



Material Hardship

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What do we know about material hardship?

Despite progress in recent years to improve the day-to-day living standards for children in New Zealand (NZ), many families and whānau still lack the resources they need to meet a basic standard of living (1). A good standard of material wellbeing sees that households are able to access local amenities and afford essential everyday items. On the other hand, living in material hardship reflects circumstances where families are going without necessities such as suitable clothing and adequate heating. Assessing the extent of material hardship faced by children continues to be a key area of policy concern in NZ, in efforts to ensure that all children and young people have access to their fundamental right to live free from poverty and hardship (2). This focus is also of importance given that childhood living conditions play a crucial role in shaping both early-life health and developmental outcomes, as well as long-term health, employment prospects, and family-life in adulthood (3,4). The measurement and reporting on material hardship is legislated in NZ through the Child Poverty Reduction Act 2018, alongside other measures of child economic security, such as poverty rates (2). Accordingly, information on children's experiences of material hardship can lay the foundations for the development of policies and interventions to better support families, to ensure all children have what they need and to reduce the number of children growing up in disadvantage (5).

What can *Growing Up in New Zealand* add?

This report examined the material circumstances of young people using data from the *Growing Up in New Zealand* study. We investigated who was living in households reporting material hardship at age 12, to provide a snapshot of the cohort's living conditions at this time point. This report also investigated how material hardship unfolded over time. The movement and stability of children's material circumstances from 9-months to 12-years of age was described, providing the first contemporary longitudinal assessment of the timing, duration, and patterns of material hardship from birth through to early adolescence.

Two main questions were addressed in this report:

1. What are young people's experiences of material hardship at 12 years of age?
2. How do experiences of material hardship change across the childhood years?



Measuring material hardship

At age 12, material hardship was measured using the DEP-17 index (6). The 17 items in this index were asked to the mothers of the cohort and therefore, are representative of the households that the 12-year-olds were living in at the time of the survey. These items focused on low living standards with respect to paying for food, clothing, housing, utilities, and other everyday costs. Young people were grouped into three categories based on their scores on the DEP-17 index: no/little material hardship (scores 0–5), material hardship (6–8), and severe material hardship (9+). For the longitudinal analyses, a material hardship variable was derived for each participant at the 9-month, 2-year, 4.5-year, 8-year, and 12-year data collection waves. At each time point, participants were categorised as either living in material hardship or not living in material hardship. More information can be found in the technical documentation.

Key findings

- One in 10 of the *Growing Up in New Zealand* cohort were living in households reporting material hardship at age 12.
- Those living in material hardship at age 12 were more likely to be from sole-parent homes, lower-income households, and identify as Māori and/or Pacific.
- One in five had lived in households experiencing material hardship at some point in childhood, with most of these children experiencing hardship before starting school.
- Longitudinal modelling identified four common experiences across childhood: Not in Material Hardship, Some Material Hardship, Increasing Hardship, and Persistent Hardship.

Material hardship at age 12

Nine out of 10 young people (90.4%, $n = 3,906$) were living in homes with no/little material hardship (Table 1), with almost half of the cohort (49.0%, $n = 2,102$) experiencing no material hardships at all (i.e., a DEP-17 score of 0). However, one in 10 (9.6%, $n = 414$) were living in either material hardship or severe material hardship at age 12, with less than one percent ($n = 20$) scoring at the extreme tail end (i.e., DEP-17 score of 14–17).

Table 1. Material hardship scores at age 12 ($n = 4,320$)

No/little Material Hardship (Scores 0–5)		Material Hardship (Scores 6–8)		Severe Material Hardship (Scores 9+)	
<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
3,906	90.4%	249	5.8%	165	3.8%



When examining the individual indicators of material hardship, one in five mothers reported that they put off visiting the dentist (20.5%, $n = 887$) and almost one in five reported not having home contents insurance (18.4%, $n = 798$; Table 2). Additionally, 15.4% ($n = 674$) of mothers indicated they bought cheaper cuts or less meat than they would have liked.

Table 2. Mother-reported material hardships, as defined in the DEP-17 index

Household Hardships		Prevalence		Total
		n	%	
Enforced lack	Did not have two pairs of good shoes	166	3.8%	4,380
	Did not have suitable clothes for special occasions	269	6.2%	4,355
	Did not have home contents insurance	798	18.4%	4,338
	Did not eat a meal with meat/fish/chicken (or veggie substitute) every 2nd day	226	5.2%	4,370
	Was unable to give gifts to family/friends	284	6.5%	4,364
Economising	Went without fresh fruit and vegetables	222	5.1%	4,371
	Bought cheaper or less meat (or veggie substitute)	674	15.4%	4,373
	Put up with feeling cold	143	3.3%	4,364
	Cut back on local trips	639	14.7%	4,356
	Delayed replacing/repairing appliances	429	9.9%	4,345
	Put off doctor's visits	205	4.7%	4,364
	Put off dentist's visit	887	20.5%	4,326
Restrictions	Felt limited buying clothes/shoes	530	12.4%	4,286
	Could not afford an unexpected \$500 expense	509	12.2%	4,159
Financial stress (in the past 12 months)	Could not pay utilities	333	7.7%	4,351
	Fell behind on payments for car	457	10.7%	4,267
	Borrowed money to meet everyday costs	348	8.0%	4,363

