compassion for others.
  - tend to feel less safe in their schools and enjoy their schooling experience less than those in more stable, less transient environments.
- Need to pay attention to the negative effect of transience on children who stay in place through the school year.
  - From a design perspective, a social PYD curriculum in highly transient schools must include lessons that equip students with the skills required to maintain healthy social relationships during disruption to social networks
  - Help children cope with the sudden absence of classmates and the continual introduction of new classmates in their classroom.
  - Life-long friendships formed in school are important, but difficult to establish when other kids leave and arrive throughout the school year.
  - It is also important that schools have the tools needed to ensure disruptive behaviors are not socialized or normalized
- Attention is drawn to the plight of the student who stays behind

Acknowledgements

- We would like to acknowledge the leadership teams at the Graeme Dingle Foundation along with the Kiwi Can schools, teachers, leaders, and students who willingly participated in this study. It would not have been possible to conduct this research without their initial support and active involvement.