

# **Cultural transitions in early childhood: The developmental consequences of discontinuity between home and childcare**

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## **Abstract**

This paper reports findings from the Australian Institute of Family Studies' recent investigation, *Child Care in Cultural Context*, which explores the impact of continuity and discontinuity between experiences at home and at childcare on developmental outcomes among children using childcare services from Somali, Vietnamese and Anglo-Australian cultural backgrounds. Using a multivariate analytic framework which considers the effects of child characteristics, family background factors and objective assessments of childcare quality, the impact of discontinuity in the practices and values manifested in home and in child care contexts on behavioural, motor, social and cognitive outcomes are discussed.

## **Introduction**

Parents from different cultural backgrounds are known to differ in their beliefs about children, how children develop, and the importance of parents and others in this process. Cross-culturally, parents also have very different ideas about the importance of children achieving particular developmental tasks, and what a well-adjusted member of society looks like (Bornstein, 1991; Rosenthal and Roer-Strier, 2001). The beliefs that parents hold about children and childhood help shape their childrearing approaches and routine care practices.

In bicultural contexts, such as the instance of immigration, children can be exposed to two sets of cultural influence or parenting regimes - the culture of origin and the culture of the host nation. For children from culturally and linguistically diverse backgrounds using childcare services, bicultural contact often happens at a very early stage in development.

In Australia today, 11.2% of children using Commonwealth-supported childcare services are children from culturally diverse backgrounds, and Aboriginal or Torres Strait Islander children comprise 1.5% of all children using such services (ABS, 1999).

Developmental theory points to the importance of consistency for optimal

development, suggesting that “attunement”, or “continuity” between parents and carers on aspects of childrearing may be important for children. Indeed, research has shown that discrepant care may lead to feelings of disorientation, confusion and insecurity in children (Howes, 1991; Shimona and Ferguson, 1992).

However, another perspective suggests that children are aware of differences between home and childcare settings and differences between mothers and other adult caregivers, and are able to adjust their behaviour accordingly (Nelson and Guarduque, 1991). There is also evidence to suggest that children from lower SES backgrounds may profit from day care that compensates for deficiencies in the home environment (Pianta, 1992, van Ijzendoorn, Sagi and Lambermon, 1992; Howes, Rodning, Gulluzzo and Myers, 1988). Studies from the NLSY support the hypothesis that day care is positively influential on cognitive development, but only for low income or “at-risk” children (Coughy, DiPietro and Strobino, 1994).

Further, the effect of discontinuity on children may be linked to carers understanding of children’s experiences and carer attitudes toward childrearing disagreements.

### **The childcare in cultural context study**

The Australian Institute of Family Studies study, called *Childcare in Cultural Context*, examined the effects on children of differences between home and childcare settings (Wise and Sanson, 2000). Data were collected, via parent and carer questionnaires and through direct observation, on the development of children in non-parental childcare from Somali, Vietnamese and Anglo-Australian backgrounds. Information about various characteristics of the home and childcare settings believed to influence child development was also collected.

The current paper discusses the impact on children of discrepancies between parents and carers in; expectations for children’s development, socialisation goals, discipline styles, warmth behaviours and carers response to home-childcare discontinuity.

The central research question asks “does discontinuity between parent and carer report on parenting variables, and carer response to discontinuity, predict child outcomes, after accounting for family income, maternal education, family structure, child age, ethnicity, child temperament, childcare quality and hours in childcare?”

### **Recruitment**

The study aimed to compare the effect of discontinuity and carer response to discontinuity among children using childcare services from Anglo-Australian, Vietnamese and Somali backgrounds.

Childcare centres and family day care schemes in the Melbourne metropolitan area with high proportions of Somali and Vietnamese children were approached for their assistance in recruiting parents and carers to the study.

Parents, then carers were approached directly by AIFS researchers, centre directors and family day care coordinators to take part in the research.

### **Background characteristics of the sample**

Data was collected on a total of 258 children - 115 girls and 143 boys. Of the sample children, 87 were from Anglo-Australian backgrounds, 82 were from Somali backgrounds, 68 were from Vietnamese backgrounds, and 21 were from 'other' non-Anglo cultural backgrounds. The children ranged in age from 2 months to 69 months, and children spent between 8 and 55 hours in childcare per week. Complete data were provided from both parents and carers in 226 cases. 146 children were using long day care centres, 100 were using a family day care arrangement, and a further 12 children were in informal care. Family income was negatively skewed, with 42.9% of the sample reporting annual incomes below \$20,000. In terms of family structure, 78.6% of children were from couple parent families, and 21.4% were from single-parent families. Approximately one-third (33.2%) of families had one child (the study child) only, over one-half (52.1%) had 2-3 children, and 14.7% of families had 4 or more children.