Table 3 uses a heatmap to visualise the percent of participants in each material hardship category who were experiencing each of the hardship indicators. The left-hand column details each hardship indicator, and the subsequent columns indicate the percent of young people experiencing each indicator. The green colour represents a lower percent and red a higher percent. For example, 90% of the participants living in severe material hardship could not afford an unexpected expense of \$500.

Households with no/little material hardship (i.e., low DEP-17 scores) typically compromised, if necessary, on home contents insurance and visits to the dentist. However, these households did not often compromise on having good shoes, fresh fruit and vegetables, and did not put up with feeling cold to save costs. Households in material hardship (6–8 hardships) experienced more severe limitations on everyday essentials. For example, the majority bought cheaper or less meat, cut back on local trips, and felt limited in buying clothes/shoes. Interestingly, although the types of hardship experienced were similar between those households in material and severe material hardship, the proportion of young people who experienced each hardship was much larger in the latter group (9+ hardships). For example, while putting off a dentist visit was one of the most common experiences across all hardship groups, only 14% of those in no/little material hardship were living in households where dentist's visits were put off, compared to 70% of those in material hardship, and 85% of those in severe hardship.

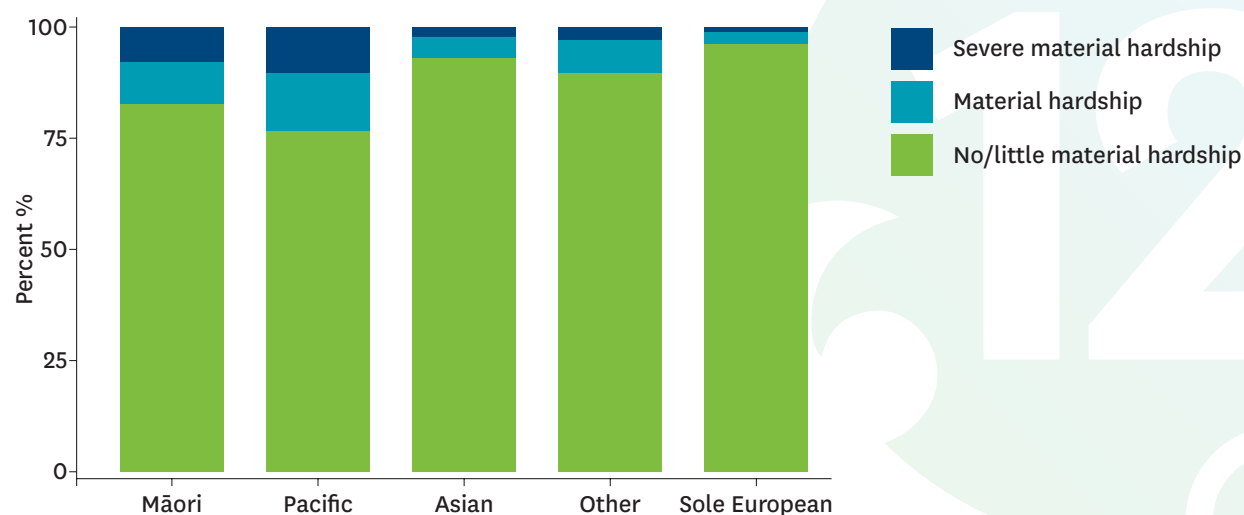


Table 3. Material hardship indicators heatmap

Hardship Indicator	No/Little Material Hardship (n = 3,906)	Material Hardship (n = 249)	Severe Material Hardship (n = 165)
Did not eat a meal with meat/veggie substitute every 2nd day	4%	12%	30%
Fell behind on payments for car	9%	30%	21%
Put up with feeling cold	1%	11%	42%
Did not have two pairs of good shoes	1%	15%	42%
Did not have suitable clothes for special occasions	3%	27%	52%
Was unable to give gifts	3%	30%	50%
Put off doctor's visits	1%	24%	55%
Went without fresh fruit and vegetables	1%	24%	62%
Could not pay utilities	3%	37%	68%
Borrowed money to meet costs	3%	44%	73%
Delayed replacing/repairing appliances	5%	49%	78%
Did not have home contents insurance	13%	55%	78%
Felt limited in buying clothes/shoes	6%	55%	89%
Could not afford unexpected \$500 expense	6%	61%	90%
Cut back on local trips	9%	64%	85%
Put off dentist's visit	14%	70%	85%
Bought cheaper or less meat (or veggie substitute)	9%	71%	88%

Who was living in material hardship at age 12?

