

# Changing places: Resilience in children who move

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Figures from the Australian Bureau of Statistics (ABS) show that more than 40 per cent of Australian children moved their place of residence at least once in the Census period from 1996 to 2001 (ABS, 2001a). The literature varies in its assessment of the impact that this has on children. The purpose of this study was to examine the associations between residential relocation, resilience and the emotional, behavioural and academic adjustment of children aged 8–12 years who had moved home. Risk factors and the relative impact of resilience were examined. Results highlight the importance of good schooling and suggest that building and enhancing the intellectual functioning of children is a vital component in the development of resilience. Different aspects of resilience may be important for different developmental stages and life stressors. We discuss the distinction between cause and effect when examining resilience factors and suggest that outcomes in one context may be treated as influences on outcomes in another context.

## Introduction

### Residential relocation

Australia's population has been reported to be one of the most mobile in the world (Long, 1992), and moving house has become an increasingly frequent part of most people's lives over the last 50 years. Figures from the ABS show that more than 40 per cent of all Australian children moved home at least once in the Census period from 1996 to 2001 (ABS, 2001a). In terms of total numbers, 1 810 578 children moved once during this time period and an additional 595 442 children moved two or more times. Of these, 49 per cent were between 8 and 12 years old. As a consequence, the interest in the impact that moving has had on children has increased.

Studies have identified numerous factors that contribute to the adjustment children make to this change in their lives with the aim of identifying interventions that may alleviate potential negative outcomes. Residential mobility can be studied both as an outcome or as a result of social factors, and as a possible cause of a variety of consequences. Results from studies in this field have been equivocal, primarily due to methodological differences: for example, in the means by which adjustment or moving are measured. Previous research findings have also been

difficult to compare because they have focused on different variables that might affect children's adjustment to a move (for example, the number of moves, parental attitude towards the move or family composition).

Many of the early studies on the impact of moving home on children came out of the military, originally in the USA and later in Australia, with anecdotal concerns reaching government level and leading to various enquiries in an attempt to ameliorate the potential negative impacts of compulsory military moves (Hamilton, 1986; Kelly, 1988). Outcomes from military studies have tended to differ from those of other studies with fewer negative impacts being found (e.g., Marchant & Medway, 1987; Weber & Weber, 2005).

Although research on the impact that moving has on children is equivocal, there is an overall tendency towards a sliding scale of negative effects. Some factors found to have positive effects on adjustment have been the importance of a positive parental, particularly maternal, attitude towards the move (Linke, 2000; Marchant & Medway, 1987; Pedersen & Sullivan, 1964; Shaw, 1987; Sinetar, 1986; Stroh & Brett, 1990), fewer moves (Felner et al., 1981; Scanlon & Devine, 2001; Simpson & Fowler, 1994; Tucker et al., 1998; Wood et al., 1993), intact family composition (Nelson et al., 1996; Scanlon & Devine, 2001) and higher socio-economic status (SES) (Pribesh & Downey, 1999; Wright, 1999). In addition, the most highly mobile children are often those from the lowest socio-economic backgrounds and are also often from single-parent families, with both of these factors having greater adverse impact on children's adjustment than the number of moves (Fields, 1995; Nelson et al., 1996; Scanlon & Devine, 2001; Tucker et al., 1998). Although these children were found to be adversely affected both academically and behaviourally, controlled studies indicated that these problems pre-dated their moves. As studies have only been carried out on school-age children, results may not be definitive, as they cannot account for moves pre-dating school attendance. Similarly, the finding that other variables have greater impact does not mean that moving had no adverse effects. Pribesh and Downey (1999, p. 531) were emphatic that, taking all else into consideration, 'moving itself matters' and they were unable to 'identify any group that consistently benefitted from moving'.

