Inequality in work and family life courses at the intersection of gender and race.

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Abstract

Which privileges and constraints do members of differently empowered groups face when combining work and family? Using the NLSY, we analyze work and family life courses at the intersection of gender and race. We focus on work-family trajectories of white and African American men and women from an intersectional quantitative life course perspective. Our results from a multichannel sequence analysis and the use of Mantel coefficients show a weak link between work and family life trajectories for white men, implying the privilege for white men to "have it all" and combine any type of family formation with any type of work career. In contrast, family formation processes tend to constrain work careers for other groups at the intersection of race and gender. We contribute to the literature by showing the privilege of possibilities for white men and identifying constraints for women and black men when combining family and work life.

Introduction

White men in the Unites States earn the highest wages compared to all other social groups. This is true historically, in all states and across all educational levels. White women, black men and women earn less (Pew Research 2015). At the same time these gender/race groups also tend to experience very different timing and sequencing of family events across the life course. Black men for example on average marry at the age of 27, whereas white women marry at a much younger age of 22 (NLSY79, own calculations). At the same time, white men wait longest to have children (mean age 26), whereas black women on average have their first child already at the age of 20. "Motherhood penalties" and "marriage and fatherhood premia" are well documented in the literature (Budig and England 2001; Killewald and Gough 2013; Cooke 2014). Research consistently shows that work and family lives are ubiquitously intertwined and that social location, defined by gender and race among others, matters in how these processes are interrelated across the life course. Most research focuses on indicators at specific points or stages in the life-course, including marriage and family penalties (England et al 2016, Budig and England 2001; Killewald and Gough 2013), the change in occupational prestige after child birth (Author 2010) or the effects that specific family events have on escaping poverty (Author 2008). Orloff's words summarizing the gendered nature of the link between family and work as women being only a "husband away from poverty" rings as much true today as it was in 1993. Several recent studies approach the work and family interplay from a life course perspective analyzing life-courses as a whole to assess how labor market advantages and disadvantages associated with family events cumulate over time (Authors 2017; Kahn et al 2014; Simiö, Kauppinen and Martikainen 2017). Findings substantiate previous results that men's careers are

less constrained by their family life courses than women's (Authors 2017) and motherhood penalties do seem to attenuate over time for most women (Kahn et al 2014).

A different line of research has examined the interaction of gender and race in work-family inequalities, pointing to both lower fatherhood premiums? for black men compared to white men (Glauber 2008) and lower motherhood penalties for black women compared to white women (Glauber 2007). Apart from a few exceptions, the (quantitative) literature on parenthood and marriage premiums is strongly focused on gender differences. Only few studies acknowledge that race is important beyond including it as a "control variable" (e.g. Author et al. 2010; England et al. 2016; Kahn & Bianchi 2014; DiPrete & McManus 2010 to just name a few). Looking at the effects of gender and race separately misses out on the structural power intersectional categories have, and how they place individuals in different social locations, with different privileges and disadvantages attached (Choo & Feree 2010; Brown & Misra 2003). In this article we apply a process oriented life course perspective integrating intersectionality into a comparative analysis of intertwined longitudinal work and family life courses. We offer an indepth longitudinal analysis to jointly explore the gendered and racial privileges and constraints that black men, white men, black women and white women experience in combining work careers and family life. In other words: Is it possible for white men to combine any family formation processes with any type of work career? Do black men and women have the similar possibilities? Are black women more constrained to certain careers by their family formations than white women? The analysis centers on black and white women and men during their most active family formation and career building phase between the age of 22 and 44, born between the mid-1950s and the mid-1960s. Our analysis reveals a significant link between work-family life courses for all intersectional groups except for white men. White men are the only group

who has the privilege to possibly combine any type of family formation process with any type of work careers. In contrast, black men are more constrained by family formation processes. They only have access to careers of high occupational prestige, if they are in long-term stable coresidential relationships, enter fatherhood at later ages and have no more than one child. For black women we cannot identify any very high prestige career patterns in significant numbers, but even medium prestige careers are mostly accessible for black women who have few children later in life and/or who have no partner. For white women careers of high occupational prestige also tend to be linked to late parenthood or childlessness.

In our research we focus on white men and women and African America men and women, we do not analyze other combinations of race and gender, such as groups that identify as gender queer or other racial groups. This is in no way an indicator of the importance to analyze other groups as well.