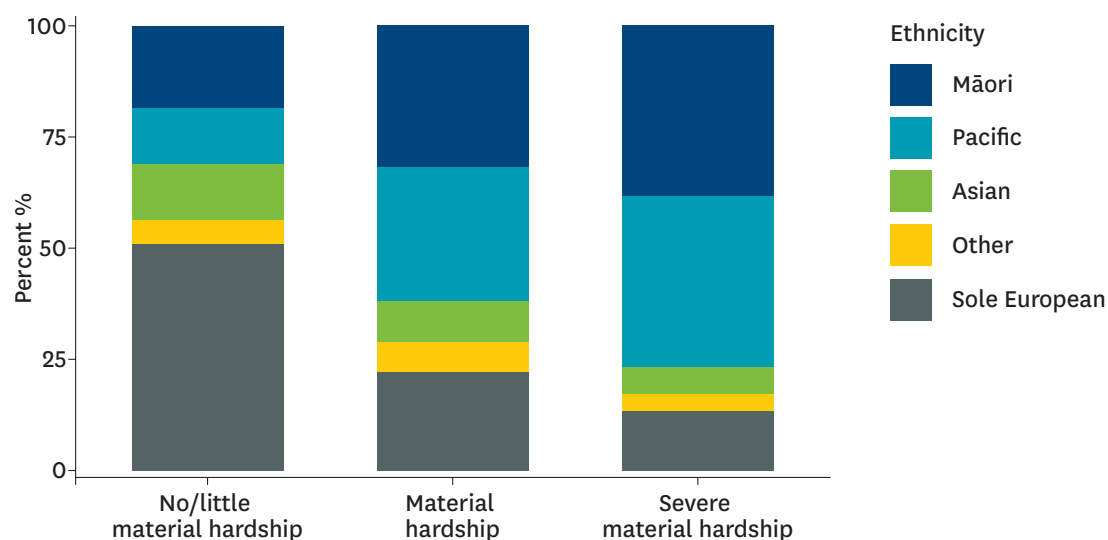
The data presented in Figure 1 highlights ethnic inequities in hardship faced by young people in the *Growing Up in New Zealand* cohort (see the NWA12 methods paper for an explanation on ethnicity). At 12 years of age, 17.4% (n = 166) of rangatahi Māori and 23.5% of Pacific young people were living in households experiencing material hardship or severe hardship. In comparison, only 4.1% of Sole European children (n = 90) were living in material or severe hardship.



Note: Participants who reported more than one ethnic group are counted once in each group reported, except for the "Sole European" group which includes those young people who only identified as European.

Figure 1. Material hardship, by ethnicity (n = 4,180)

Another way to examine these data are to flip the categories and look at the ethnic composition within each material hardship grouping. Figure 2 shows that, of the children living in severe material hardship, 38.3% were rangatahi Māori ($n = 74$), 37.8% were Pacific young people ($n = 73$), while just 13.5% were Sole European ($n = 26$), despite Sole European making up 50.9% of the sample cohort. A further 6.7% were Asian ($n = 13$) and 3.6% of Other ethnicity ($n = <10$; total response ethnicity percentages are weighted to be out of 100%). Within the material hardship category, 31.8% were rangatahi Māori ($n = 92$), 30.1% were Pacific young people ($n = 87$), 22.1% Sole European ($n = 64$), 9.3% were Asian ($n = 27$), and 6.6% ($n = 19$) were of Other ethnicity. Of those children living in no/little material hardship, 51.0% were Sole European ($n = 2,129$), 18.8% Māori ($n = 786$), 12.5% were Pacific ($n = 522$), 12.5% Asian ($n = 522$), and 5.2% ($n = 218$) of Other ethnicity.



Note: Participants who reported more than one ethnic group are counted once in each group reported, except for the “Sole European” group which includes those young people who only identified as European.

Figure 2. Ethnic composition of material hardship ($n = 4,180$)



Material hardship was also investigated by household structure at age 12 (Figure 3). A higher proportion of young people living in a sole parent household experienced material hardship and severe material hardship (22.7%, $n = 165$), and a lower proportion to those living with two parents (6.8%, $n = 241$). However, in absolute terms, 58.8% ($n = 241$) of those living in hardship and severe hardship were from two parent households, 40.2% ($n = 165$) from sole parent households, and <1% ($n = <10$) from Other households.