## **Resilience**

There is a broad crossover between studies of resilience and those of children adjusting to moving home. As to be resilient automatically assumes that there has been exposure to risk, the variability in these risks then, in turn, has an impact on the definition of resilience. Kaplan (1999) suggests that, the greater the number of risk factors in a child's life, the greater the number of protective factors required to counterbalance them, although this is not a clear-cut relationship. Similarly, it is likely that those children who adapt best may be those with fewest risk factors. Relocation studies, despite their widely different methodologies, have consistently concluded that, as risk factors accumulate, the ability to adjust to the move diminishes. Resilience studies have also observed the importance of this cumulative risk (Heller et al., 1996; Kumpfer, 1999; Masten & Powell, 2003; Gilgun, 1999; Rutter, 2000; Smith & Prior, 1995; Wood et al., 1993).

While such aggregation provides a good prediction of outcome, it can obscure the more specific processes of stress or adaptation. Slee suggests that, although the presence of adverse social or economic situations may increase a child's vulnerability, 'from an early age, stress-resilient children possess attributes, skills and competencies that may help buffer them against the effect of significant life stress' (1995, p. 16).

Masten and Powell (2003) studied both additive (or compensatory) models and moderating models and their relationship to competence and resilience. In both models parenting quality, intellectual functioning and family socio-economic resources were consistently identified as key resources. Thus resilience factors may account for some of the findings in the literature on the impact of geographic mobility on children. Conclusions that SES, positive parental attitude and intact families are significant variables that affect children's adjustment after moving closely echo the resilience literature. Similarly, the three external domains of family, school and community have been identified as significant for both moving and resilience in individuals (Howard & Johnson, 2000) and families (Walsh, 1996).

While relocating is not a uniformly negative experience, with such a high proportion of Australian children moving each year, there are still significant social, emotional and academic costs to individuals, families, schools and communities that could potentially be alleviated through targeted approaches.

## **Aims and hypotheses**

The purpose of this study was to examine the association between residential relocation, resilience and the emotional, behavioural and academic functioning of children 8–12 years of age who had moved. The study is divided into two parts. First, the characteristics of the sample were examined and outcomes on risk factors as identified in the literature were studied. The second part of the study introduced the concept of resilience and investigated its relative impact compared to the identified risk factors. The study will add to and build upon the literature by studying specific components of the resilience equation in children within the targeted age range and their relative impact on children making this transition. The hypotheses and expected findings are as follows:

**Hypothesis 1:** Children who had moved home will exhibit a range of outcomes:

- there will be no difference in academic progress or behavioural outcomes compared to the normal population
- children living in more disadvantaged areas (low SES) or children from single-parent families will display greater adjustment difficulties after relocation than those from more advantaged areas (high SES) and from two-parent families
- positive maternal attitudes and greater time since relocation will be associated with more positive outcomes.

**Hypothesis 2:** Resilience will have an additional positive impact on adjustment after relocation, over and above the impact of risk factors.

## Methods

### Participants

After obtaining permission from the Human Ethics Committee at the University of Sydney and the New South Wales Department of Education to conduct the study, recruitment took place by visiting 10 schools, publishing advertisements and articles in magazines on children's issues, defence and local newspapers and through a blanket email to all New South Wales primary schools. Seventy-seven children (40 boys and 37 girls), their parents and their teachers participated in the study. All children were aged between 8 and 12 years ( $M = 9.3$ ,  $SD = 1.2$ ) and were attending primary school. While some families were in the defence forces, most were civilian families from geographically widespread locations including city, suburban and country areas.

### Moving

Moving was defined as a 'residential relocation'. Comparative data was able to be commissioned from the ABS giving the number of children in Australia who had moved one or more times between 1996 and 2001. Questionnaires used to measure adjustment and resilience have well-established norms allowing comparisons to be made with the normal population without the need for a control group of non-movers.

### Adjustment

Behaviour, affect and academic results have appeared most frequently in the literature as measures of adjustment and therefore have been utilised in this study. The total T-score, internalising T-score and externalising T-score from the problem scales of the Achenbach (1991) child behaviour checklist (CBCL), parent version, were used to measure behaviour and affect. Comparative academic progress and grade retention were used for academic achievement with the information being obtained from teachers who were asked to rate the child 'in relation to his or her peers'. Teachers also identified if the child had repeated a class.

