



Does type of childcare in infancy predict two-year-olds' adaptation to group care?



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Children's adaptation / adjustment to child care

A U S T R A L I A

- A review of research on infant-toddler child care (both large and small scale studies) shows a variety of ways to describe adjustment:
 - well-being (de Schipper, Tavecchio, van IJzendoorn, Zeijl, 2004)
 - behaviour problems (NICHD ECC, 1998; Harrison, 2008)
 - social competence (Howes & Hamilton, 1993; Harrison, 2008)
 - play/exploration (Thyssen, 2000)
 - caregiver relationship (Ahnert, Pinquart, Lamb, 2006)
 - participation in community of peers (Elfer, 2006)

Adaptation to group care as a daily transition

A U S T R A L I A

- Transition to child care typically understood and investigated in terms of ‘starting care’
- but children also make daily transitions as they arrive, reunite with familiar carers and other children, and separate from the parent
- and children transition again when they are reunited with the parent and leave the care setting

- Adaptation = managing these transitions well
- What is an adaptive transition?
- What explains and supports an adaptive transition?

Influences on infant-toddler adjustment to care

A U S T R A L I A

- Characteristics of the child
 - Gender, age
 - male (de Schipper et al., 2004); female (Ahnert et al., 2006)
 - Temperament
 - difficulty adapting to novelty; irritable (de Schipper et al., 2004)
 - Affect regulation
 - negative emotion during transition to care (Ahnert et al., 2004)
 - Communication
 - Gestures/signals in response to carer communication (Vallotton, 2010)
 - Attachment relationship
 - secure toddler-mother attachment (Ahnert et al., 2004)

Influences on infant-toddler adjustment to care

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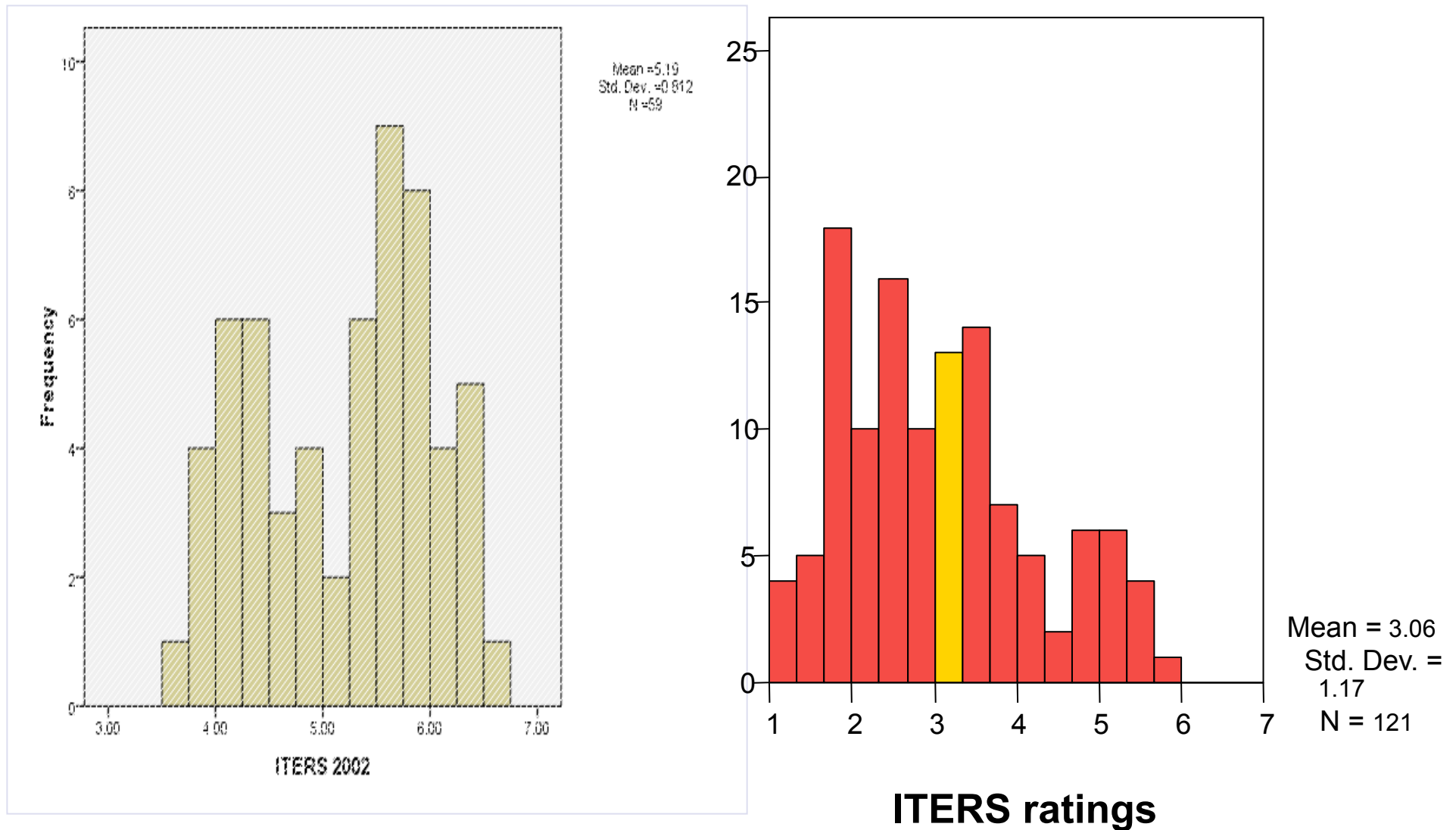
- Characteristics of the transition
 - Structural support
 - Primary caregiver system (Dalli, 1998; Elfer, 2006)
 - Orientation period
 - Number of days spent at the centre with mother present (Ahnert)