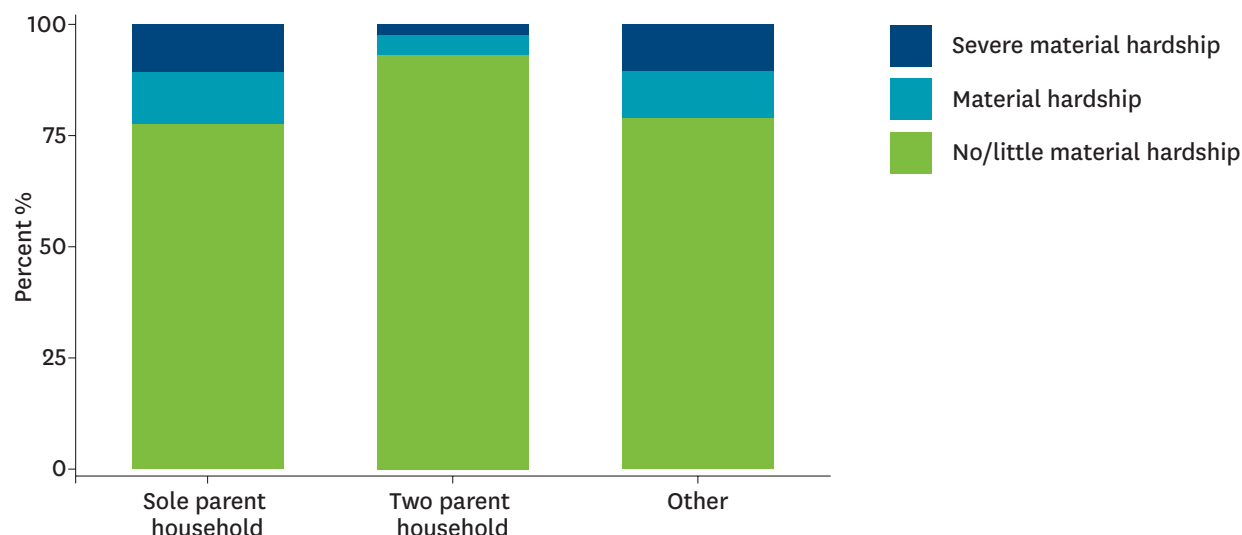


Figure 3. Material hardship, by household structure ($n = 4,300$)

Material hardship groupings were then examined by equivalised annual household income (a measure of income that accounts for the number of people within each household being supported) (7). Figure 4 shows that there were a higher proportion of children living in material hardship when families had lower equivalised incomes (\$70,000 or less) compared with higher equivalised income households. However, not all lower income households were affected by material hardship and a small proportion of households with higher incomes (>\$70,000) were experiencing hardship. Regarding the absolute values, of those living in hardship and severe hardship with household income data available ($n = 297$), 64.3% ($n = 191$) were living in households with an equivalised income of \$30,000 or less, and 35.7% ($n = 106$) had a total household income of \$30,001–\$150,000 per year.

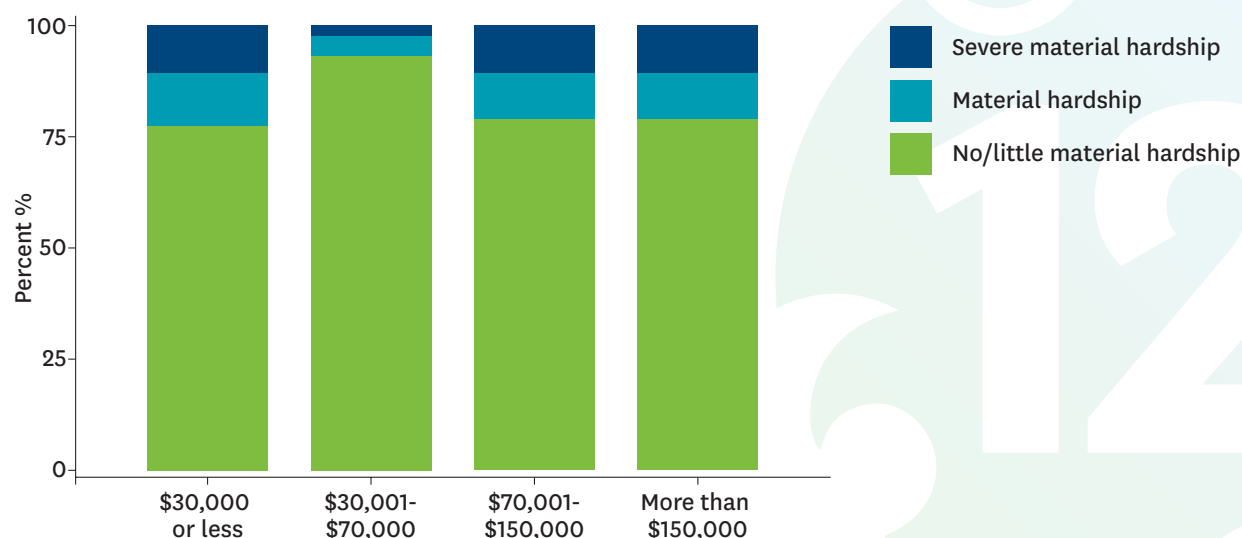


Figure 4. Material hardship, by household structure ($n = 4,300$)

Material hardship across the childhood years

Data on material hardship collected at the 9-month, 2-year, 4.5-year, 8-year, and 12-year time points provide the opportunity to explore experiences of material hardship across time. Using these data, young people were categorised as living in material hardship or not living in material hardship at each time point. More information can be found in [Supplementary material](#).