### Resilience

In the present study a single questionnaire, the Behavioural and Emotional Rating Scale-2 (BERS-2) (Epstein, 2004) was used to measure resilience. The BERS-2 encompasses the main attributes consistently described in the resilience literature. It contains five factor-analytically derived subscales that have been found to be both stable and reliable (Epstein et al., 2002):

- interpersonal strength
- family involvement
- intrapersonal strength
- school functioning
- affective strength.

Each subscale yields a score out of 20 and the scores for the BERS-2 Total Strength Index fit a normal distribution with an average score falling between 90 and 110.

The parent version was used in this study in order to limit the demands on teachers.

### Family questionnaire

A family questionnaire was constructed to obtain information on the other predictor variables: gender, distance moved, number of moves, reasons for the moves, age at moves, SES, family composition and maternal attitude towards the move. SES was determined by the ABS *Index of Relative Socio-Economic Disadvantage* for New South Wales postcodes (ABS, 2001b) based on factors such as educational attainment, unemployment and occupational status as derived from the 2001 Census.

### Analyses

The dependent variable was adjustment to a residential relocation that had occurred in the past 21 months. Adjustment was measured by behaviour, academic progress and whether or not a child had repeated a grade. The independent variables were gender, distance moved, number of moves, reasons for the moves, age at moves, SES, family composition, maternal attitude towards the move and resilience.

## Results

### Demographic characteristics of the sample

Although there was a wide geographic distribution of participants in the study, this did not equate to an even spread of SES. The distribution included a large number of participants (52 per cent) from the least disadvantaged areas of New South Wales and only 4 per cent from the most disadvantaged.

Distances moved were relatively evenly distributed. Thirteen children had changed state and 16 had changed country. The number of moves experienced ranged from one to six ( $M = 2.9, SD = 1.6$ ) (Table 1). The majority of respondents had relocated quite recently; the time since the last move ranged from 1 to 21 months ( $M = 7.5, SD = 5.2$ ) with a number of participants ( $n = 12$ ) having moved outside the requested time frame. Most children lived with both biological parents, with only six living in single parent households and six with a step-parent and biological parent.

**Table 1 Characteristics of sample: number of moves**

<i>Number of moves</i>	<i>Frequency</i>	<i>Per cent</i>
1	16	20.8
2	26	33.8
3	10	13.0
4	6	7.8
5	11	14.3
6	8	10.4
Total	77	100.0

Note: Percentage totals do not add due to rounding.

**Hypothesis 1a—Academic and behaviour outcomes** Frequencies of the occurrence of repeating grades, behaviour problems and academic progress relative to the general population of similarly aged children were examined in order to detect any difference in academic progress or behavioural outcomes after a residential relocation when compared to the normal population. The majority of children fell into the average to above-average categories on most measures. Out of the 77 cases, 14 teachers did not respond leaving 63 results of academic progress. Of this 63, 10 children were rated as well below or below average with the remaining 53 children rated as average or above. In this sample, 11 children (14.3 per cent) had repeated a class. This figure is higher than Stone's (1997) reported rate of 5.5 per cent of New South Wales children repeating Year 1, 3 per cent for Year 2 and 1.5 per cent who repeat Year 3. Statistically, this sample of children who have moved is quite similar to the normal population both behaviourally and emotionally as measured on the CBCL total scale ( $M = 50.7$ ,  $SD = 11.0$ ) and on the internalising ( $M = 51.7$ ,  $SD = 11.0$ ) and externalising scores ( $M = 50.3$ ,  $SD = 10.0$ ).

**Hypothesis 1b—SES, family composition, moving and adjustment**

Multiple regression analyses with each dependent variable were conducted to investigate the relative impact of each of the independent variables. With only six participants coming from single-parent families, meaningful analyses of the relative impact of single-parent families could not be carried out. Reason for the move (that is, forced or non-forced) was also not included as a predictor variable due to the small number (five) who had listed 'forced' as their reason to move.