### **Hypotheses**

Two hypotheses were generated about the impacts of home-childcare discontinuity on child outcomes. These were guided by an ecological developmental perspective on home-childcare discontinuity, which suggests the greater the consistency and congruity across the environments in which children live and learn, the better the outcomes for the child.

It was expected that discontinuity between parent and carer report on parenting variables, and childcare practices that do not appropriately acknowledge parents' views on childrearing, would predict more behaviour problems, poorer cognitive development, poorer social skills, poorer language skills and poorer motor skills.

It was also expected that home-childcare discontinuity would have a greater negative impact on children from Vietnamese and Somali cultural backgrounds compared to those children from Anglo-Australian backgrounds.

### **Measures: Child outcome variables predicted**

Five outcomes were predicted - behaviour problems, cognitive skills, social skills (for children over 12 months of age), language skills and motor skills. In the current analysis, parent reported data were used as measures of motor, language and cognitive development and behaviour problems. Carer reported data were used to measure social skills.

### ***Behaviour problems***

The parent questionnaire contains a series of 17 items relating to child behaviours, 15 of which were derived from the Behaviour Checklist (Richman

and Graham, 1982). Each behavioural item is rated 1,2 or 3 according to the severity of the symptom, but the ratings for certain items were combined in order to avoid undue emphasis being given to a particular problem area.

A total behaviour problem score was obtained by combining the ratings from individual items or combination of items. Only those items that were deemed developmentally appropriate were used to calculate behaviour problems for different age groups. Mean scores were used in the analysis to facilitate comparison. For children under 12 months, 9 items were used to calculate behaviour problems ( $\alpha = .29$ ). For children between 13 and 25 months, 10 items (or combination of items) were used to measure behaviour problems ( $\alpha = .48$ ). For the 25-35 months age group, 11 items (or combination of items) were used to measure behaviour problems ( $\alpha = .45$ ) and 13 items (or combination of items) were used to measure behaviour problems in children 36+ months ( $\alpha = .61$ ).

LOG transformation (Tabachnick and Fidell, 1996:85) was performed on the total problem behaviour variable to produce normality.

### ***Cognitive development***

The parent questionnaire contains a series of 7 items to assess the cognitive development of children over 12 months of age, and a series of 5 items for children less than 12 months of age. The items were based on the Bayley Scales of Infant Development – Mental Scale items (Bayley, 1993). The same response scale was used for both age groups to facilitate comparability. Parents rated items in terms of how each feature of children’s understanding applied to the child on a 3-point scale. A score of 1 shows the item “never applies” and a score of 3 showed the item “often applies”. A total cognitive development score was obtained by combining the ratings from individual items. Cronbach’s alpha coefficient for the 7-item scale was .85 and Cronbach’s alpha coefficient for the 5-items scale was .87, indicating high internal consistency. Mean scores were used in the analysis to enhance interpretability.

Reflect and LOG transformation (Tabachnick and Fidell, 1996:85) was performed on the total cognitive development variable to produce normality.

### ***Social skills (12+mo only)***

The carer questionnaire included a series of 13 items for children over 12 months of age that were adapted from the Gresham and Elliott Social Skills Rating System – elementary teacher questionnaire (Gresham and Elliott, 1990). Questionnaires were adapted for developmental appropriateness. Carers rated these items on 5-point scale, where a score of 1 shows the behaviour “never applies”, and a score of 5 shows the behaviour “always applies”. A total social skills score was obtained by combining the ratings from individual items. Cronbach’s alpha coefficient for the 13-item scale was .68.

### ***Language skills***

The parent questionnaire contains a series of 7 items to assess the language development of children over 12 months of age, and a series of 6 items for children under 12 months of age. The same response scale was used for both age groups to facilitate comparability. Parents rated items in terms of how each feature of children's understanding applied to the child on a 3-point scale. A score of 1 shows the item "never applies" and a score of 3 showed the item "often applies". A total language skills score was obtained by combining the ratings from individual items. Cronbach's alpha coefficient for the 7-item scale was .92 and Cronbach's alpha coefficient for the 6-items scale was .85, indicating high internal consistency. Mean scores were used in the analysis to enhance interpretability.

Reflect and LOG transformation (Tabachnick and Fidell, 1996:85) was performed on the total expressive language variable to produce normality.

