Rational Choice Sociology: Theory and Empirical Applications
Workshop at VIU, San Servolo

12/04/08

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Does it matter if you met your girl while playing tennis or while drinking beer?

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MZES

Overview

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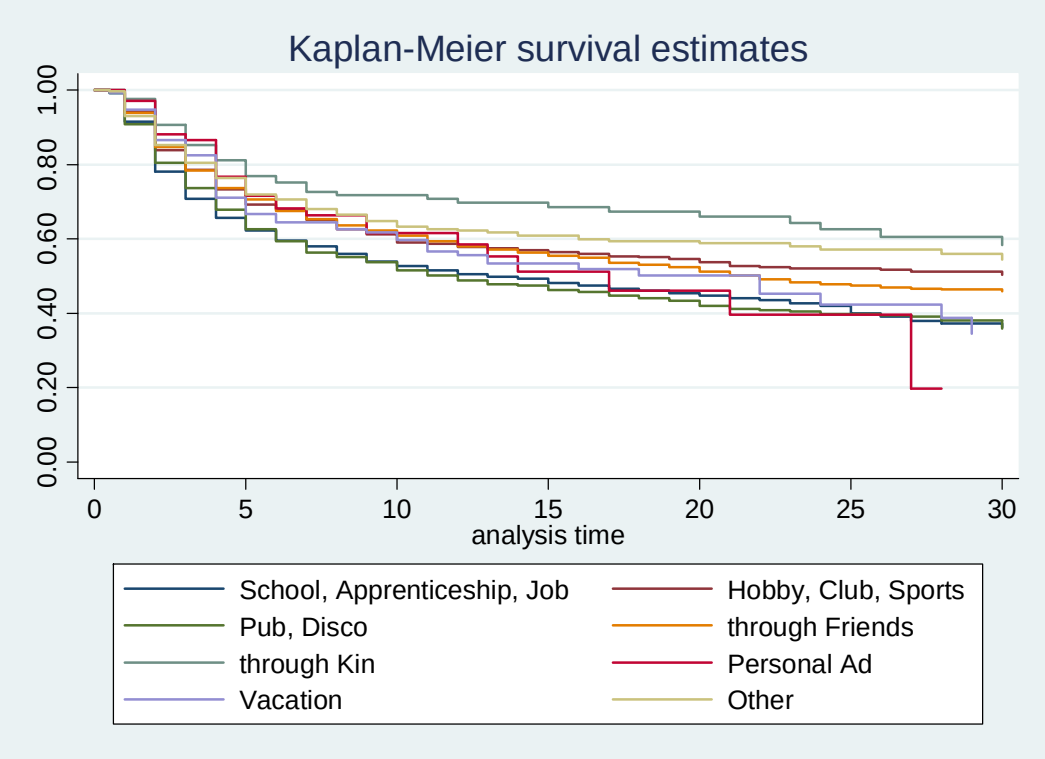
1. The Puzzle
2. Theoretical Framework and Arguments
3. Data and Methods
4. Analyses
5. Conclusion

The Puzzle



How was your initial encounter?	Percent		Percent
In School, Apprenticeship, Job	21.45	Through Kin	1.89
Hobby, Club, Sports	11.26	Personal Ad	1.07
Pub, Disco	21.56	Vacation	2.16
Through Friends	34.98	Other	5.63
n= 6,998			

