
Marital Status Transitions and Domestic Labour

A multiprocess, multilevel approach

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Introduction:

Life course pathways & housework time

- Using longitudinal survey data to investigate relationships between women's time on domestic labour and transitions through partnerships and marriage.
- It is well-known that pathways through the lifecourse have changed in recent years.
- These changes have consequences for understanding the organisation of domestic work.
- Important because research has shown that prior relationship experiences and events will affect the ways in which individuals and couples organise domestic labour in their current households.

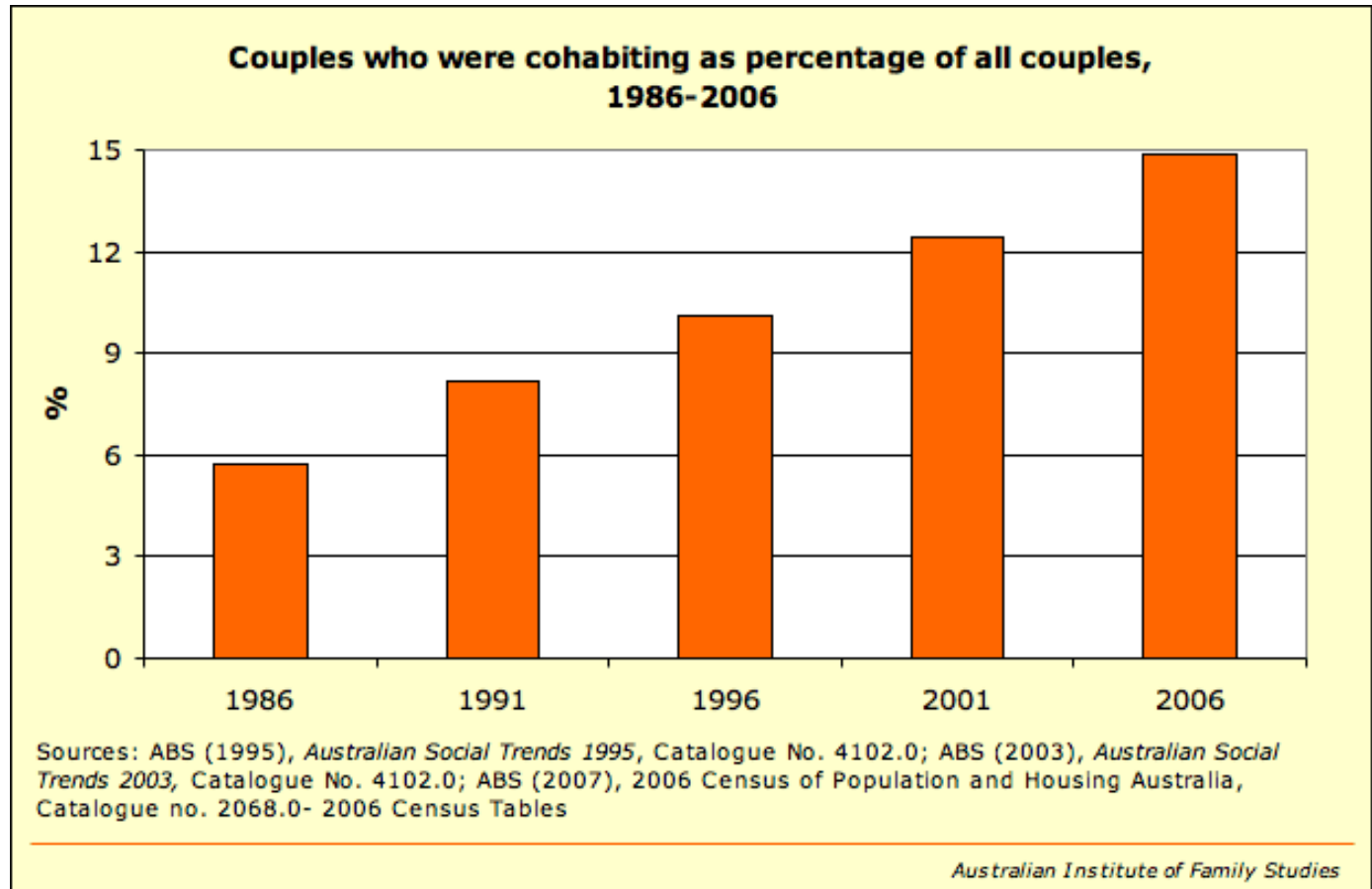
Introduction/2

- Differing levels of responsibility for domestic labour has consequences for :

relationship stability, family experiences and individual wellbeing, the relationship of households to the labour market, and in particular women's access to paid employment.
- Key factor in increasing overall workloads and feelings of time pressure and strain.
- **Question:**

Does time spent in a cohabiting relationship prior to marriage lead to more egalitarian housework arrangements after marriage?