### ***Motor skills***

The parent questionnaire contains a series of 8 items to assess the language development of children over 12 months of age, and a series of 17 items for children under 12 months of age. The same response scale was used for both age groups to facilitate comparability. Parents rated items in terms of how each feature of children's motor development applied to the child on a 3-point scale. A score of 1 shows the child performs the task "not at all well" and a score of 3 shows the child performs the task "very well". A total motor skills score was obtained by combining the ratings from individual items. Cronbach's alpha coefficient for the 8-item scale was .76 and Cronbach's alpha coefficient for the 6-items scale was .89, indicating high internal consistency. Mean scores were used in the analysis to enhance interpretability.

Reflect and LOG transformation (Tabachnick and Fidell, 1996:85) was performed on the total motor skills variable to produce normality.

### **Measures: Parenting variables used to predict child outcomes**

#### ***Socialisation goals***

Parent and carer questionnaires contain a series of 20 statements about childrearing concerned with self-directing, conforming and social behaviours. The scale is based on the Index of Parental Values, as modified by Schaefer and Edgerton (1985), and includes 11 of the original items. Respondents indicated how important it is that a child learns obedience, independence and social behaviours on a 5-point scale, where a score of 1 shows the characteristic is "not at all important", and a score of 5 shows the characteristic is "very important".

Three a priori factors were formed, based on the Index of Parental Values factor structure. The "self direction" factor contained 6 items, and Cronbach alphas of internal consistency were .85 for parent data and .86 for carer data. The "compliance" factor contained 6 items, and Cronbach alphas of internal consistency were .83 for parent data and .88 for carer data. Finally, the "social behaviours" factor contained 3 items, and Cronbach alphas of internal consistency were .81 for parent data and .80 for carer data.

### ***Discipline beliefs***

The parent and carer questionnaires contained a series of 9 statements derived from the Parenting Effectiveness Questionnaire (PEQ) (Critchley, unpublished). The PEQ contains 9 items, 8 of which fit into two scales - beliefs about the effectiveness of power assertion (5 items) and beliefs about the effectiveness of inductive reasoning (3 items). Respondents were asked to rate how effective they thought each statement would be in managing children's difficult behaviour. The items were rated on a 5-point scale, where a score of 1 showed the approach was "never effective" and a score of 5 showed the approach was "almost always effective". Exploratory principal components analyses, with varimax rotation, confirmed the two-factor model on both parent and carer data. Cronbach alphas of internal consistency for the "beliefs about the effectiveness of power assertion" for parent and carer data were .82 and .62 respectively. Cronbach alphas of internal consistency for the "beliefs about the effectiveness of inductive reasoning" factor were .60 for parent data and .62 for carer data.

### ***Warmth behaviour***

Parent and carer questionnaires contained a series of 11 items from the Parenting Practices Questionnaire (Paterson and Sanson, unpublished). The items related to warmth and discipline, and were rated on a 5-point scale, where a score of 1 showed the respondent "never demonstrated the behaviour" and a score of 5 showed the respondent "always showed the behaviour".

Three a priori factors representing warmth, punishment and inductive reasoning were created for both parent and care provider data. The warmth factor only is used in the current analysis (6 items, parent  $\alpha = .70$ , carer  $\alpha = .74$ ).

### ***Developmental expectations***

Parental and care provider expectations of appropriate ages for children to reach particular developmental milestones were assessed using a 21-item scale developed for the study. Respondents were asked to indicate the age at which they expected a child to achieve a series of outcomes across five developmental domains - motor development, language development, independence, cognitive development and self-control. Seven response options were provided - 0-6 months, 7-12 months, 13-24 months, 25-36 months, 37-48 months, 49-60 months and 61+ months. One motor development item 'sit alone for 10-15 minutes on the floor' was excluded from analyses due to the presence of a number of outliers. Based on the data reduction procedures used by Rosenthal (1994) on a similar scale, a priori analyses were conducted on the five developmental areas and Cronbach alpha coefficients of internal consistency were obtained.

Cronbach alphas of internal consistency for the 5 developmental outcome domains were; motor development (3-items, parent  $\alpha = .76$ , carer  $\alpha = .78$ ) language development (3 items, parent  $\alpha = .78$ , carer  $\alpha = .81$ ), independent behaviour (4 items, parent  $\alpha = .77$ , carer  $\alpha = .83$ ), cognitive development (4

items, parent  $\alpha = .83$ , carer  $\alpha = .81$ ) and obedience and self-regulation (6 items, parent  $\alpha = .89$ , carer  $\alpha = .90$ ).

### **Parenting discontinuity**

To obtain measures of discontinuity in socialisation goals, discipline beliefs, warmth behaviours and developmental expectations, parent and carer scores were first converted to standardised scores. Parent scores are then subtracted from carer scores to obtain a continuous measure of 'discontinuity'. Discontinuity scores are converted to absolute values by multiplying scores less than zero (i.e. negative discontinuity scores, where parent scores are higher than carer scores) by  $-1$ . Thus, the direction of differences between parents and carers was not examined in the current analysis.