Who experienced hardship in childhood?

Table 4 shows the number of points that children were living in material hardship. In the first 12 years of life, one in five children (21.9%, $n = 823$) experienced at least one instance of material hardship. Additionally, one in 10 of the cohort (9.6%, $n = 361$) experienced two or more hardship spells. A small number of young people experienced persistent hardship ($n = 18$, <1%) across all time points.

Table 4. Number of waves in material hardship

Number of waves	Participants ($n = 3,764$)	
	n	%
0	2,941	78.1%
1	462	12.3%
2	170	4.5%
3	103	2.7%
4	70	1.9%
5	18	<1%

Material hardship experiences were investigated further to understand at what time points hardship was most prevalent. Of the 823 children who experienced hardship at least once in childhood, 74.6% ($n = 614$) experienced hardship before starting school (i.e., 9-months old, 2-years old, and/or 4.5-years old), and 54.8% ($n = 451$) experienced hardship during middle childhood–early adolescence (i.e., 8-years old, and/or 12-years old). Figure 5 shows the number of children who experienced hardship before starting school only (45.2%, $n = 372$), middle childhood–early adolescence only (25.4%, $n = 209$) and those who experienced hardship prior to starting school and in the middle childhood–early adolescence years (29.4%, $n = 242$).

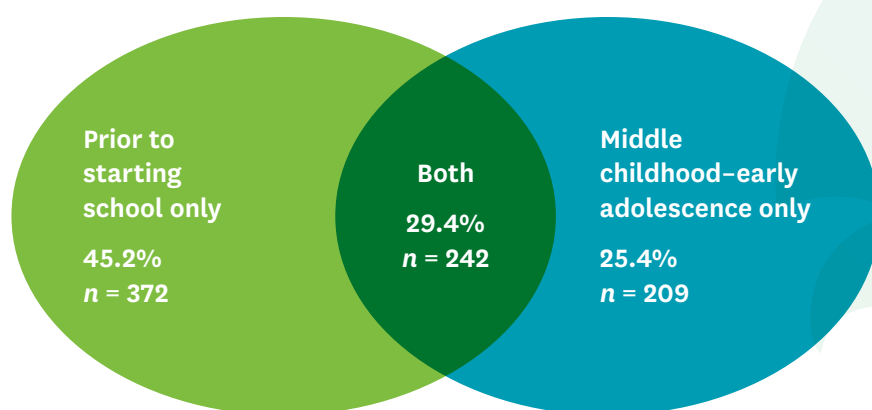


Figure 5. Timing of exposure among those who experienced hardship ($n = 823$)

Trajectories of hardship

Children's longitudinal experiences of material hardship were investigated further using social sequence analysis. Social sequence analysis is an analytic technique designed to identify how experiences, such as living in material hardship, remain stable across time or change at different time points in ways that are similar or different within a population. Flux in experiences was common, with 32 unique trajectories of material hardship experienced by the cohort across the five time points. To interpret these patterns in a manageable way, cluster analysis was applied to identify which unique patterns were broadly similar to each other. This process identified four groups and the distributions are displayed in Figure 6. The green blocks represent the proportion of children within each group who were categorised as not living material hardship at each wave, and the dark blue blocks represent the proportion in material hardship.