Why? Theoretical Framework

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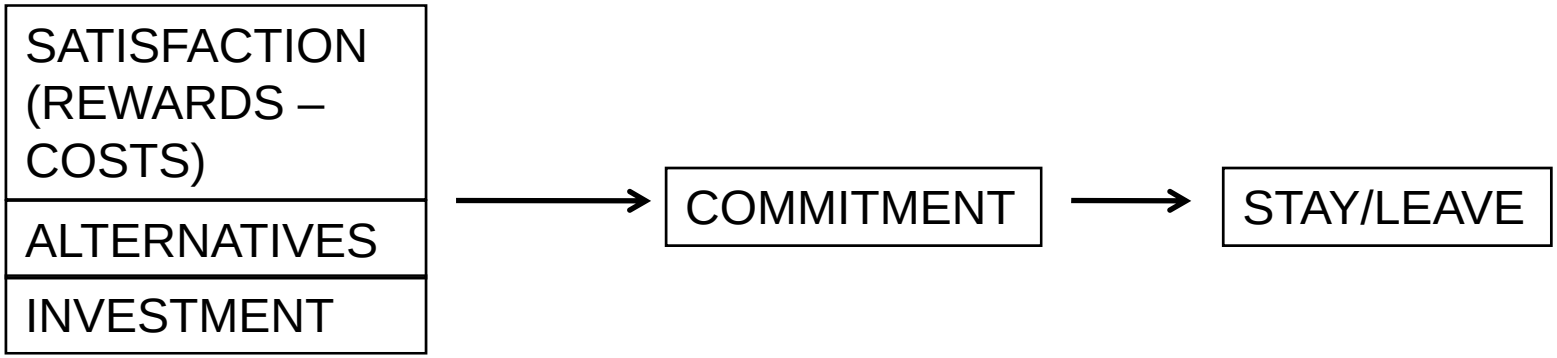
- Social Exchange Theory
- “Relationships grow, develop, deteriorate, and dissolve as a consequence of an unfolding social exchange process, which may be conceived as a bartering of rewards and costs both between the partners and between members of the partnership and others" (Huston/Burgess 1979)
- „Investment Model of Social Relations“ (Rusbult 1980)



- Love and Rational Choice?
  - Rusbult (1983):during the early 'honeymoon' period of a romantic relationship, the balance of exchange was largely ignored.
  - Enzo (2005): Neurotrophine level in blood high during the first year of relationship.

Why? Theoretical Arguments

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1. Homophily:
   - homogenous relationships are more stable
   - structured meeting leads to homogenous partners
2. Information
3. Social Embeddedness:
   - Predicted Outcome Theory: social embeddedness high → cost of breaking up high → uncertainty reduction
   - Costs of breaking up

Hypotheses

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	Information	Homophily	Social Embeddedness
In School, Apprenticeship, Job	0	+	+
Hobby, Club, Sports	-	+	0
Pub, Disco	-	-	-
Through Friends	+	+	+
Through Kin	+	+	+
Personal Ad	-	-	-
Vacation	-	-	-
Other	?	?	?

Data and Method

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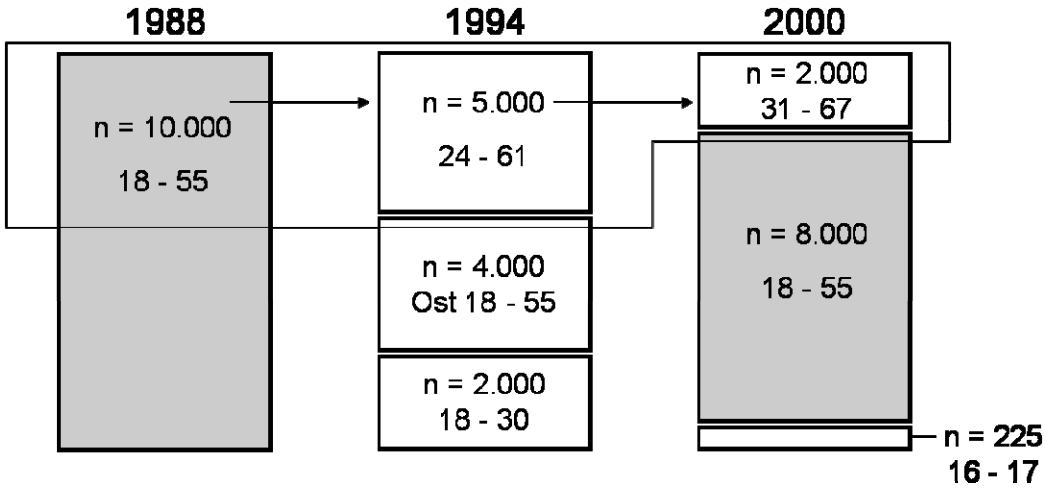
- Biography of all „close heterosexual intimate relations“ longer than one year