### **Carers' response to childrearing differences**

Carer's responses to childrearing differences were measured by 7 items that describe different approaches to home-childcare differences on childrearing issues. Carers rate how often they used each approach in their practice on a 5-point scale, where a score of 1 shows that they "never used the approach", and a score of 5 shows that they "always used the approach". When one cross-loading item was removed, principle components analysis with 2-factor solution revealed 2 factors that were interpretable as "cooperation/negotiation" ( $\alpha = .58$ ) and "override" ( $\alpha = .48$ ).

### **Measures: Family demographic, child and childcare variables used to predict child outcomes**

Information about various characteristics of the home and childcare settings and children's characteristics also believed to influence child development were measured and included in the analysis. These 'control' variables included childcare quality, hours in childcare, family income, maternal education, family structure, child age, child sex and child temperament.

#### ***Total family income (annualised)***

Total annual family income was measured as a continuous variable.

#### ***Maternal education***

Maternal education was measured as a categorical variable, indicating whether the study child's mother held less than year 12 qualification, a year 12 qualification or a tertiary qualification. Year 12 qualification was the omitted category in the analysis.

#### ***Family structure***

A dichotomous variable was constructed to indicate whether the study child's mother was partnered or not partnered. Partnered was the omitted category in the analysis.

### ***Ethnic group of child***

The study child's ethnic group was measured as a categorical variable, indicating whether the child was from a Vietnamese, Somali or Anglo-Australian cultural background. Anglo-Australian was the omitted category in the analysis.

### ***Child temperament – approach and reactivity***

Two dimensions of child temperament – approach and reactivity - were measured in the study using the a priori factor structure from the Short Temperament Scale for Infants, which is an Australian adaptation based on a factor analysis of the Infant Temperament Questionnaire (Carey and McDevitt, 1985) and the Short Temperament Scale for Toddlers (Prior, Sanson, Oberklaid and Northam, 1987), which is an Australian adaptation of the Toddler Temperament Questionnaire (Fullard, McDevitt and Carey, 1984). The alpha coefficients from reliability analysis were; approach (7 items from the Short Temperament Scale for Infants = .75, and 5 items from the Short Temperament Scale for Toddlers = .66) reactivity (6 items from the Short Temperament Scale for Infants = .79 and 8 items from the Short Temperament Scale for Toddlers = .66).

### ***Child age***

Child age at the time data were collected was measured in months.

### ***Sex***

Child sex was measured as a dichotomous variable, indicating whether the study child was male or female (not male). Male was the omitted category in the analysis.

### ***Childcare quality***

The quality of group care is assessed with the early Childhood Environment Rating Scale (ECERS) (Harms and Clifford, 1980), the Infant/Toddler Environment rating Scale (ITERS) (Harms, Cryer and Clifford, 1990) and the Family Day Care Rating Scale (FDCRS) (Harms and Clifford, 1989). All three rating scales are based on a series of 7-point items that tap various dimensions of childcare quality. A score of 1 shows inadequate quality, a score of 3 shows minimal quality, a score of 5 shows good quality, and a score of 7 shows excellent quality.

In order to establish reliability on the ITERS and ECERS, three coders independently rated the quality of a room in one of the long day care centres involved in the study. For the ITERS, there is an 82.9% agreement within a  $\pm 1$  range between the principal coder and the other two coders. For the ECERS, there is 85% agreement within a  $\pm 1$  range between the principal coder and the other two coders. Both attempts to establish reliability were found to exceed the minimum acceptable percentage agreement (80%) for each pair of coders.

In order to establish reliability on the FDCRS, the principal coder and the other 2 coders independently scored a Family Day Care home. There is 94% agreement within a  $\pm 1$  range between the principle coder and the first coder, and 90.32% agreement within a  $\pm 1$  range between the principle coder and the second coder.

Continuous checks were also made during the period of data collection. Pairs of observers coded the same rooms/FDC homes independently so the level of agreement could be assessed. Once again, degree of reliability was assessed by the percentage of scored items on which the observers agree. On 18 of the 19 occasions percentage agreement between the principle coder and the other two coders was found to exceed the minimum acceptable percentage agreement (80%) for each pair of coders.

In the current analysis, mean quality scores are used for comparability.

### ***Hours in childcare***

The hours that study children spent in childcare in a typical week was measured as a continuous variable.

### **Analytic approach**

Regression analysis was used to determine whether discontinuity between parent and carer report on parenting variables and carer responses to discontinuity improves on the prediction of child outcomes after accounting for a base set of variables.