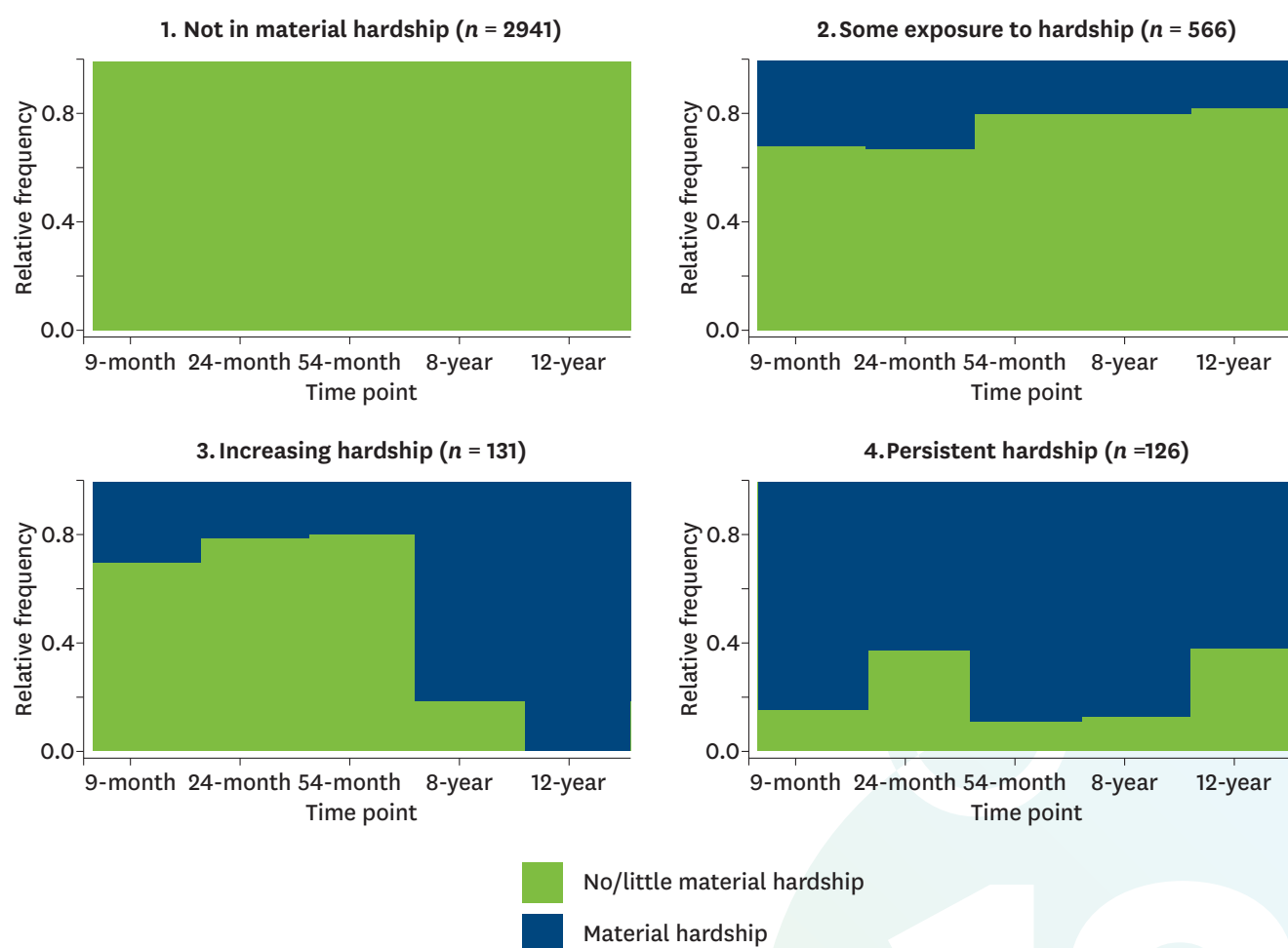


Figure 6. Material hardship distributions (n = 3,764)

As shown in Figure 6, **Group One** (Not in Material Hardship) was comprised of 78.1% ($n = 2,941$) of the *Growing Up in New Zealand* cohort. These participants had no experience of being in material hardship at any time point throughout childhood–early adolescence.

Group Two (Some Exposure to Hardship) describes 15.0% ($n = 566$) of the cohort who were living in material hardship at either one or two time points across childhood and the rest not in material hardship. This can be seen by the large blocks of green colour indicating no material hardship in Figure 6, and relatively fewer blocks of dark blue indicating material hardship. While all in this group were exposed to material hardship at some point, the majority (83.7%, $n = 474$) were not living in material hardship by the time they were 12 years old (i.e., they had transitioned out of hardship).

Group Three (Increasing Hardship) describes 3.5% ($n = 131$) of the cohort who experienced at least one spell of not living in material hardship before they started school. However, by middle childhood—early adolescence (i.e., 8-year and 12-year time points), they were all living in hardship.

The final sequence, **Group Four** (Persistent Hardship) included 3.3% ($n = 126$) of the *Growing Up in New Zealand* cohort. A small number of these participants experienced hardship at all waves (14.3%, $n = 18$) and most experienced three or four points in hardship (85.7%, $n = 108$). This indicates that, even amongst the most disadvantaged group, there are periods where households report not being in hardship.

Who are the children in each group?

The demographic composition of each group was analysed to understand how experiences of hardship are socially patterned. Table 5 displays this information along with the results from the chi-squared (χ^2) test where a significant p-value ($p < .05$) indicated a significant relationship between the demographic characteristic and groups.

Young people in the **Not in Material Hardship** group, were more likely to identify as Sole European (60.3%, $n = 1,773$), have their mothers gain a bachelor's degree or higher (55.7%, $n = 1,639$), and live in a house that was owned by their family when they were born (60.1%, $n = 1,769$).