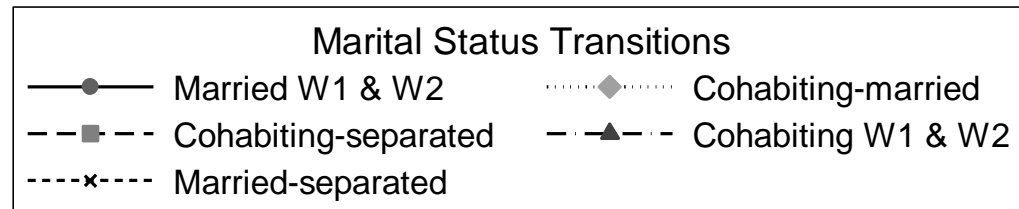
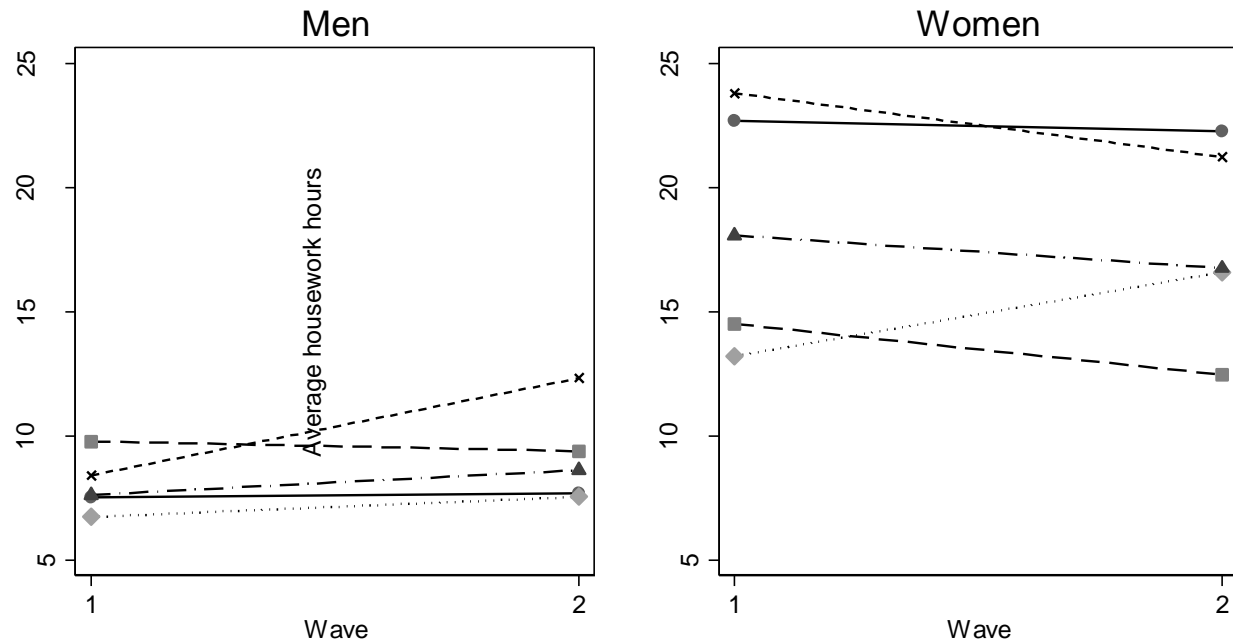
Trends in cohabitation (Australia)



Trends in cohabitation/2

- Australia has seen an enormous growth in the percentage of marriages preceded by de facto cohabitation
- The percentage of couples living together before marriage has increased from 16% in 1971 to 78% in 2008
- Similar to several other countries including the United States, Canada, Britain, West Germany, the Netherlands
- So if time pressures and workload strain is reduced by taking different life course pathways, then it is important to know what these are.

Trends in housework hours: 2 waves from NLC survey



Background

- Our earlier work has shown that lifecycle events have a much greater affect on women's housework time than men's (Baxter, Hewitt & Haynes, JMF, 2008)
- Women's housework hours vary considerably in relation to marital, parental and employment status with women generally increasing their hours in response to the formation of partnerships and the arrival of children.
- Men on the other hand, on average, do much the same number of housework hours regardless of marital, parental or employment status.
- For this reason, we now focus on women, examining changes in women's housework hours in relation to marital transitions – both into and out of partnerships.