Separate multiple regression analyses were conducted with the CBCL total T-score and with academic progress along with the seven independent variables (gender, age, number of moves, distance moved, SES, total maternal attitude, months since the last move). Neither model was found to account for a significant proportion of the variance in behaviour or academic progress after having moved (CBCL total-T:  $F(7, 69) = .71$ , *ns*; academic progress:  $F(7, 60) = .75$ , *ns*). Subsequent analyses with CBCL internalising ( $F(7, 69) = .46$ , *ns*) and externalising T-scores ( $F(7, 69) = 1.07$ , *ns*) also yielded non-significant results.

Logistic regression was used to analyse the effect that moving had on the categorical variable, 'repeating a grade'. The model was also not found to be significant, ( $\chi^2(7, 70) = 5.59$ , *ns*).

**Hypothesis 1c—Maternal attitudes and time since relocation**

To test the hypothesis that maternal attitude ( $M = 20.3$ ,  $SD = 3.5$ ) and the time since relocation ( $M = 7.5$ ,  $SD = 5.2$ ) would independently predict adjustment after relocation, the impact of these predictor variables on the dependent variables was studied. The effects were small and non-significant.

**Hypothesis 2—Resilience** BERS-2 strength indexes in this sample population were within the normal range ( $M = 104.1$ ,  $SD = 15.4$ ). Additional multiple regression analyses with the two dependent variables ('behaviour' and 'academic progress') and a logistic regression analysis with the dependent variable 'repeat

grade' were rerun with the same seven independent variables used previously and with the addition of the BERS-2 total strength index. The BERS-2 was added to the analyses in order to study whether the individual factor of resilience would add significantly to the variance accounted for by the other variables in the prediction of children's adjustment to relocation.

With the addition of resilience, the regression model was found to be significant ( $F(8, 69) = 4.05, p = .001$ ) and accounted for 34.7 per cent of the total variance in behaviour. The total-T for the CBCL was significantly negatively correlated with the BERS-2 strength index ( $r = -.54$ ) as shown in Table 2, indicating that resilience accounts for 27.4 per cent of the variance in the behaviour of children who have moved and that behaviour improves as resilience increases.

When resilience was added to the analysis of academic progress, the model still did not account for a significant proportion of the variance ( $F(8, 60) = 1.20, p = .32$ ). Similarly, the inclusion of resilience to the 'repeat grade' equation made no significant difference ( $\chi^2(8, 70) = .58, ns$ ).

**Table 2 Regression coefficients of CBCL total scale and predictor variables including resilience**

Independent variable	Non-standardised coefficients		Standardised coefficients	t	Significance
	B	Std error	Beta		
Gender	2.36	2.47	.11	.96	.34
Age in years	.62	.99	.07	.63	.53
Socio-economic status	-1.53	1.01	-.17	-1.52	.13
Months since last move	.01	.24	.01	.01	.99
Distance moved	1.56	1.03	.17	1.52	.14
Total attitude	.10	.35	.03	.26	.79
Number of moves	-.39	.71	-.06	-.55	.59
BERS-2 strength index	-.40	.08	-.56	-5.05	.00

When taken together, the results for the impact of resilience on all the dependent variables provides partial support for the hypothesis that greater resilience will help children adjust after a residential relocation in terms of emotional and behavioural outcomes but not on either academic results or repeating a grade. Given this pattern of results, *post hoc* analyses were conducted with the BERS-2 subscales and CBCL internalising and externalising scales and these are detailed in the next section.

### Further analyses

Analyses of the CBCL internalising and externalising scales with the BERS-2 strength index produced different results. SES and Resilience were not significant predictors of the internalising scale ( $F(8, 69) = 1.78, p = .099$ ) but did have significant negative associations with externalising behaviours ( $F(8, 69) = 4.50, p = .001$ ). This suggests that stronger resilience and less socio-economic disadvantage may result in less rule breaking and less aggressive behaviour (Table 3).

