

Overview

- Time effect/intracohort change: portion due to actual change in individual attitudes. Reflects a society-wide shift that affects all group at the same time.
 - Some studies also include structural change (e.g. education expansion) as a part of time effect. However, some studies have a separate category for it.
- Cohort effect: portion due to changes in population membership that result from births and deaths
 - Characteristics for a particular period do not affect everyone in the same way. The size of the effect is likely to depend on ones' life stage.

Paper	Data set	Birth cohort	Country	Category
Brewster & Padavic (2000)	General Social Surveys (1977-1996)	??-1978	US	cohort & time effect
Ciabattari (2001)	General Social Surveys (1974-1998)	1925-1980	US	cohort & time effect
Bolzendahl & Myers (2004)	General Social Surveys (1974-1998)	??-??	US	cohort & time effect
Cotter et al. (2011)	General Social Surveys (1977-1998)	1925-1974	US	cohort & time effect
Thijs (2017)	Netherlands (CCN) Surveys (1979-2012)	1907-1992	Netherland	cohort & time effect
Brooks & Bolzendahl (2004)	General Social Surveys (1985-1998)	1910-1979	US	cohort & time effect
Pampel (2011)	International Social Survey (1988, 1994, 2002)	1900-1984	19 countries	cohort & time effect
Vella (1994)	Australian Longitudinal Survey (1985)	1960-1969	Australia	labor market outcome
Fortin (2005)	World Value Surveys (1990, 1995, 1999)	1935-1965 (approx.)	24-26 OECD countries	labor market outcome
Schnittker et al. (2003)	General Social Survey 2006	1936-1955	US	cohort effect
Shorrocks (2018)	European Values Study (1990-1993, 1999-2001, 2008-2010)	1925-1985	22 European countries	cohort effect
Knight & Brinton (2017)	World Value Surveys & European Values Surveys (1990-2012)	1970-1992	17 European OECD countries	Dimensionality

Decomposition of attitude

Brewster & Padavic (2000)

- This study decomposes the trend in gender role attitude into time effect and cohort effect.
- Dependent variable is summarized into a single index from 4 items concerning women's work and family responsibility.
- Results (cf. Table 2)
 - Time effect contributes more to the change toward egalitarian attitude than cohort effect during 1977-1985. However, when longer time span is considered (1977-1996), contribution of cohort effect increases.
 - Sex difference in attitudes is greater among recent cohorts.
 - This can be attributed to male wage stagnation in 1985-1996 period → Individuals growing up during this period have mothers who worked for pay → More egalitarian view

Ciabattari (2001)

- This paper decomposes men's attitude into period and cohort effect.
 - Period effect also includes structural changes such as education, parents' education etc.
- Cohort effect is captured by three dummy variables of whether that person was born prior to, during, or after the baby boom.
- It also addresses multidimensionality of attitude by using two dependent variables: support for female labor force participation, agreeing that children suffer if their mothers work.
- Results
 - Both period and cohort effect contribute to the changes in attitude.
 - Across cohorts, married men with unemployed spouse and men with conservative ideologies are most conservative.

Bolzendahl & Myers (2004)

- This paper examines the trend and determinants of attitude.
- Dependent variables are statements about abortion, premarital sex, gender roles, and family responsibilities. Each item is not combined into single index but separately regressed.
- Results
 - Similar results for all aspects except abortion.
 - Older individuals tend to be more conservative.
 - Time makes people more liberal. However, the relationship is not linear. The change slows down during 1987-1998.
 - The predictors of men and women's attitude are similar.

Cotter et al. (2011)

- This paper explains what contributes to conservative/liberal gender attitude. Possible channels include
 - cohort replacement (cohort effect)
 - time of survey (time effect)
- Dependent variable is Gender attitude scale i.e. summarized index from four items in GSS. The items include opinions on women in politics, working mother, childcare, gender role.

- Cohort effects are captured by birth year. Time effects are captured by the survey year.
- Results (cf. Table 2)
 - Overall, later cohorts and individuals surveyed at later periods tend to be more liberal.
 - Cohort effect is not linear. The differences after the baby boom are much smaller.
 - After 1994, time makes people more conservative.