Hierarchical regression was employed, where a block base set of variables (maternal education, family structure, child age, child sex, childcare quality and child temperament) was entered into the regression equation using *forward selection* equation building method. Home-childcare discontinuity variables were then entered as a second block using *stepwise selection*, enabling the relative importance of the discontinuity variables to be measured by statistically eliminating the base set variables.

Change in adjusted R-squares and standardised regression coefficients were used to evaluate the effect of each predictor. Adjusted  $R^2$  is used to indicate the total variance explained by the model.

Given the small sample size, home-childcare discontinuity variables were only included in the regression analysis if bivariate analyses indicated they were significantly related to the outcome of interest at the .10 level.

The regression procedure was conducted for each outcome separately. This procedure was conducted for the entire sample first, and then repeated for the Anglo-Australian, Vietnamese and Somali samples independently.

### **Findings**

Tables 1-5 presented below show the list of predictor variables that were measured in the study the left-hand column. Variables that were entered into

the regression equation were either ‘predictor’ or ‘excluded’ variables. Adjusted R-squares and standardised regression coefficients are reported for each predictor variable in columns on the right. Excluded variables are indicated by ‘Excl.’ in the right-hand columns. Right-hand columns are left empty for those variables that were not entered into the regression equation (because they were not significantly related to the dependent variable at the .10 level). Results are presented for the entire sample, then for Anglo, Vietnamese and Somali samples separately.

**Table 1: (LOG) Behaviour problems**

Predictors	All cases		Anglo		Vietnamese		Somali	
	Beta	$\Delta R^2$	Beta	$\Delta R^2$	Beta	$\Delta R^2$	Beta	$\Delta R^2$
Child age	-.171*	.039	Excl.	Excl.	-.479***	.239	Excl.	Excl.
Male (omitted category)	-	-	-	-	-	-	-	-
Female	Excl.	Excl.	.055*	.047	Excl.	Excl.	Excl.	Excl.
Anglo (omitted category)	-	-	-	-	-	-	-	-
Vietnamese	-.270***	.066	-	-	-	-	-	-
Somali	-.169*	.024	-	-	-	-	-	-
Reactivity	.259***	.057	.038***	.179	Excl.	Excl.	Excl.	Excl.
Approach	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
Childcare quality	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
Hrs in childcare	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
Partnered (omitted category)	-	-	-	-	-	-	-	-
Not partnered	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
Year 12 qualification								
Qualification	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
Less than yr 12 education	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
Family income	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
Self-direction goals	-	-	-	-	-	-	-	-
Compliance goals	-	-	-	-	-	-	-	-
Social skills goals	-	-	-	-	-	-	-	-
Authoritarian beliefs	-	-	-	-	-	-	-	-
Authoritative beliefs	.176*	.028	Excl.	Excl.	-	-	-	-
Warmth behaviours	-	-	-	-	-	-	-	-
Expectations motor	-	-	-	-	-	-	-	-
Expectations language	Excl.	Excl.	-	-	-	-	-	-
Expectations independence	-	-	-	-	-	-	-	-
Expectations cognitive	Excl.	Excl.	-	-	-.325**	.106	.350*	.122
Expectations	Excl.	Excl.	-	-	-	-	-	-

<b>obedience</b>								
<b>Cooperation</b>	-	-	-	-	-	-	-	-
<b>Override</b>	-	-	-	-	-	-	-	-
<b>Adjusted R<sup>2</sup></b>	.192	.192	.203	.203	.317	.317	.098	.098

\* p < .05; \*\* p < .01; \*\*\* p < .001

When all children were examined simultaneously, results of regression analysis showed that children with behaviour problems (compared to children with fewer behaviour problems) were *more* reactive, were *less* likely to be Vietnamese than Anglo-Australian, were younger, were *less* likely to be Somali than Anglo-Australian, and were *more* likely to have parents and carers who differed in their beliefs about inductive reasoning.

Discontinuity variables were not predictive for the Anglo-Australian sample. However, Vietnamese children with behaviour problems (compared to Vietnamese children with fewer behaviour problems) were younger and were *less* likely to have carers and parents that differed in their expectations for cognitive development. By contrast, Somali children with behaviour problems (compared to Somali children with fewer behaviour problems) were *more* likely to have parents and carers who differed in their expectations for cognitive development.