- Familiensurvey
- 3rd wave, without panel, without age 16-17
- no migrants
- no respondents from eastern Germany
- no missing values in the analysis
- → 4,588 respondents
- → 6,998 episodes, 3,826 censored

- Cox Regression
- Effect coding: deviations from the grand mean



Variables

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Variable	Obs	Mean	Std. Dev.	Min	Max
Age Consistency	6,998	.32	.47	0	1
Consistency of Religion	6,998	.65	.48	0	1
Interethnic Relation	6,998	.03	.16	0	1
Educational Consistency	6,998	.78	.42	0	1
No. previous relations	6,998	.34	.64	0	9
Initial Age	6,998	21.4	5.33	14	54
Cohort 1950-1970	6,998	.26	.44	0	1
Cohort 1971-1980	6,998	.34	.47	0	1
Cohort 1981-1990	6,998	.29	.45	0	1
Cohort 1991-2000	6,998	.11	.32	0	1
Region Urban	6,998	.61	.49	0	1
Region "Middle"	6,998	.29	.46	0	1
Region Rural	6,998	.09	.29	0	1
Age of Respondent	6,998	43.0	8.56	18	55
Female	6,998	.60	.49	0	1

Homophily

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	Model (1)	
In School, Apprenticeship, Job	1.20	(5.38)**
Hobby, Club, Sports	0.89	(-2.46)*
Pub, Disco	1.22	(6.04)**
Through Friends	0.94	(-2.08)*
Age Consistency		
Consistency of Religion		
Interethnic Relation		
Educational Consistency		
Episodes (censored)	6,998	(3,825)
Respondents	4,588	
Wald χ^2	76.90**	

z statistics in parentheses, exponentiated coefficients (hazard ratio), robust standard errors
* $p < 0.05$, ** $p < 0.01$

Homophily

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	Model (1)		Model (2) Homophily	
In School, Apprenticeship, Job	1.20	(5.38)**	1.14	(3.86)**
Hobby, Club, Sports	0.89	(-2.46)*	0.95	(-1.17)
Pub, Disco	1.22	(6.04)**	1.22	(5.93)**
Through Friends	0.94	(-2.08)*	0.94	(-1.80)
Age Consistency			1.23	(5.67)**
Consistency of Religion			0.71	(-9.10)**
Interethnic Relation			1.46	(4.56)**
Educational Consistency			0.74	(-7.48)**
Episodes (censored)	6,998	(3,825)	6,998	(3,825)
Respondents	4,588		4,588	
Wald χ^2	76.90**		317.25**	

z statistics in parentheses, exponentiated coefficients (hazard ratio), robust standard errors
* $p < 0.05$, ** $p < 0.01$

Information

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	Model (1)		Model (3) Information	
In School, Apprenticeship, Job	1.20	(5.38)**	1.16	(4.00)**
Hobby, Club, Sports	0.89	(-2.46)*	0.95	(-1.24)
Pub, Disco	1.22	(6.04)**	1.13	(4.06)**
Through Friends	0.94	(-2.08)*	0.91	(-3.08)**
No. of relationships			1.91	(7.28)**
First relationship			ref.	
1 previous relationships			0.70	(-3.49)**
2 previous relationships			0.41	(-4.06)**
3 or more prev. relationships			0.17	(-7.97)**
Intial Age			0.97	(-3.92)**
Episodes (censored)	6,998	(3,825)	6,998	(3,825)
Respondents	4,588		4,588	
Wald χ^2	76.90**		640.32**	

z statistics in parentheses, exponentiated coefficients (hazard ratio), robust standard errors
* $p < 0.05$, ** $p < 0.01$