Background/2

- While previous longitudinal studies offer some important insights into the association between transitions into and out of relationships and changes in time spent on domestic work, questions about selection and causality remain.
- For example, do women who do more housework select into marriage rather than cohabitation?
- Do women who do less housework select out of marriage?
- We take our earlier analyses further by considering the joint associations between housework time and marital status transitions.

Background/3

- We consider the time spent on housework as a process that is influenced by both observed and unobserved factors related to a woman's characteristics or circumstances
- This process varies depending on current marital status and transition from a previous marital status.
- We also consider that a marital transition is a process that is influenced by observed and unobserved factors that may be similar to those in the housework process.
- Thus in this paper we consider time spent on housework and marital transitions as two related processes.

Research Questions

1. What is the effect of a marital status transition on women's time in housework?
2. Is there a selection effect of women who are prone to higher levels of domesticity into marriage compared to cohabiting relationships?
3. Do these relationships differ between Australia and Britain?

Data for Australia and Britain

- We consider 2 sources of data - HILDA & BHPS
- Household, Income and Labour Dynamics in Australia panel survey is a broad social and economic survey of households in Australia
- Implemented using multistage sampling design similar to BHPS
- Wave 1 commenced in 2001 with 7,682 households, 13,969 persons
- Have analysed 6 waves of data from 2001-2006 from both HILDA & BHPS (for comparison)

Sample Restrictions for Analysis

- Sample includes women of all marital statuses but excludes widows
- Restricted to women who complete surveys across all 6 waves and have responses for dependent variables on at least one wave
- HILDA sample: waves 1-6
 - 4,252 women & 19,886 observations
- BHPS sample: waves 11-16
 - 5,374 women & 26,267 observations

Variables - comparable for both HILDA & BHPS

Dependent variables

1. Time spent on housework

2. Marital transition

- from single status to cohabitation or marriage
- from cohabitation to single or marriage
- from marriage to single

Independent variables

marital status, number of children, birth since last wave, age, household income, education, employment status, gender role attitudes

Previously...

- With only 2 or 3 waves of data (NLC, HILDA) we modelled housework time as a single process
- Lagged variables for marital status were included to estimate the effect of previous marital status on housework.
- A linear mixed model with random intercept was used to separate out the within and between effects and to control for unobserved variation.

Baxter, Hewitt & Haynes (2008) JMF, 70, 259-272

Baxter, Haynes & Hewitt (In press) Journal of Family Issues

Method of Analysis

- with two processes

- Linear mixed model for housework hours

Y_{tji} is time on h'work at wave t , for individual i in marital status j
where 1 = single, 2 = cohabiting, 3 = married

X_{tij} are covariate values, I_j is an indicator variable,

α_{ji} are random effects (REs) for individual i in marital status j

$$\ln(Y_{tji}) = u_j + \beta_j X_{tij} I_j + \alpha_{ji}$$

- If independent, the REs for each marital status are normally distributed

i.e. $\alpha_{ji} \sim N(0, \sigma_j)$ where $j = 1, 2, 3$

Method of Analysis cont.

- Multinomial logit model with random effects for transitions out of a marital status
 - Single to cohabiting or married where $j=2,3$ (2 REs)
 - S-S-S**
 - S-S-C**
 - S-S-M**
 - Cohabiting to single or married where $j=1,3$ (2 REs)
 - C-C-C**
 - C-C-S**
 - C-C-M**
 - Married to single where $j=1$ (1 RE)
 - M-M-M**
 - M-M-S**

(in each case reference is 'no transition')

Method of Analysis cont.

- Each model is of the form below where p_{tji} is the probability of individual i transitioning out of the specified marital status k into status j

$$\log it(p_{tkji}) = u_{kj} + \beta_{kj} X_{tkji} + \alpha_{kji}$$

Method of Analysis cont.

- **Multilevel, multiprocess model**
 - Linear mixed model for housework hours (3 REs)
 - Multinomial logit model with random effects for transitions out of each marital status: S, C, M (5 REs)
 - A system of equations estimated simultaneously
 - The 8 random effects are permitted to covary

- **Estimation using MCMC via WinBUGS**
 - Non-informative priors on regression coefficients
 - Multivariate normal prior distribution on covariance matrix for 8 random effects

Distribution of Transitions

(in person-years)

	HILDA (Waves 2 – 6)	BHPS (Waves 12 – 16)
Married	12,031	16,616
Single	5,279	6,855
Cohabiting	1,566	2,796
Single – Married	99	131
Single – Cohabit	353	419
Cohabit – Married	213	314
Cohabit – Single	168	214
Married – Single	177	188
Woman-years	19,886	26,267
Number of women	4,252	5,374