Influences on infant-toddler adjustment to care

A U S T R A L I A

- Characteristics of the care setting
 - Quality
 - Opportunities for play – content /meaning (Thyssen, 2000)
 - Caregiver language/stimulation (ORCE: NICHD ECC, 2000)
 - Ratios of adults-to-children (Harrison, 2008)
 - Carer engagement in play/interaction or non-play (Harrison, 2008)
 - Global measures; eg. Infant Toddler Environment Rating Scale (ITERS) (Harms & Clifford, 1980)
 - Caregiver relationship
 - Caregiver availability (de Schipper et al., 2004)
 - Type
 - Multiple care settings
 - Centre vs home-based care settings (Ahnert et al., 2006)

Observed ratings of quality in Australian and US centres



Research questions

A U S T R A L I A

1. Do carer-reported arrival, separation and reunion behaviours at daily transitions provide a coherent measure of adjustment in child care?
2. Does transition behaviour differ by type of care?
3. Does type of care in infancy influence transition behaviour in two-year-olds?
4. Do child characteristics predict transitioning behaviour in two-year-olds?



Growing up in Australia: the longitudinal study of Australian children

- an Australian Government Initiative

- 10,000 families, 5,000 babies (6-12 months), 5,000 4-5 year olds
- nationally representative sample
- full assessment in home every two years from 2004 to 2020+
- parent interviews, child testing, caregiver mail-back questionnaire
- mid-wave parent questionnaire
- broad areas: family functioning, health, child care, education

www.aifs.gov.au/growingup



Type of child care



1. Parent interview

- “Over the past 1 month has [*child’s name*] been looked after at regular times during the week by anyone other than you (or [*partner’s name*])?”
- Details collected on up to **three** current arrangements