**Table 3 Regression analysis with SES and resilience Predictors of Adjustment as Measured by CBCL externalising score ( $n = 77$ )**

	<i>Beta</i>	<i>t</i>	<i>Significance</i>
SES	-.25	-2.70	.02
BERS-2 strength index	-.55	-5.06	.01

Further analyses were then carried out using the five BERS-2 subscales—interpersonal strength, family involvement, intrapersonal strength, school functioning and affective strength—as independent variables. Successive analyses used academic progress, CBCL total scale, CBCL externalising subscale and CBCL internalising subscale as dependent variables. The regression models accounted for significant proportions of the variance in all four dependent variables (total CBCL:  $F(5,76) = 9.51, p < .01$ ; internalising:  $F(5,76) = 3.44, p = .008$ ; externalising:  $F(5,76) = 13.53, p < .01$ ; Academic progress:  $F(5,62) = 2.76, p = .03$ ). The results of these analyses are summarised in Table 4.

**Table 4 Regression analyses of five BERS-2 subscales on academic and behavioural outcomes**

<i>Dependent variable</i>	<i>independent variables</i>	<i>Beta</i>	<i>t</i>	<i>Significance</i>
Academic progress	Interpersonal strength	-.13	-.60	.55
	Family involvement	-.14	-.76	.45
	Intrapersonal strength	.12	.71	.48
	School functioning	.46	3.01	.01
	Affective strength	.04	.26	.79
CBCL total	Interpersonal strength	-.53	-3.26	.01
	Family involvement	.12	.82	.42
	Intrapersonal strength	.05	.35	.73
	School functioning	-.34	-2.89	.01
	Affective strength	.05	.41	.69
CBCL externalising	Interpersonal strength	-.65	-4.37	.00
	Family involvement	-.14	-1.09	.28
	Intrapersonal strength	.23	1.92	.06
	School functioning	-.20	-1.81	.07
	Affective strength	.12	.95	.34
CBCL internalising	Interpersonal strength	-.18	-.99	.33
	Family involvement	.08	.50	.62
	Intrapersonal strength	-.07	-.50	.62
	School functioning	-.30	-2.18	.03
	Affective strength	-.02	-.13	.90

The BERS-2 subscale of ‘school functioning’ was a significant predictor of academic progress, indicating that higher levels of this aspect of resilience are associated with higher levels of academic progress. No other independent variables were significantly associated for this model.

Factors from the BERS-2 subscales that were significant predictors of the CBCL total scale were interpersonal strength and school functioning. Both had negative regression coefficients, indicating that higher capacity to get on with others and function well at school is associated with better overall behavioural and emotional adjustment after a residential relocation.

Interpersonal strength had the only significant association with the externalising scale, although intrapersonal strength ( $p = .06$ ) and school functioning ( $p = .08$ ) approached significance. Interpersonal strength measures the ability of a child to get on with others and control emotions and behaviour in social situations. This result indicates that higher levels of this aspect of resilience are associated with fewer behavioural problems as a child adjusts to the move. The data suggests that confidence and self-esteem measured by the intrapersonal strength subscale may also have some association with behavioural adjustment, although the evidence is not conclusive.

The only significant BERS-2 subscale showing an association with the CBCL internalising scale was school functioning, indicating that resilience in the area of school functioning is associated with less anxious or depressed feelings in these children.

In summary, school functioning and interpersonal strength were the factors that had the most consistent association with the CBCL scales and with academic progress, although no factor reached significance for repeating a grade. The data provided no evidence for the association of family involvement, intrapersonal strength or affective strength with success in these outcomes.

## Summary

The purpose of this study was to examine the associations of residential relocation and resilience with the emotional, behavioural and academic functioning of children 8–12 years of age who had moved house during the period under consideration.

### Adjustment outcomes

Children in the sample were generally typical of the wider population with respect to behavioural outcomes. Without knowledge of pre-move academic results, it is not possible to ascertain whether these outcomes had been affected by their moving (for example, Heinlein & Shinn, 2000).

Although there were no norms available for repeating a grade, Stone's (1997) results were consistent with Kenny's (1991) findings that in New South Wales primary schools 5.5 per cent of children repeated Year 1, 3 per cent repeated Year 2, and 1.5 per cent repeated Year 3. Children in the sample did report a much higher rate of having repeated a class (14.3 per cent). In addition to the usual reasons for repeating a class, which are a child's abilities or social development (Stone, 1997), children who have moved may experience further difficulties such as a change in education system and the need to adjust to different standards, culture and, possibly, curricula. While this sample was found to repeat more grades than average, there do not seem to be obvious adverse effects in their academic or behavioural outcomes.