Thijs et al. (2017)

- This paper investigates what contributes to changes in gender role attitude and whether the effect sizes differ between men and women.
- Dependent variable is one dimension and constructed from the question *A woman is more suitable to raise little children than a man.*
- They run separate regressions for men and women. To avoid perfect collinearity between age, period, and birth year, they assume individuals under 35 years old have the same attitude.
- Results
 - Younger cohorts tend to have more egalitarian view.
 - Time makes people more egalitarian.
 - Cohort replacement effect is larger in women than men.

Combination with other hypotheses

Brooks & Bolzendahl (2004)

- This study incorporates ideological learning into the decomposition.
- Ideological learning is when people form opinions based on prior beliefs. It is captured by other right-wing attitudes not related to gender roles e.g. attitudes toward civil liberties, support for African-American civil rights, sexual tolerance.
- It decomposes gender role attitude into
 - cohort effect
 - time effect
 - social structural factors
 - ideological learning
- Results
 - Contribution of cohort and time effects are reduced after accounting for ideological learning

Pampel (2011)

- This paper examines the source of changes in gender role attitude. Possible channels include:
 - structural influence hypothesis - education shapes gender norm
 - value shift hypothesis - cohort replacement shapes gender norm
 - diffusion hypothesis - cohort replacement affects gender norm differently for different education levels
- Separate regressions for men and women. To avoid perfect collinearity between age, period, and birth year, age is grouped into 7 categories.
- Data supports diffusion hypothesis.

Effects of attitude on labor outcome

Vella (1994)

- This paper estimates the effect of
 - demographic and cultural background → gender role attitude
 - gender role attitude → education, labor supply, wage
- Gender role attitude is an index constructed from responses to statements about working women.
- Results
 - It finds demographic and cultural background explains 7.6% of variation in female attitudes and 4.9% of male attitudes.
 - It finds more egalitarian views increase education, labor supply, and hourly wage.

Fortin (2005)

- This paper tests whether gender role attitude affects gender pay gap.
- Data sets
 - WVS as main data set
 - Supplementary data for gender earnings ratio from secondary sources (cf. bottom of Appendix table 1)
- Construction of variables
 - gender pay gap
 - logarithm of 1 minus the ratio of women's to men's earnings
 - gender role attitude
 - 1 if agree and 0 if neither/disagree to *Being a housewife is just as fulfilling as working for pay*
 - work values
 - 1 if agree and 0 if neither/disagree to *When jobs are scarce, men should have more right to a job than women*
 - 1 if think *good hours* is an important aspect of a job
- Gender pay gap is decomposed into
 1. tertiary education
 2. gender role attitude
 3. work values
 4. time effect of changes in gender role attitudes i.e. men and women's difference multiplied by time trend
- Results (cf. Table 5)
 - When the men-women difference in attitude about scarce job widens by 1%, there is 0.40-0.43 point *increase* in gender pay gap.
 - When the men-women difference in attitude about housewifery widens by 1%, there is 0.25-0.69 point *decrease* in gender pay gap.
 - Time effect is positive but only mildly significant ($t=1.8$).
- This paper focuses on the change of attitude over time. It does not emphasize on cohort replacement effect.

Only cohort difference

Schnittker et al.(2003)

- This paper examines what makes people identify themselves as feminist.
- It uses data from 1996 to identify differences across cohorts.
- Results
 - People born during the second-wave feminist movement are most likely to self-identify as feminists.
 - Structural variables have little effect on feminist self-identification.

Shorrocks (2018)

- This paper examines the difference of gender role attitude across cohorts around the second-wave feminist movement in Eastern Europe.
- It estimates generalized additive model and ordered logit model with dependent variable on 4 topics.
- Results
 - Opinion becomes more egalitarian up to 1956-1970 cohort but the change slows down in 1971-1985.
 - 1956-1970 cohort were the most egalitarian because they came of age during the second-wave feminist movement. Latter cohorts were less egalitarian because they came of age during the post-feminist era.

Multi-dimensionality of attitude

Knight & Brinton (2017)

- This paper questions the two-dimensionality of gender role attitude.
- It uses Latent Class Analysis to group individuals into 4 classes:
 - traditionalism
 - egalitarian familism
 - flexible egalitarianism
 - liberal egalitarianism
- It finds that traditionalism has waned and each European country supports different types of egalitarianism.