2. Categorised

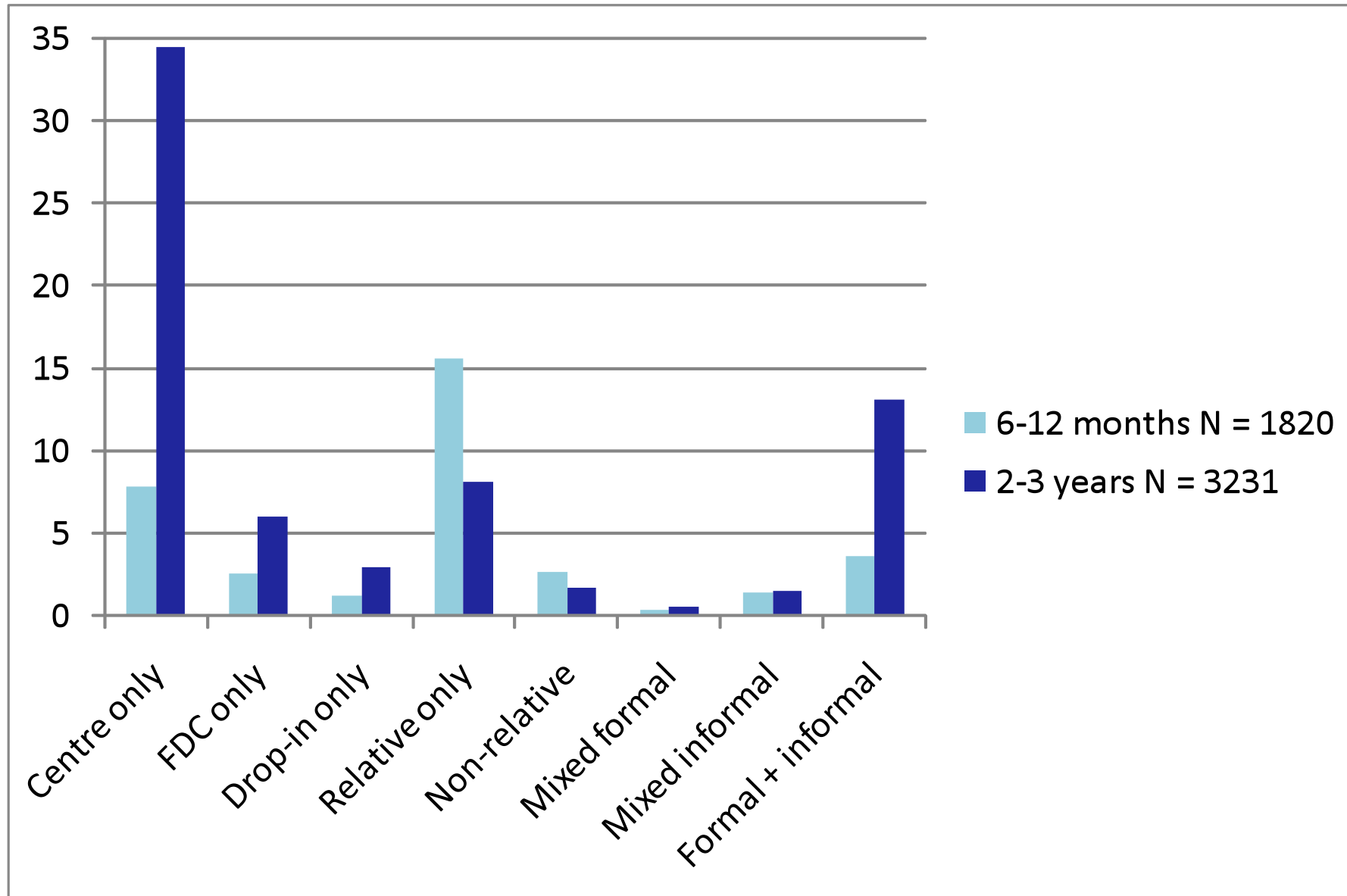
- Formal care = government-regulated LDC centres and FDC homes
- informal care = relatives and non-relatives, as well as ‘drop-in’ care

3. Combined

- to construct a summary of each child’s child care arrangements at age 0-1 years and at age 2-3 years.
- Eight care patterns
 - Single type of care each week
 - Multiple care arrangements each week