Children living in more disadvantaged areas did not display greater adjustment difficulties after relocation than those from more advantaged areas, although there were very few participants from the most disadvantaged (lowest SES) areas. No evidence for the impact of family composition could be obtained due to small numbers. The effect of maternal attitudes and time since the move were found to be statistically insignificant.

## **Resilience**

When the results are taken together, this study provided partial support for the hypothesis that greater resilience will help children adjust after a residential relocation. Resilience had a positive association with the children's behaviour but no significant association with their academic progress or their likelihood of repeating a grade.

Additional analyses of behavioural and emotional outcomes and resilience revealed that resilience and SES were positively associated with externalising behaviour but not with internalising behaviours. When the BERS-2 total scale was replaced in the analyses by its two subscales, regression models with the three CBCL measures as dependent variables accounted for significant proportions of variance. Interpersonal factors and school functioning were found to be significantly negatively associated with the CBCL total scale. Interpersonal functioning was also found to be negatively associated with externalising behaviours. Only school functioning was found to be significantly associated with internalising behaviours and academic progress but the resilience subscales had no significant association with repeating a grade.

## **Discussion**

In Masten and Powell's (2003) analyses, three key resources were consistently associated with competence or resilience, regardless of the extent of experienced adversity. These variables were parenting quality, intellectual functioning and family socio-economic resources. While parenting quality was not directly measured in this study, the results highlighting the significance of interpersonal strength, school functioning and SES in their impact on adjustment clearly reflect some of the findings of Masten and Powell (2003).

For children who have moved to a new school, these interpersonal strengths are of benefit in quickly making new friends and developing relationships with other children, teachers and neighbours. This notion fits with Howard and Johnson's (2000) study that suggested that schools could contribute by making a difference in the lives of children through the development of social and coping skills. Similarly, these interpersonal skills would enhance involvement in pro-social organisations such as church, sport and other clubs that have been seen as the contribution made by the community in supporting children (Masten & Powell, 2003). Parker and colleagues (1990, p. 21) noted the importance of 'effective coping strategies and interpersonal problem-solving skills, including empathy' in their potential to favour resilient outcomes.

While intrapersonal factors such as self-esteem, internal locus of control, self-regulation and temperament (Masten & Powell, 2003; Slee, 1995; Walsh, 1996) are

also acknowledged as important in the development of resilience, in the context of this study, these intrapersonal strengths played a less important role in the adjustment of primary-school children who have moved to a new location. A possible reason for this finding may be the developmental stage of the children in the sample population. Masten and Coatsworth (1998) list the developmental tasks of middle childhood as social adjustment, academic achievement, getting along with peers and rule-governed behaviour. These directly correspond to the interpersonal strengths and school functioning found to be important for these sample children.

Among the individual differences noted by Masten and Powell (2003) as contributing to the development of resilience are cognitive abilities. Similarly, Howard and Johnson's (2000) study also identified the importance of gaining good academic grounding at school in contributing to 'kids with tough lives doing OK'. The finding in this study—that school functioning makes a significant contribution to helping children adjust after moving house—is consistent with these earlier studies, with higher levels of school functioning being associated with fewer behavioural and emotional adjustment problems and improved academic progress. School functioning encompasses both school achievement and desirable school behaviours—such as paying attention and completing homework—that are valued outcomes that result in positive responses and in turn would ease some of the stresses of moving.

While the children in this study have all had the stress of having to move house, the demographics of this sample suggest that they may not have had to encounter multiple life challenges or adversities experienced by children of lower SES. This could explain the lack of significant effects of demographic factors on the adjustment of the children in this sample. This reasoning also corresponds with Kaplan's (1999) concept of the variability in risk factors. The conclusion that SES, positive parental attitude and intact families are significant variables that impact on children's adjustment after moving closely reflects findings in the resilience literature.