In the **Some Exposure to Hardship** group, 41.0% ($n = 232$) identified as Sole European, 31.8% ($n = 180$) as Māori, and 21.7% ($n = 123$) as Pacific. The majority of the mothers of these participants did not have a bachelor's degree (65.9%, $n = 373$).

Those in the **Increasing Hardship** group were more likely to identify as Māori (44.3%, $n = 58$) or Pacific (39.7%, $n = 52$), and be born into a home that their family owned or privately rented (74.8%, $n = 98$).

A high proportion of those in the **Persistent Hardship** group identified as either Māori (39.7%, $n = 50$) or Pacific (42.9%, $n = 54$). Additionally, one in four identified as Sole European (25.4%, $n = 32$). This group also had the highest proportion of children (16.7%, $n = 21$) living in a public rental home, compared to all other groups.



Table 5. Descriptive statistics for material hardship groups

	1. Not in Material Hardship (n = 2,941)		2. Some Exposure to Hardship (n = 566)		3. Increasing Hardship (n = 131)		4. Persistent Hardship (n = 126)		χ^2 p-value
Demographic characteristics	n	%	n	%	n	%	n	%	
Ethnicity (12Y Child Report)									-
Māori	539	18.3%	180	31.8%	58	44.3%	50	39.7%	
Pacific	290	9.9%	123	21.7%	52	39.7%	54	42.9%	
Asian	385	13.1%	56	9.9%	<10	<10%	14	11.1%	
Other	144	4.9%	36	6.4%	<10	<10%	<10	<10%	
Sole European	1,773	60.3%	232	41.0%	25	19.1%	32	25.4%	
Maternal Education (Antenatal)									<.001
No secondary school	55	1.9%	40	7.1%	23	17.6%	22	17.5%	
Secondary school/ NCEA 1–4	488	16.6%	134	24.0%	37	28.2%	29	23.0%	
Diploma/Trade cert/ NCEA 5–6	735	25.0%	199	35.2%	55	42.0%	53	42.1%	
Bachelor's degree or higher	1,639	55.7%	176	31.1%	15	11.5%	16	13.0%	
Missing	24	<1%	17	<1%	<10	<1%	<10	<1%	
Housing Tenure (Antenatal)									<.001
Own	1,769	60.1%	240	42.4%	33	25.2%	27	21.4%	
Private rental	792	26.9%	223	39.4%	65	49.6%	58	46.0%	
Public rental	35	1.2%	25	4.4%	14	10.7%	21	16.7%	
Other	93	3.2%	13	2.3%	<10	<10%	0	0%	
Missing	252	8.6%	65	11.5%	16	12.2%	20	15.9%	
Household structure (Antenatal)									<.001
Sole parent	103	3.5%	72	12.7%	26	19.8%	31	24.6%	
Two parents	2,807	95.4%	469	82.9%	102	77.9%	87	69.0%	
Missing	31	<1%	25	4.4%	<10	<10%	<10	<10%	
Rurality									>.05
Urban	2,656	90.3%	507	89.6%	121	92.4%	115	91.3%	
Rural	265	9.0%	44	7.8%	<10	<10%	<10	<10%	
Missing	20	<10%	15	2.7%	<10	0%	<10	<10%	

Note: % are column percents. Participants who reported more than one ethnic group are counted once in each group reported, except for the "Sole European" group which includes those young people who only identified as European. A chi-square value was not calculated for ethnicity as the groups are not mutually exclusive.

Relevance for policy and practice

This report has examined the material hardship experiences of NZ young people at age 12, and longitudinally across their childhood years. These experiences have been analysed to provide an overview of who had lived in households reporting material hardship, the severity of hardship experienced, and the persistence of material hardship across time.

Most 12-year-olds did not live in households reporting material hardship

Most 12-year-olds were living in homes where their family and whānau had access to essential resources, and only rarely were these households having to cut back or delay the purchase of everyday essentials. These findings suggest that most of the cohort have what they need in terms of basic living standards and provides important new insights into how families are faring two years into the COVID-19 pandemic. However, one in 10 young people were living in homes that did not have the resources needed to meet a basic standard of living in NZ. These findings broadly align with the most recent reports of material hardship by Statistics NZ which indicated that 10.3% of children were living in households experiencing material hardship, and help to provide confidence in the numbers reported here (8). Also aligned to recent reports, our research shows that 12-year-olds in the *Growing Up in New Zealand* cohort from sole-parent homes, lower-income households, and those who identified as Māori and/or Pacific, were more likely to be living in households facing material hardship (1). This lack of access to resources highlights fundamental inequities in the systems and structures within NZ and demands further attention and policy supports. Improving the living standards for these households is needed to ensure all young people in NZ are given the opportunity to thrive.