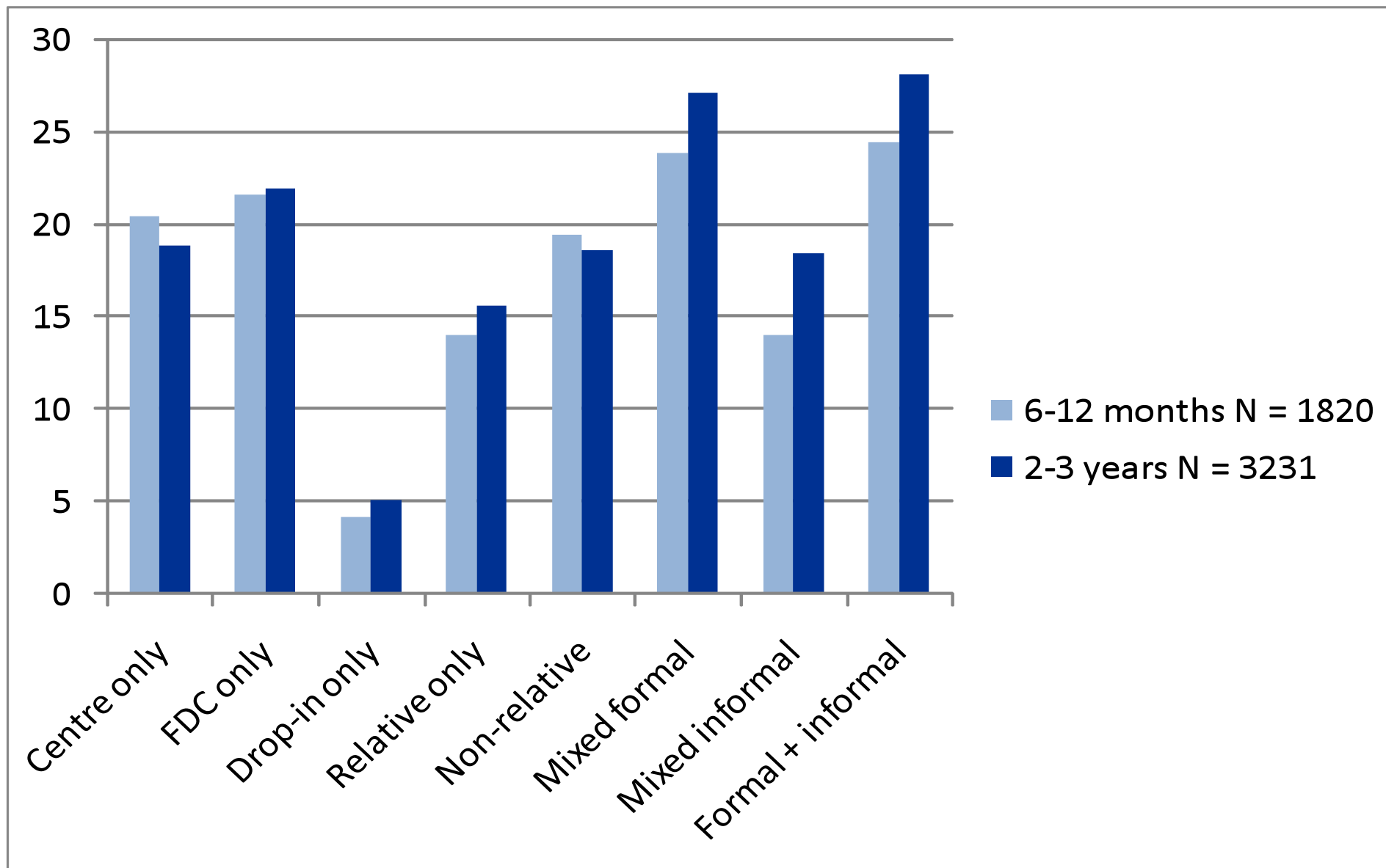
Percent of children in 8 care types: single/multiple care

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Hours of care per week in single and multiple care

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Selected LSAC measures



1. Temperament (2-3 years)

- approach (eg., pleasant when first arriving in unfamiliar places)
- persistence (eg., plays continuously >10 min with favourite toy)
- reactivity (eg., responds to frustration intensely)

2. Maternal separation anxiety (6-12 months)

- proxy for attachment relationship (Harrison & Ungerer, 2002)