Masten and Coatsworth (1998) noted the importance of being able to distinguish between cause and effect when examining resilience factors. (Masten and Powell, 2003, p. 14) described resilience as arising from the 'operation of common human adaptational systems, rather than rare or extraordinary processes'. They noted that these adaptational systems have evolved from a long history of biological and cultural evolution and that they develop over time in individuals and, as such, sustain or restore conditions essential to cognitive and social development. This may help to explain why, in this study, there was no significant impact of family demographic factors on adjustment, but a strong impact of resilience factors. Possibly many of the harmful family factors identified in the relocation literature were unintentionally controlled for, resulting in a population of children who were resilient in the context of moving with their families. Of note is that their strengths were within the average range and did not have to be exceptional to cope with the stress of relocation. It is possible that their family environments were such that they sustained the conditions required for cognitive and social development, therefore promoting resilience.

## Implications and future directions

The current study is significant because it provides an enhanced understanding of the factors that would assist children when they move and reduce potential negative impacts. It raises important issues that need to be further explored.

Mathews (2005) noted that length of residence was the most important factor in the prediction of people's attachment to their local community, and that this was linked to their well-being. The finding—that for children who move, interpersonal skills may make a difference in their ability to adjust—is a positive one as many of these abilities such as coping skills, social problem-solving and empathy can be taught (Parker et al., 1990). Perhaps one of the more important implications of this study is the importance of the part played by schools. While it is of great benefit that schools provide a venue and opportunity for children to learn intra-personal and, in particular, interpersonal skills, this study has revealed that their core business of building and enhancing the intellectual functioning of children is a vital component in the development of resilience.

The literature has paid little attention to the perspectives of the children who have recently moved. Both Stroh and Brett (1990) and Howard and Johnson's (2000) studies worked directly with the children themselves, not just with parents and teachers. Howard and Johnson's (2000) study on resilient outcomes for children at risk could be used as a basis for a similar study whereby, rather than relying solely on parent or teacher assessments, focus groups with children themselves could be organised to find out what they found helpful or unhelpful during the relocation process.

## Limitations

There were many issues that this study was unable to consider. A potentially important question on whether or not the residential relocation had included a change of schools was not asked. While it was clear by the distances moved that this would have been the case for the majority of the participants, there is some face validity to the idea that a change of residence without a change of school may not require the same adjustment. If sufficient numbers of participants had not changed schools, results could potentially have been different from those obtained if most participants had in fact changed schools.

The small sample size in this study puts limits on the conclusions that can be reached about subgroups. Power analyses indicated that the sample size of 53 provided sufficient power (0.80) to detect only large effects in the regression analyses using eight independent variables. The study may have failed to identify moderate and small effects that could yet prove to be important.

Finally, the use of a volunteer sample, while necessary, must leave doubts about the extent to which the findings can be generalised. While the sample statistics indicated that in some respects the sample bore a close resemblance to state norms, it is impossible to know how the need to volunteer might have affected the representativeness of the sample. For example, if those worst affected by moving house were the most reluctant to respond, the study may have failed to detect influences

that would have been detected in a more representative sample. In the absence of a probability sample, this limitation will always be present. The findings of this study, like any other, provide modest evidence about the research questions but not definitive answers.

## Conclusions

This study has been as notable for what was not found as for what was found to be associated with children's adjustment after moving. While not finding significant links with family demographic characteristics and adjustment, the importance of resilience—over and above family factors—was clear. Following on from this, the presence of resilience made a difference but specific components of resilience—in this case interpersonal strengths and school functioning—were particularly important for this sample of children, to make this transition. These findings suggest that different aspects of resilience may be important for different developmental stages and different life stressors.

While this study was not able to incorporate information from those with the highest risk factors, it is likely that their inclusion, had it been possible, would have strengthened the study's conclusions rather than weakened them. With such large numbers of people moving house, the findings of this study are potentially relevant to a large number of people. This does not lessen the need to access those most at need, as it is these children who may grow to make the largest demands on society in health and welfare needs. But the development of resilience is clearly not a 'one size fits all' and, for programs to be effective and economic, they need to be directed appropriately. This study provides evidence that may assist those who are charged with the responsibility to make these important decisions.

## Keywords

relocation	adjustment	risk
resilience	children	schooling

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