**Table 2: (Reflect and LOG) Cognitive development**

Predictors	All cases		Anglo		Vietnamese		Somali	
	Beta	R <sup>2</sup>	Beta	R <sup>2</sup>	Beta	R <sup>2</sup>	Beta	R <sup>2</sup>
<b>Child age</b>	-.575***	.337	-.626**	.489	-.608***	.345	-.534***	.295
<b>Male (omitted category)</b>	-	-	-	-	-	-	-	-
<b>Female</b>	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
<b>Anglo (omitted category)</b>	-	-	-	-	-	-	-	-
<b>Vietnamese</b>	Excl.	Excl.	-	-	-	-	-	-
<b>Somali</b>	-.120-	.013	-	-	-	-	-	-
<b>Reactivity</b>	Excl.	Excl.	.194*	.036	Excl.	Excl.	Excl.	Excl.
<b>Approach</b>	.153*	.015	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
<b>Childcare quality</b>	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
<b>Hrs in childcare</b>	Excl.	Excl.	.216**	.058	Excl.	Excl.	Excl.	Excl.
<b>Partnered (omitted category)</b>	-	-	-	-	-	-	-	-
<b>Not partnered</b>	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
<b>Year 12 qualification (omitted category)</b>	-	-	-	-	-	-	-	-
<b>Qualification</b>	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
<b>Less than yr 12 education</b>	Excl.	Excl.	Excl.	Excl.	.325**	.105	-.326**	.106
<b>Family income</b>	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.

Self-direction goals	-	-	-	-	-	-	-	-
Compliance goals	-	-	-	-	-	-	-	-
Social skills goals	-	-	-	-	-	-	-	-
Authoritarian beliefs	-	-	-	-	-	-	Excl.	Excl.
Authoritative beliefs	-	-	-	-	-	-	-	-
Warmth behaviours	-	-	-	-	-	-	-	-
Expectations motor	Excl.	Excl.	Excl.	Excl.	-	-	-	-
Expectations language	Excl.	Excl.	Excl.	Excl.	-	-	Excl.	Excl.
Expectations independence	-	-	-	-	-	-	-	-
Expectations cognitive	-	-	-	-	-	-	-	-
Expectations obedience	-	-	-	-	-	-	-	-
Cooperation	-	-	-	-	-	-	-	-
Override	-	-	-	-	-	-	-	-
Adjusted R <sup>2</sup>	.355	.355	.564	.564	.429	.429	.373	.373

\* p < .05; \*\* p < .01; \*\*\* p < .001

Home-childcare discontinuity variables were not included in the predictor list for any of the regression analyses. Rather, sociability, reactivity, hours in childcare and maternal education were predictive of cognitive development.

**Table 3: Social skills**

Predictors	All cases		Anglo		Vietnamese		Somali	
	Beta	R <sup>2</sup>	Beta	R <sup>2</sup>	Beta	R <sup>2</sup>	Beta	R <sup>2</sup>
Child age	.295***	.074	.419***	.137	.378**	.188	Excl.	Excl.
Male (omitted category)	-	-	-	-	-	-	-	-
Female	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
Anglo (omitted category)	-	-	-	-	-	-	-	-
Vietnamese	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
Somali	-.240***	.053	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
Reactivity	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
Approach	Excl.	Excl.	.205*	.045	Excl.	Excl.	Excl.	Excl.
Childcare quality	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	-.461***	.125
Hrs in childcare	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.

<b>Partnered (omitted category)</b>	-	-	-	-	-	-	-	-
<b>Not partnered</b>	Excl.	Excl.	-.213*	.048	Excl.	Excl.	Excl.	Excl.
<b>Year 12 qualification (omitted category)</b>	-	-	-	-	-	-	-	-
<b>Tertiary qualification</b>	Excl.	Excl.	.278*	.062	Excl.	Excl.	Excl.	Excl.
<b>Less than yr 12 education</b>	Excl.	Excl.	Excl.	Excl.	.248*	.077	.345*	.108
<b>Family income</b>	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
<b>Self-direction goals</b>	-	-	-	-	-	-	-	-
<b>Compliance goals</b>	-	-	-	-	-	-	-	-
<b>Social skills goals</b>	-	-	-	-	Excl.	Excl.	-	-
<b>Authoritarian beliefs</b>	Excl.	Excl.	-	-	-	-	Excl.	Excl.
<b>Authoritative beliefs</b>	Excl.	Excl.	-	-	-	-	-	-
<b>Warmth behaviours</b>	-	-	-	-	-	-	-	-
<b>Expectations motor</b>	-	-	-	-	Excl.	Excl.	-	-
<b>Expectations language</b>	-	-	-	-	-	-	Excl.	Excl.
<b>Expectations independence</b>	-	-	-	-	-	-	-	-
<b>Expectations cognitive</b>	-	-	-	-	-	-	-	-
<b>Expectations obedience</b>	-	-	-.235*	.053	-	-	-	-
<b>Cooperation</b>	.150*	.022	-	-	.254*	.063	-	-
<b>Override</b>	-	-	-	-	-	-	-	-
<b>Adjusted R<sup>2</sup></b>	.133	.133	.294	.294	.283	.283	.189	.189