3. Carer-child relationship (6-12 months & 2-3 years)

- closeness

4. Childcare Separation/Reunion Scale (2-3 years)

- LSAC short-version of NICHD ECC measure

NICHD SECCYD, Childcare Separation/Reunion Scale

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- The original scale consists of 20 items designed to assess the socioemotional reaction of children when the child is left with caregiver and when parent returns, and 20 items to assess the separation and reunion behaviors of the parent (McCartney, K., & Beauregard, K. (1991) *Child care Separation/Reunion Scale*, University of New Hampshire, unpublished measure)
- LSAC selected 14 items
 - 7 assess the child's response at arrival/separation
 - 6 assess the child's response at reunion/departure
 - 1 assessed parent behaviour
- Ratings are on a 4-point scale (never, sometimes, often, always)
- Factor analysis generated 3 factors
 - Child positive behaviours on arrival/separation (24.6% of variance)
 - Child positive behaviours on reunion (19.1% of variance)
 - Parent/child difficulty with separation/reunion (8.1% of variance)

	F.1	F.2	F.3
When this child arrives he greets you enthusiastically	.754	.080	.075
When child arrives he seems angry or sad	-.704	.061	.253
While parent is there child maintains physical contact with parent	-.528	.419	.214
While parent is there child plays with other children	.702	-.074	.097
While parent is leaving child says goodbye in some way	.736	.183	-.039
While parent is leaving child seems angry or sad	-.720	.154	.264
After parent leaves child become involved within 3 minutes	.575	.112	.016
Parent stays too long before leaving	-.249	.078	.584
Upon return of the parent child greets parent as soon as possible	.071	.738	-.016
Child stops playing easily when parent arrives	-.088	.725	-.140
When upset child accepts comfort from parent	.043	.623	-.111
Child cooperates getting ready to go home	.073	.594	-.388
At the point of leaving this child is upset	.033	-.253	.688
In general child ignores or avoids parent	.047	-.263	.633

Coherence/validity of transition behaviour ratings

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Internal consistency

F. 1 Arrival/separation: Cronbach's alpha = .80

F. 2 Reunion: Cronbach's alpha = .68

Correlations with other measures of adjustment

BITSEA problem behaviour:

F. 1 Arrival/separation: $r = -.37$

F. 1 Reunion: $r = -.16$

BITSEA social competence:

F. 1 Arrival/separation: $r = .35$

F. 1 Reunion: $r = .17$

STRS closeness/conflict:

F. 1 Arrival/separation: $r = .38 / r = -.21$

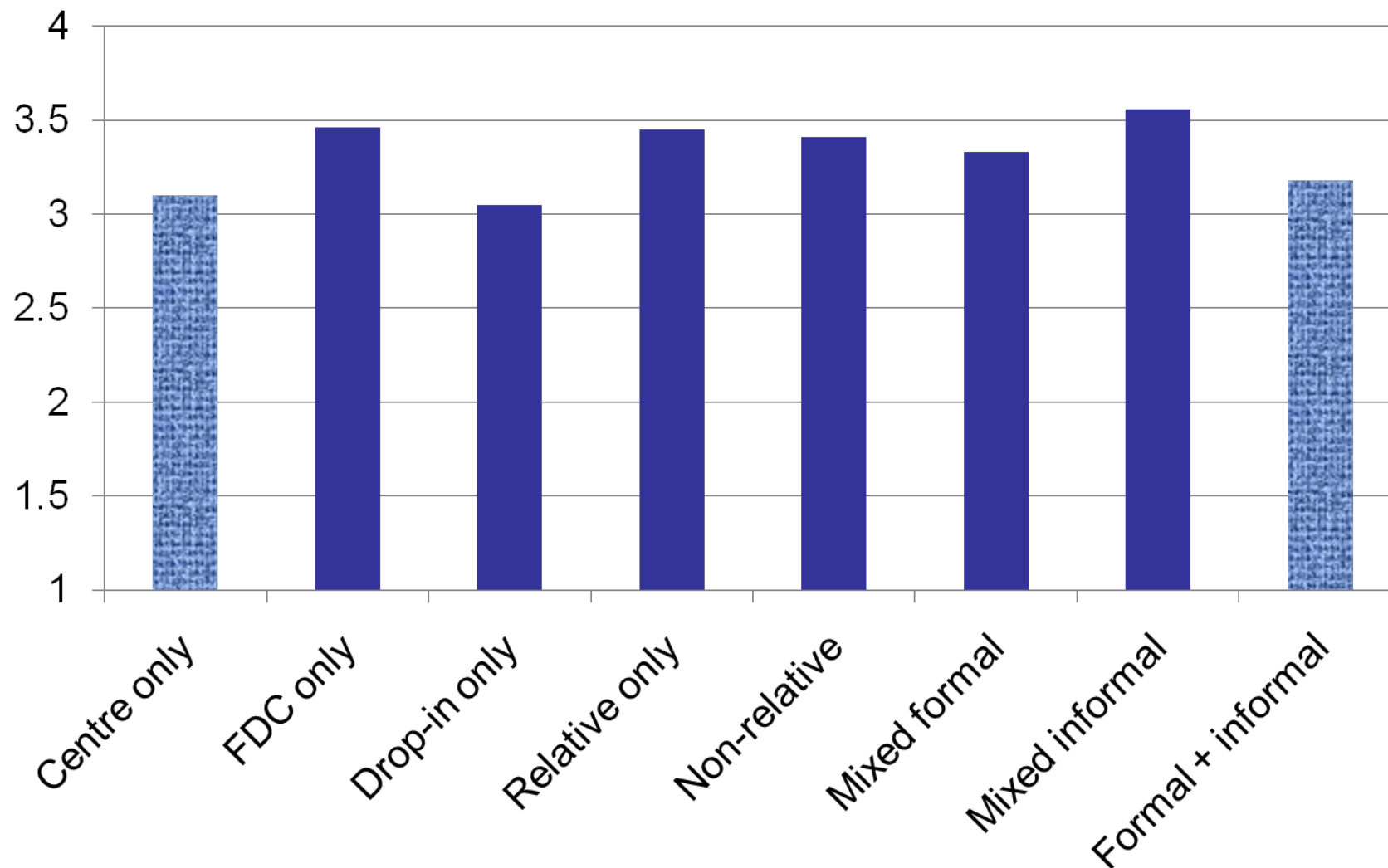
F. 1 Reunion: $r = .11 / r = -.21$



Child arrival/separation behaviour by type of care

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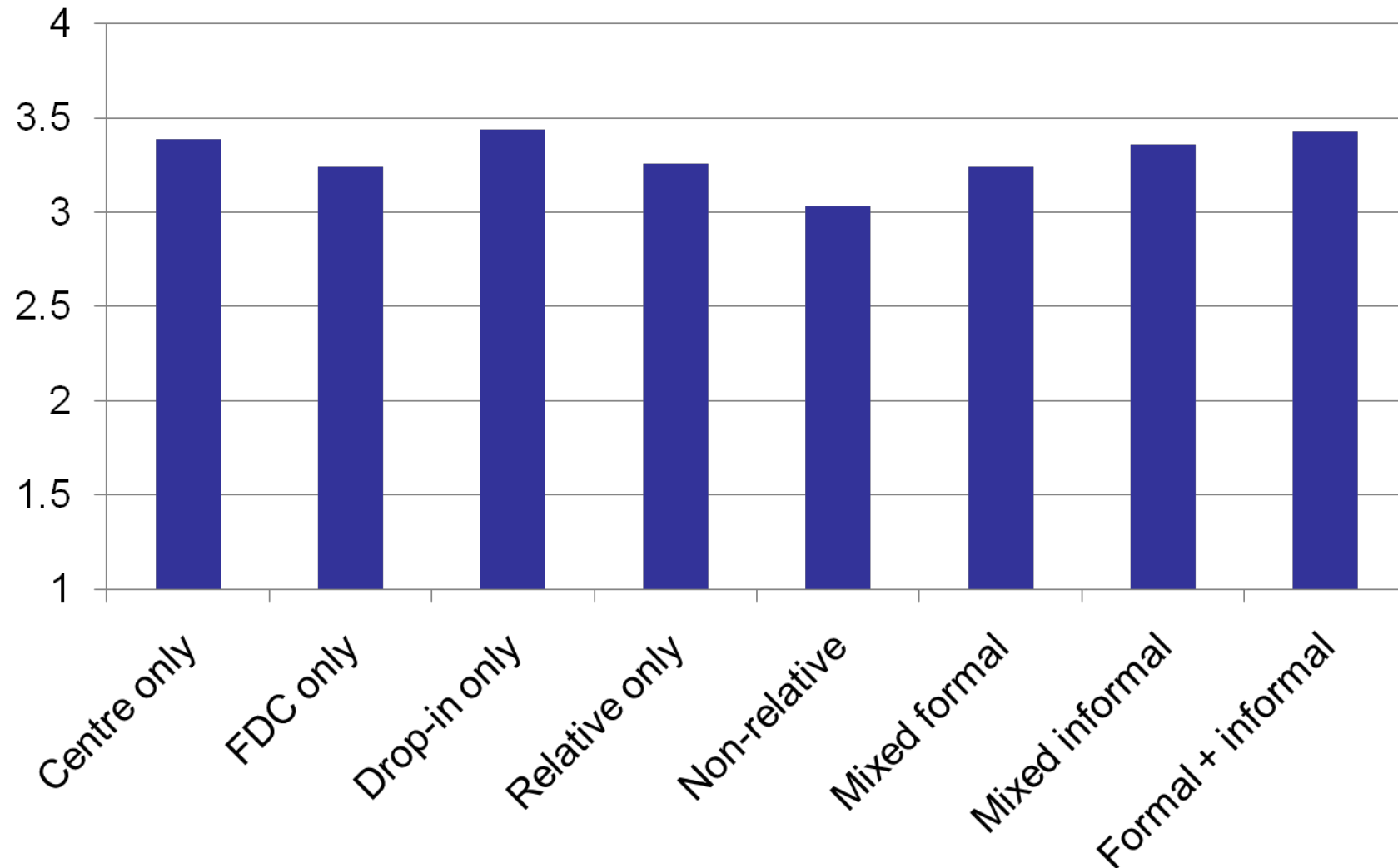
$F = 19.90, p < .001$