Covariate effects for time spent on housework (logged)

ln(hwrk)	Results for Australia			Results for Britain		
	Single	Married	Cohabit	Single	Married	Cohabit
Hhold income	-0.129*	-0.016	-0.022	-0.012*	-0.0006	-0.005
Bach degree	0.077*	-0.013	-0.015	-0.066*	-0.190*	-0.133*
1 child	0.472*	0.206*	0.421*	0.168*	0.178*	0.252*
2 child'n	0.509*	0.264*	0.573*	0.282*	0.267*	0.349*
3+ child..	0.512*	0.316*	0.495*	0.469*	0.384*	0.479*
Full-time work	-0.255*	-0.460*	-0.410*	-0.173*	-0.012*	-0.250*
Part-time work	-0.183*	-0.178*	-0.237*	-0.096*	0.001	-0.095*

Transition effects for time spent on housework (logged)

In(hwrk)	Results for Australia			Results for Britain		
Transitions	Single	Married	Cohabit	Single	Married	Cohabit
S-C	0.366*			0.290*		
S-M	0.321*			0.129*		
M-S		-0.141*			-0.050	
C-S			-0.121			-0.300*
C-M			0.010			0.055

- Transition to partnership associated with increase in time on housework
- Separation associated with decrease in time on housework
- Significance differs for Australian and Britain

Covariate effects for log odds of partnership formation

Log odds Transition	Results for Australia			Results for Britain		
	S-M	C-M	S-C	S-M	C-M	S-C
Hhold income	2.395*	-3.706*	1.228*	0.061*	-2.562*	0.056
Bach degree	0.267	0.768	-0.221	0.083	0.460	0.518*
First birth	2.764	-1.013	3.377*	2.359*	-1.374	0.394
Higher birth	-0.621	-2.775	1.666*	1.626*	-0.843	1.105

- In **Australia**, the likelihood of a **transition from single to cohabiting** is associated with a **birth since previous wave**
- In **Britain**, likelihood of a **transition from single to married** is associated with a **birth since previous wave**

Covariate effects for log odds of separation

Log odds Transition	Results for Australia		Results for Britain	
	C-S	M-S	C-S	M-S
Hhold income	0.846*	-3.922*	-0.002	-0.065*
Bach degree	0.340	0.024	0.489*	-0.641*
First birth	-0.197	-0.973	-0.021	
Higher birth	-0.690	-1.252	0.129	-0.756

- In **Australia**, likelihood of **separation from cohabitation increases with income** but likelihood of **separation from marriage decreases with income**
- In **Britain**, likelihood of **separation from cohabitation increases for women with bachelor's degree** and **separation from marriage decreases with income and with bachelor degree**

Correlation of random effects

- influence of unobserved characteristics

Random effect	Results for Australia		Results for Britain	
	HW-single	HW-married	HW-single	HW-married
HW-single				
HW-married	0.618*		0.618*	
HW-cohabit	0.677*	0.606*	0.650*	0.633*
S-M trans		-0.187*		-0.163*
S-C trans				
C-M trans		-0.169*		-0.278*
C-S trans				-0.214*
M-S trans		-0.246*		-0.181*

Selection Effects

In Australia and Britain

- Women who have a propensity to spend more time on housework when single also do more housework than average when cohabiting or married
- Women who marry indirectly via cohabitation are likely to spend less than average time on housework when married
- Women who separate from marriage are likely to spend less than average time on housework when married

Additionally in Britain

- Women who separate from cohabitation are likely to spend less than average time on housework when married to a different partner

Domestic Time

- Overall our results suggest similar processes linking marital status transitions and time spent on housework for women in both Australia and Britain.
- Generally, movement into a relationship and the birth of children increases women's time on domestic labour in both countries.
- Women who have higher levels of domesticity when single spend more time on housework after marriage, while women who spend less time on housework when married are more likely to separate. This implies a selection effect of certain kinds of women out of relationships.

Cohabitation

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- Also observe variations in the processes associated with transitions into cohabitation and the effect of income and education on relationship transitions and domestic time.
 - Single British women are more likely to marry following the birth of a child whereas single Australian women are more likely to cohabit following a birth.
 - These results imply differences across countries in the role and meaning of cohabitation.
 - Britain - women may view cohabitation as a temporary arrangement prior to marriage which still plays a major role in the bearing and raising of children.
 - Australia – cohabitation not just a precursor to marriage, but an acceptable form of relationship union in its own right, and one suitable for raising children.

Work in Progress

- Extending data using 8 waves of HILDA
- Include duration of time in marital status before experiencing a transition
- Developing data to include marital and cohabitation histories where possible.
- Combining processes using linear model for housework hours and event history model for marital transitions.