\* p < .05; \*\* p < .01; \*\*\* p < .001

With the exception of the Somali group, in every analysis home-childcare discontinuity variables were predictive of child social skills. For the entire sample, children with better social skills (compared to children with poorer social skills) were older, were *less* likely to be Somali than Anglo-Australian, and had parents and carers who cooperated on childrearing issues. Anglo-Australian children with better social skills (compared to children with poorer social skills), were older, were *more* likely to have a mother with a tertiary qualification than a mother with year 12 education, were *more* likely to be sociable, were *less* likely to have mothers who were partnered than unpartnered, and were *less* likely to have carers and parents who disagreed in their expectations for obedience. Vietnamese children with better social skills, compared to children with fewer social skills were older, were *more* likely to have mothers with less than year 12 education than year 12 education, and had carers and parents that cooperated on childrearing issues.

**Table 4: (Reflect and LOG) Language development**

Predictors	All cases		Anglo		Vietnamese		Somali	
	Beta	R <sup>2</sup>	Beta	R <sup>2</sup>	Beta	R <sup>2</sup>	Beta	R <sup>2</sup>
<b>Child age</b>	-.511***	.259	-.607***	.368	-.642***	.394	Excl.	Excl.
<b>Male (omitted category)</b>	-	-	-	-	-	-	-	-
<b>Female</b>	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
<b>Anglo (omitted category)</b>	-	-	-	-	-	-	-	-
<b>Vietnamese</b>	.150*	.026	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
<b>Somali</b>	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	-.437**	.191
<b>Reactivity</b>	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
<b>Approach</b>	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
<b>Childcare quality</b>	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
<b>Hrs in childcare</b>	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
<b>Partnered (omitted category)</b>	-	-	-	-	-	-	-	-
<b>Not partnered</b>	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
<b>Year 12 qualification</b>	-	-	-	-	-	-	-	-
<b>Qualification</b>	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
<b>Less than yr 12 education</b>	Excl.	Excl.	Excl.	Excl.	.239*	.057	Excl.	Excl.
<b>Family income</b>	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
<b>Self-direction goals</b>	-	-	-	-	-	-	Excl.	Excl.
<b>Compliance goals</b>	-	-	-	-	-	-	Excl.	Excl.
<b>Social skills goals</b>	-	-	-	-	-	-	Excl.	Excl.
<b>Authoritarian beliefs</b>	-	-	-	-	-	-	-	-
<b>Authoritative beliefs</b>	-	-	Excl.	Excl.	-	-	-	-
<b>Warmth behaviours</b>	Excl.	Excl.	-	-	-	-	-	-
<b>Expectations motor</b>	-	-	-	-	-	-	-	-
<b>Expectations language</b>	Excl.	Excl.	Excl.	Excl.	-	-	-	-
<b>Expectations independence</b>	-	-	-	-	-	-	-	-
<b>Expectations cognitive</b>	-	-	-	-	-	-	-	-
<b>Expectations</b>	.132*	.017	-	-	Excl.	Excl.	-	-

<b>obedience</b>								
<b>Cooperation</b>	-	-	-	-	-	-	-	-
<b>Override</b>	-	-	-	-	-	-	-	-
<b>Adjusted R<sup>2</sup></b>	.292	.292	.360	.360	.429	.429	.173	.173

\* p < .05; \*\* p < .01; \*\*\* p < .001

Home-childcare discontinuity variables were also predictive of language skills for the entire sample, but not when each cultural group was analysed separately. Children who have better language development, compared to children who have poorer language development were older, were *less* likely to be Vietnamese than Anglo-Australian, and were *less* likely to have parents and carers who disagreed in their expectations for obedience.