Social Embeddedness

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	Model (1)		Model (4) Embeddedness		Model (5) Embeddedness	
In Education, Job	1.20	(5.38)**	1.18	(4.93)**	0.99	(-0.11)
Hobby, Club, Sports	0.89	(-2.46)*	0.91	(-2.06)*	0.76	(-2.82)**
Pub, Disco	1.22	(6.04)**	1.21	(5.85)**	1.44	(5.57)**
Through Friends	0.94	(-2.08)*	0.94	(-2.16)*	0.99	(-0.17)
Cohort 1950-1970			ref.			
Cohort 1971-1980			1.63	(7.26)**		
Cohort 1981-1990			2.02	(10.63)**		
Cohort 1991-2000			2.44	(12.68)**		
Region Urban					ref.	
Region "Middle"					0.74	(-3.78)**
Region Rural					0.60	(-3.67)**
Episodes (censored)	6,998	(3,825)	6,998	(3,825)	4,588	(3,767)
Respondents	4,588		4,588		4,588	
Wald χ^2	76.90**		1218.81**		614.06**	

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Preliminary Conclusion

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- Full model:
  - „School/Job“ negative, significant
  - „Disco“ negative, significant
  - „Friends“ and „Sports“ no deviation from the mean

- Homophily explains a fraction of „Meeting Effects“
- Social Embeddedness determinant of stability, but: no test.
- Information?

- Further Evidence:
  - Effects not time varying
  - Effects similar in „within estimation“ (fixed effects)

Marriage

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	Full Model		Full Model + Interactions	
In School, Apprenticeship, Job	0.102	(2.94)**		
Hobby, Club, Sports	-0.0589	(-1.29)		
Pub, Disco	0.181	(5.45)**		
Through Friends	-0.0613	(-1.94)		
Female	-0.296	(-8.16)**		
control variables omitted in table				
Female By Marriage				
"Job" By Marriage				
"Sports" By Marriage				
"Disco" By Marriage				
"Friends" By Marriage				
Marriage (tv)				
Episoden (zensiert)	6,998	(3,825)	6,998	(3,825)
Responenten	4,588		4,588	
Wald χ2	808.88**		1513.75**	

z statistics in parentheses, coefficients of cox regression, robust standard errors, omitted variables in table: "age consistency", "consistency of religion", "interethnic relation", "educational consistency", "no. of previous relations", "initial age", "cohort", "no. of relation"
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Through Friends	-0.0613	(-1.94)		
Female	-0.296	(-8.16)**	-0.275	(-6.74)**
control variables omitted in table				
Female By Marriage			0.225	(2.57)*
"Job" By Marriage				
"Sports" By Marriage				
"Disco" By Marriage				
"Friends" By Marriage				
Marriage (tv)			-1.580	(-19.49)**
Episoden (zensiert)	6,998	(3,825)	6,998	(3,825)
Responenten	4,588		4,588	
Wald χ2	808.88**		1513.75**	

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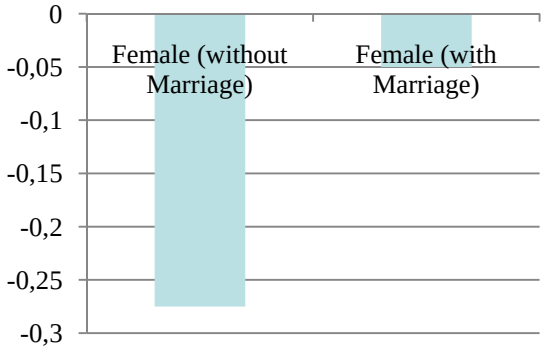

Marriage

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	Full Model		Full Model + Interactions	
In School, Apprenticeship, Job	0.102	(2.94)**	0.0252	(0.64)
Hobby, Club, Sports	-0.0589	(-1.29)	0.0101	(0.20)
Pub, Disco	0.181	(5.45)**	0.129	(3.44)**
Through Friends	-0.0613	(-1.94)	-0.0262	(-0.73)
Female	-0.296	(-8.16)**	-0.275	(-6.74)**
control variables omitted in table				
Female By Marriage			0.225	(2.57)*
"Job" By Marriage			0.0229	(0.26)
"Sports" By Marriage			-0.354	(-2.94)**
"Disco" By Marriage			0.199	(2.55)*
"Friends" By Marriage			0.0387	(0.54)
Marriage (tv)			-1.580	(-19.49)**
Episoden (zensiert)	6,998	(3,825)	6,998	(3,825)
Responenten	4,588		4,588	
Wald χ2	808.88**		1513.75**	

