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Demographic Study of Divorce

Separation and reproduction in relation to the death of a child

Fjalar Finnäs, Mikael Rostila & Saarela

Background

- Losing a child: rare, unexpected and traumatic event
- Affect parental morbidity and mortality
- Few studies on parental relationship stability (divorce risk)
- Inconclusive evidence, due to methodological limitations
- Potential mechanisms: (a) increased divorce risk because of relationship strain and parental health problems, (b) decreased divorce risk because of improved relationship quality if the stressful event increases cohesion
- However, separation is strongly related to family size (children), and losing a child might affect future fertility

‘The replacement child’

- Parents of fertile age: inclined to give birth to a new child
- A constructive action to cope with the loss
- Or because predetermined aim to have family of particular size
- Hence divorce could be dependent on child loss, but child loss might also affect fertility (parity progression)
- These endogeneity problems also likely reasons to why no consistent evidence in support of bereavement effect on divorce
- In-depth empirical study must prospectively follow the couples

Research on child loss and divorce

- Most studies: small-scale datasets from surveys, clinical descriptions of participants in grief support groups, or retrospective reports
- Mixed results: quite few argue that there is an effect
- Only two large-scale studies: Sweden (van den Berg et al., 2012), Norway (Lyngstad, 2013)
- No sample attrition, no self-reporting bias
- Suggests an effect, but not explicitly concerned with the fact that the association between bereavement and divorce needs to allow for compensatory behaviour in terms of new births

The data we use

- Register based longitudinal data from Finland
- Couples from moments when marry and when become parents
- 1971-2003, socioeconomic and demographic variables
- 70% of all child deaths during first two years of life
- Random (representative) sample of the population of Finland
- In total: 123,435 marriages (≤ 15 yrs)

Setup

- First: one-year divorce risks with retrospective information (no follow-up): 'having ever experienced child loss'
- Leads to erroneous conclusions, since bereavement strongly related to parity progression
- Second, therefore: prospectively observe each couple over time (maximum 15 yrs), by parity, process time starts from the birth of the youngest child: 'child loss within one year after the birth of the youngest child'
- Cox regressions, focus is on risk ratio of divorce and parity progression, respectively, between bereaved couples and non-bereaved couples

Table 1. Relative divorce risks by bereavement and parity (with 95% confidence intervals), without follow-up

	Bereaved	Non-bereaved	Row ratio
Parity			
0	-	1	-
1	1.21 (0.85-1.73)	0.97 (0.93-1.01)	1.25
2	0.71 (0.55-0.92)	0.54 (0.51-0.56)	1.33
3	0.56 (0.43-0.71)	0.38 (0.35-0.40)	1.48
4+	0.40 (0.26-0.62)	0.30 (0.27-0.35)	1.31
n, observations	1,321,035		

Table 2. Relative risks of parity progression by bereavement and parity (with 95% confidence intervals), without follow-up

	Bereaved	Non-bereaved	Row ratio
Parity			
0	-	1	-
1	3.17 (2.87-3.50)	0.69 (0.68-0.70)	4.58
2	1.25 (1.16-1.35)	0.23 (0.22-0.23)	5.54
3	0.46 (0.41-0.50)	0.21 (0.21-0.22)	2.16
4+	0.66 (0.57-0.77)	0.58 (0.55-0.60)	1.15
n, observations	1,321,035		

Table 3. Parity distribution by bereavement (%), ten years after marriage

	Berea- ved	Non- berea- ved
Parity		
0	-	6.8
1	8.9	25.6
2	28.9	46.9
3	39.1	16.6
4	17.1	2.9
5+	6.0	1.1
Total	100.0	100.0
n, couples	1,061	100,217

Table 4. Association between bereavement and divorce risk by parity, with follow-up

	Rela- tive risk	95% confidence interval	n, coup- les	n, divor- ces
Parity one				
The child survives	1		106,697	18,974
The child dies	1.01	(0.82-1.24)	513	96
Parity two				
Both children survive	1		79,829	12,307
1st child dies	1.07	(0.87-1.33)	509	92
2nd child dies	1.12	(0.88-1.42)	434	73
Parity three				
All children survive	1		29,227	3,737
1st child dies	1.22	(0.94-1.59)	383	63
2nd child dies	1.20	(0.91-1.57)	378	59
3rd child dies	1.08	(0.70-1.66)	167	26

Table 5. Association between bereavement and risk of parity progression by parity, with follow-up

	Rela- tive risk	95% confidence interval	n, coup- les	n, births
Parity one				
The child survives	1		106,697	80,623
The child dies	2.24	(2.04-2.47)	513	447
Parity two				
Both children survive	1		79,829	29,771
1st child dies	2.74	(2.45-3.06)	509	346
2nd child dies	4.51	(4.01-5.07)	434	313
Parity three				
All children survive	1		29,227	7,499
1st child dies	1.22	(1.02-1.46)	383	137
2nd child dies	1.51	(1.27-1.79)	378	150
3rd child dies	2.61	(2.07-3.27)	167	104

Conclusion

- A (minor) child's death has only a modest influence on marital stability, whereas its effect on fertility (parity progression) is considerable
- Also as compared to estimates for effects of the background variables (not shown), the effect of bereavement on divorce is, if not non-existent, at least small