**Table 5: (Reflect and LOG) Motor skills**

	All cases		Anglo		Vietnamese		Somali	
	Beta	R <sup>2</sup>	Beta	R <sup>2</sup>	Beta	R <sup>2</sup>	Beta	R <sup>2</sup>
<b>Predictors</b>								
<b>Child age</b>	-.578***	.319	-.700***	.490	-.506***	.332	-.559***	.313
<b>Male (omitted category)</b>	-	-	-	-	-	-	-	-
<b>Female</b>	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
<b>Anglo (omitted category)-</b>	-	-	-	-	-	-	-	-
<b>Vietnamese</b>	.168**	.028	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
<b>Somali</b>	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
<b>Reactivity</b>	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
<b>Approach</b>	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
<b>Childcare quality</b>	Excl.	Excl.	Excl.	Excl.	-.254*	.058	Excl.	Excl.
<b>Hrs in childcare</b>	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
<b>Partnered</b>	-	-	-	-	-	-	-	-
<b>Not partnered</b>	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
<b>Year 12 qualification (omitted category)</b>	-	-	-	-	-	-	-	-
<b>Qualification</b>	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
<b>Less than yr 12 education</b>	Excl.	Excl.	Excl.	Excl.	.224*	.050	Excl.	Excl.
<b>Family income</b>	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.	Excl.
<b>Self-direction goals</b>	-	-	-	-	-	-	Excl.	Excl.
<b>Compliance goals</b>	-	-	-	-	-	-	-	-
<b>Social skills goals</b>	-	-	-	-	-	-	-	-

<b>Authoritarian beliefs</b>	Excl.	Excl.	-	-	-	-	Excl.	Excl.
<b>Authoritative beliefs</b>	-	-	Excl.	Excl.	Excl.	Excl.	-	-
<b>Warmth behaviours</b>	-	-	-	-	-	-	-	-
<b>Expectations motor</b>	-	-	-	-	-	-	-	-
<b>Expectations language</b>	Excl.	Excl.	-	-	-	-	-	-
<b>Expectations independence</b>	-	-	-	-	-	-	-	-
<b>Expectations cognitive</b>	-	-	-	-	-	-	-	-
<b>Expectations obedience</b>	-	-	-	-	Excl.	Excl.	-	-
<b>Cooperation</b>	-	-	-	-	-	-	-	-
<b>Override</b>	-	-	-	-	-	-	.342**	.116
<b>Adjusted R<sup>2</sup></b>	.340	.340	.483	.483	.407	.407	.399	.399

\* p < .05; \*\* p < .01; \*\*\* p < .001

Home-childcare discontinuity variables were only predictive of motor skills for the Somali sample. Somali children with better motor skills (compared to children with poorer language skills) were older and were *less* likely to have carers that ignored parents' views on childrearing.

### Findings – summary

Research focusing on interactive effects of home and childcare suggest childcare environments have variable influences on children. An ecological conception of home-childcare discontinuity suggests the developmental potential of home and childcare environments are enhanced when there is consistency and predictability in the routines, practices and expectations across settings. It was therefore hypothesised that discontinuity between parents and carers on child related variables would have a negative impact on child development.

Discontinuity between home and childcare settings proved to be important for child development, explaining substantial proportions of the variation in behaviour problems, social skills, language skills and motor skills. Specifically, home-childcare discontinuity appeared to have a negative impact on these aspects of child development, over and above the influence of other child, family and childcare variables.

When all cases were examined, children with more behaviour problems (compared to children with fewer behaviour problems) were *more* likely to have parents and carers who differed in their beliefs about inductive reasoning as a discipline strategy. Children with better social skills (compared to children with poorer social skills) were *more* likely to have parents and carers who cooperated on childcare matters. Further, children with better language skills (compared to children with poorer language skills) were *less*

likely to have parents and carers who differed in their expectations for obedience.

Home-childcare discontinuity variables were also predictive of child outcomes when outcomes for Anglo-Australian, Vietnamese and Somali groups were analysed separately. Anglo-Australian children with better social skills (compared to Anglo-Australian children with poorer social skills) were *less* likely to have carers and parents who disagreed in their expectations for obedience. Vietnamese children with better social skills (compared to Vietnamese children with poorer social skills) were *more* likely to have carers who cooperated with their parent's views on childrearing. Somali children with more behaviour problems (compared to Somali children with fewer behaviour problems) were *more* likely to have parents and carers who differed in their expectations for cognitive development. Finally, Somali children with better motor skills (compared to Somali children with poorer motor skills) were *less* likely to have carers who ignored their parent's views on childrearing.

However, Vietnamese children with more behaviour problems were *less* likely to have parents that differed in their expectations for cognitive development. This was the only finding that went against the trend for home-childcare discontinuity to predict poorer outcomes. It is likely that this anomalous finding is attributable to the small sample size that was used in the analysis of Vietnamese child outcomes.

### **Implications**

The current study suggests that children's experiences at home and in childcare interact to affect child development in a very real way. Agreement between child rearing approaches adopted in the socialising worlds of home and childcare and caregiving practices that support parents' childrearing approaches may be important determinants of quality care.

Thus, programs that support a multicultural perspective; that is, respecting cultural differences and resolving cultural conflicts related to care practices through open dialogue and negotiation, should be fostered in childcare services. This may also involve financial assistance for ethnic children's service workers and support units.

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