References (To-read included)

- Bolzendahl, C. I., & Myers, D. J. (2004). Feminist Attitudes and Support for Gender Equality: Opinion Change in Women and Men, 1974-1998. *Social Forces*, 83(2), 759–789.
<https://doi.org/10.1353/sof.2005.0005>
- Brewster, K. L., & Padavic, I. (2000). Change in gender-ideology, 1977-1996: The contributions of intracohort change and population turnover. *Journal of Marriage and Family*, 62(2), 477–487.
<https://doi.org/10.1111/j.1741-3737.2000.00477.x>
- Brooks, C., & Bolzendahl, C. (2004). The transformation of US gender role attitudes: Cohort replacement, social-structural change, and ideological learning. *Social Science Research*, 33(1), 106–133.
[https://doi.org/10.1016/S0049-089X\(03\)00041-3](https://doi.org/10.1016/S0049-089X(03)00041-3)

- Carter, J. S., & Georgia, A. B. (2005). Assessing the Effects of Urbanism Gender-Role Attitudes, 1974 – 1998. *Sociological Inquiry*, 75(4), 548–563.
- Ciabattari, T. (2001). Changes in men's conservative gender ideologies: Cohort and period influences. *Gender and Society*, 15(4), 574–590. <https://doi.org/10.1177/089124301015004005>
- Cotter, D., Hermsen, J. M., & Vanneman, R. (2011). The end of the gender revolution? gender role attitudes from 1977 to 2008. *American Journal of Sociology*. <https://doi.org/10.1086/658853>
- Davis, S. N., & Greenstein, T. N. (2009). Gender Ideology: Components, Predictors, and Consequences. *Annual Review of Sociology*, 35(1), 87–105. <https://doi.org/10.1146/annurev-soc-070308-115920>
- Elmelech, Y., & College, B. (2005). toward Familial Obligation OBLIGATION in and in Japan. *Sociological Inquiry*, 75(4), 497–526.
- Fortin, N. M. (2005). Gender Role Attitudes and the Labour-market Outcomes of Women across OECD Countries. *Oxford Review of Economic Policy*, 21(3), 416–438. <https://doi.org/10.1093/oxrep/gri024>
- Jennings, M. K. (2006). The Gender Gap in Attitudes and Beliefs about the Place of Women in American Political Life: A Longitudinal, Cross-Generational Analysis. *Politics and Gender*, 2(2), 193–219. <https://doi.org/10.1017/S1743923X06060089>
- Knight, C. R., & Brinton, M. C. (2017). One egalitarianism or several? Two decades of gender-role attitude change in Europe. *American Journal of Sociology*, 122(5), 1485–1532. <https://doi.org/10.1086/689814>
- Oppenheim, K., Lu, Y., Gender, S., & Mar, N. (2014). ATTITUDES TOWARD WOMEN ' S FAMILIAL ROLES : Changes in the United States ,. 2(1), 39–57.
- Pampel, F. (2011). Cohort change, diffusion, and support for gender egalitarianism in cross-national perspective. *Demographic Research*. <https://doi.org/10.4054/DemRes.2011.25.21>
- Schnittker, J., Freese, J., & Powell, B. (2003). Who are feminists and what do they believe? The role of generations. *American Sociological Review*, 68(4), 607–622. <https://doi.org/10.2307/1519741>
- Shorrock, R. (2018). A Feminist Generation? Cohort Change in Gender-Role Attitudes and the Second-Wave Feminist Movement. *International Journal of Public Opinion Research*, 30(1), 125–145. <https://doi.org/10.1093/ijpor/edw028>
- Thijs, P., Te Grotenhuis, M., & Scheepers, P. (2017). The relationship between societal change and rising support for gender egalitarianism among men and women: Results from counterfactual analyses in the Netherlands, 1979–2012. *Social Science Research*. <https://doi.org/10.1016/j.ssresearch.2017.05.004>
- Vella, F. (1994). Gender Roles and Human Capital Investment : The Relationship between Traditional Attitudes and Female Labour Market Performance. *Economica*, 61(242), 191–211.