Child departure/reunion behaviour by type of care

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$F = 4.08, p < .001$



Does type of care in infancy influence transition behaviour in centre care at age two years?

- Reduce 8 types of infant care to 3 (omit drop-in care)
 - Centre care
 - long day care only, mixed formal care (LDC+LDC/FDC)
 - Home-based care
 - FDC, relative, non-relative, mixed informal
 - Centre + Home care
 - mixed formal + informal
- Select only those children in centre care at age 2
- Include children not in care in infancy
 - 4 categories

Transition behaviour at 2-3 years by type of infant care

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Type of care received in infancy (6-12 months)	Infants N = 5045		2-3 year olds in Centre care with carer data N = 1128	Arrival/ separation behaviour ratings	Departure behaviour ratings
Parent only	3287	65%	585	3.07	3.35
Centre care (single or mixed formal)	413	8%	241	3.11	3.39
Home-based care (FDC, relative, non- relative, mixed informal)	1150	23%	219	3.11	3.42
Centre + Home-based care	195	4%	83	3.11	3.40

Do child characteristics predict transition behaviour in centre care at age two years?

- Analysed potential child, family, and care predictors of arrival/separation behaviour and departure behaviour using GLM
- All children with covariates
 - Child age, gender
 - Child temperament (age 2-3)
 - Maternal separation anxiety (age 6-12 months)
 - Type of care in infancy
- Home vs centre children with above plus
 - Closeness in infant care
 - Closeness by care type

Predictors of transition behaviour at 2-3 years

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GLM	Arrival/ separation behaviour ratings	Departure behaviour ratings
Model effects	F = 4.9, p < .001	F = 1.00, ns
Child sex (higher for girls)	***	-
Child age	-	-
Temperament – approachability (+)	***	-
- persistence	-	-
- reactivity (-)	*	-
Maternal separation anxiety	-	-
Type of infant care	-	-

Conclusions/Discussion

A U S T R A L I A

- Children's typical behaviours at arrival/separation and departure from child care provide a new way of considering and measuring their adjustment to care
- Transitioning behaviour was moderately correlated with social competence, behaviour problems and caregiver relationship
- Although transitioning behaviours were related to current child care arrangements (being less adaptive for children attending centre care and more adaptive for home-based care)
 - there was no evidence (to date) that type of care in infancy had a long-term impact of adjustment
- Child temperament and sex were the key predictors
- Further analyses will examine other aspects of infant care