One in five experienced material hardship at some point in childhood

The movement and stability of material circumstances described in this report provides the first contemporary longitudinal assessment of material hardship for young people. Results indicated that at least one in five children experienced material hardship in childhood, with the majority of experiencing movement in and out of material hardship across time. It is possible that the results in this report underestimate fluctuation in circumstances as we used data from key time points in childhood which won't have captured likely flux between the data collection waves. Nevertheless, given that many children experienced fluctuation in circumstances over time, material hardship cannot be assumed to be stable across childhood. Consequently, Government and policy supports aimed at reducing and preventing childhood experiences of hardship should be informed by longitudinal data to account for differing hardship experiences and identify critical age-sensitive periods for greater investment.



Most children who experienced hardship did so before starting school

This study revealed that three-quarters of young people who experienced material hardship were living in households facing hardship in their early childhood years. This underscores the need for policies that prioritise the support of families with young children, ensuring that they live in secure and stable environments that meet their basic needs, first and foremost because children should be living free from hardship. Additionally, it is widely acknowledged that the economic contexts of a child's early years shape outcomes in childhood and adulthood (9). Given this sensitivity, addressing material hardship in early childhood is a critical area for policy support.

Many families were living in material hardship by middle childhood–early adolescence

Over half of those who lived in material hardship at some point in childhood, were living in hardship during middle childhood–early adolescence. Additionally, results from the longitudinal analysis indicated that many households transitioned into hardship during middle childhood and remained in hardship in early adolescence (see Group 3, Increasing Hardship). Together these findings suggest that barriers to transitioning out of hardship may not be easily overcome for families and whānau, especially during the COVID-19 pandemic, when the 12-year data collection wave occurred. Policy supports that stop families falling into hardship in the first place are likely more efficient and can avoid the detrimental developmental impacts of experiences of material hardship (10). Indeed, it is likely that when families fall into hardship, that additional policy supports are needed to address both immediate hardships (e.g., food insecurity) and longer-term cumulative needs (e.g., dentist's visits) that result from 'falling' into moderate and severe hardship and to support a sustained transition out of hardship.

Given evidence that material hardship can negatively affect children's wellbeing and development, particularly when hardship is persistent and occurs in early childhood (9), the findings from this report point to the heightened importance of strategies to ensure support for families and whānau facing material hardship here and now. Policy supports during these crucial years is important for wellbeing during early childhood, with implications for longer-term trajectories of social and economic wellbeing across the life course.

References

1. Perry B. Child Poverty in New Zealand [Internet]. Wellington, New Zealand; 2022. Available from: <https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/child-poverty-in-nz/2022-child-poverty-report.pdf>
2. Department of Prime Minister and Cabinet. Child Poverty Reduction Act 2018. New Zealand; 2018.
3. Cantor P, Osher D, Berg J, Steyer L, Rose T. Malleability, plasticity, and individuality: How children learn and develop in context. In: The Science of Learning and Development: Enhancing the Lives of All Young People. 2021. p. 3–54.
4. Commission On Social Determinants of Health. Closing the gap in a generation: health equity through action on the social determinants of health. Final report of the commission on social determinants of health. Geneva; 2008.
5. Department of the Prime Minister and Cabinet (New Zealand). Child and Youth Wellbeing Strategy [Internet]. Wellington, New Zealand; 2019. Available from: <https://apo.org.au/node/312237>
6. StatsNZ. Measuring child poverty: Material hardship. 2019.
7. StatsNZ. Measuring child poverty: Equivalence scale. Wellington; 2019.
8. StatsNZ. Child poverty statistics: Year ended June 2022. Wellington; 2023. <https://www.stats.govt.nz/information-releases/child-poverty-statistics-year-ended-june-2022>
9. Grant M, Meissel K, Exeter D. Promoting Temporal Investigations of Development in Context: A Systematic Review of Longitudinal Research Linking Childhood Circumstances and Learning-Related Outcomes. Educ Psychol Rev. 2023;35.
10. Goldfeld S, O'Connor M, Cloney D, Gray S, Redmond G, Badland H, et al. Understanding child disadvantage from a social determinants perspective. J Epidemiol Community Health. 2018;72(3):223–229.



Growing Up in New Zealand

Now We Are Twelve

Life in early adolescence

Further Details

Supplementary material for this snapshot is available to download.

The introduction to the 12-year data collection wave and the methodology used to analyse the 12-year data can be downloaded as a PDF.

About the *Growing Up in New Zealand Now We Are Twelve* snapshot series

The Now We Are 12 Snapshots are accessible summaries of policy-relevant research findings from *Growing Up in New Zealand*, this country's largest longitudinal study of child health and wellbeing. Other snapshots in this series can be found [here](#). An [introduction](#) to the 12-year data collection wave and the **methodology** used to analyse the 12-year data can be downloaded as a PDF.

[Supplementary material](#) for this snapshot can also be downloaded.

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