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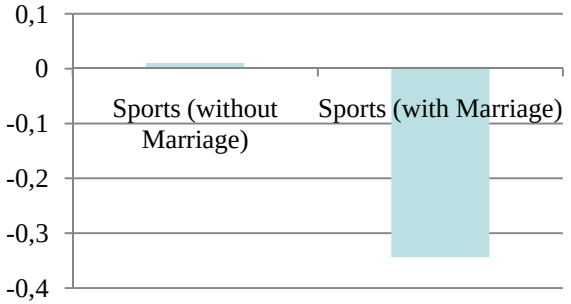

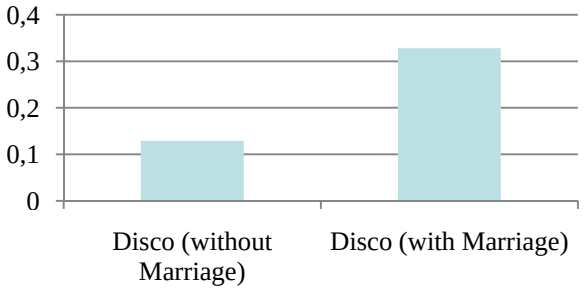

Conclusion

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- Does it matter if you met your girl while playing tennis or while drinking beer?
- Of course not!
- What is important instead: having something in common and a shared hobby (in the long run).

Thank you.

Appendix 1

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	Model (1) Cox		Model (2) Cox (restricted sample)		Model (3) FE-Cox	
In School, Apprenticeship, Job	1.20	(5.38)**	1.15	(4.07)**	1.23	(3.28)**
Hobby, Club, Sports	0.89	(-2.46)*	0.99	(-0.32)	1.11	(1.23)
Pub, Disco	1.22	(6.04)**	1.10	(2.82)**	1.12	(1.75)
Through Friends	0.94	(-2.08)*	0.94	(-1.99)*	0.90	(-1.90)
Episodes (censored)	6,998	(3,825)	3,553	(1128)	3,553	(1128)
Respondents	4,588		1,440		1,440	
Wald (Likelihood-Ratio) χ^2	76,90**		32.58**		(27.68)**	

t and z statistics in parentheses, exponentiated coefficients (hazard ratio), robust standard errors (M1)
* $p < 0.05$, ** $p < 0.01$

Appendix 2

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	Model (X) Transition to Cohabitation		Model (X) Transition to Marriage	
In School, Apprenticeship, Job	-0.45	(-5.40)**	-0.27	(-2.97)**
Hobby, Club, Sports	-0.04	(-0.44)	0.08	(0.66)
Pub, Disco	-0.01	(-0.08)	-0.17	(-1.91)
Through Friends	0.27	(4.08)**	-0.02	(-0.20)
Age Consistency	-0.33	(-3.75)**	-0.23	(-2.29)*
Consistency of Religion	0.33	(3.92)**	0.31	(3.37)**
Interethnic Relation	0.15	(0.82)	-0.78	(-3.11)**
Educational Consistency	0.53	(6.00)**	-0.04	(-0.40)
Initial Age	-0.01	(-0.72)	-0.13	(-13.76)**
Age Respondent	0.09	(13.85)**	0.12	(15.92)**
Female	0.57	(6.87)**	0.33	(3.33)**
_cons	-2.01	(-7.20)**	-0.26	(-0.86)
N	6,409		4,313	
Pseudo R2	0.13		0.16	

z statistics in parentheses, robust standard errors
* $p < 0.05$, ** $p < 0.01$