This article seeks to contribute to the literature by bringing together an intersectional perspective and a quantitative longitudinal life course approach to social inequality in long-term work and family life courses and by using an innovative quantitative longitudinal methodological approach. With the life course perspective, we move beyond point-in-time and trend outcomes and conceptualize the work-family interplay as a "process outcome" (Abbott 2005; Authors 2017) from early adulthood to midlife. Conceptualizing work-family trajectories as interlocked multidimensional life course processes enables us to complement studies that focus on a unidirectional impact of family events on employment outcomes or vice versa. As individuals move through work careers, they are simultaneously defining and redefining their family lives and vice versa. Inspired by the agenda setting article of Choo and Ferree (2010) we further adopt an intersectional approach that pays equal attention to the four intersectional groups of black

women, white women, black men and white men. No categories are left "unmarked" and the intersection of race and gender is analyzed as much as a privilege of masculinity and whiteness as a constraint for other categories. Taking this comparative idea seriously, we avoid to implicitly treat white male life courses as a normative reference point and thereby naturalize and homogenize male whiteness. Or as Choo and Ferree (2010) put it: "Methodologically, merely including difference often substitutes an implicit norm of whiteness or heterosexuality..."(133). Our empirical analysis proceeds in three steps, focusing on birth cohorts born between the mid-1950s and the mid-1960s as they travel through historical time. First we study whether linear associations exist between family life courses and work careers. In other words we analyse if any family life course can be combined with any work career, if "everything is possible" and a group has the "privilege of possibilities" or if a group's possibilities are constrained so that for example only low prestige careers are combined with certain family lives. Second we use multichannel sequence analysis, which distills patterns of interactions between the dimensions considered, in our case interactions between family and work life courses (Pollok 2007). This strategy does not offer a causal explanation of gender-specific work-family trajectories in a statistical sense. Instead, we provide a sophisticated longitudinal" thick description" (Abbott 1992) of the group specific interplay of work-family life.

Sequence analysis enables us to define "life as an unfolding process", in contrast to limiting our attention to a specific outcome variable. " It is the whole walk that is the outcome." Abott (2005, p. 421). In this analysis, the "whole walk" are complete parallel work and family life courses between ages 22 and 44. This apporach complements research that emphasizes probabilistic inferences of causal mechanisms between covariates and single elements, by exploring and measuring the resemblance and thereby the existence of salient patterns of longitudinal processes

of meaningful life course types as they are actually lived and experienced by individuals over time (Brzinsky-Fay and Kohler 2010, Aassve et al 2007).

Before the empirical analysis and discussion of our results, we elaborate on the perspective of comparative intersectionality and on the work-family life course. After presenting these different perspectives we combine them by defining expectations about the work-family interplay of the four intersectional groups.

Intersectionality: a comparative perspective

We examine the interplay between work and family life courses from an intersectionality and life-course perspective to treat gender and race as the intertwined and interrelated social powers they are. This intersectional perspective more adequately captures the complexity and density of privilege and disadvantage compared to research designs that focus on different categories of disadvantage separately, like race, gender, class, age, sexuality or ethnicity (Jones, Kim and Skendall 2012).

Crenshaw (1991) first introduced intersectionality as a concept in the context of black women's anti-discrimination lawsuits. It is considered one of the most important concepts originating from feminist theory to date. The early intersectionality literature has been criticized by some as being too strongly focused on intersectional identities and disregarding structural disadvantage associated with intersectional categories (McCall 2005). Also many of the early studies on intersectionality take an either anti-categorical or intracategorical approach that does not easily bridge into the quantitative stratification and gender welfare state literature. The **anti-categorical** approach assumes that categories are per se too simplistic and problematic, because they reify the inequalities that they criticize (McCall 2005). The **intracategorical** approach focuses on

documenting the subjective experiences of one group defined by intersecting categories, for example Latino gay men. This has produced much interesting ethnographic research, but lacks a comparison group to assess how and to what extent the specific groups' experiences differ from others (e.g. Patricia Hills Collins work).

The third approach to intersectionality, that we adopt in the following is **intercategorical**. The intercategorical approach was coined by Leslie McCall, who first brought intersectional inequalities into main-stream quantitative stratification research. In the following we compare associations in the work and family domain between all comparison groups by gender and race focusing on structural inequalities. Intersectional inequality is treated as a hypothesis and we ask to what extent it exists in longitudinal work and family life courses by gender and race in the United States.

Intersectionality questions the assumption that variables such as gender and race "are explanatory constructs in and of themselves" (Bowleg (2008, 322), and assumes that they "are not reducible to individual attributes to be measured and assessed for their separate contributions in explaining given social outcomes." (Zinn and Dill 1996: 329; also Walby 2009, Choo and Ferree 2010). An intersectionality perspective assumes that "the experiences of Latinas in the labor market reflect social constructions of gender that are racialized and social constructions of race that are gendered to create a particular experience" (Brown and Misra 2003: 490). In addition these experiences are not disconnected from the experiences of other social groups, but stand in relation and are connected to e.g. the experiences of white men. Garry (2011) underlines the strength of the intersectionality approach as not abolishing identity categories, but allowing for categories to be more complex and messy.

We understand intersectionality not only as a commitment to treat different identity markers as 'messily intertwined", but also as a commitment to focus on all social groups equally (Choo and Ferree 2010, Brown and Misra 2003). Too often research focuses on the disadvantaged groups, thereby "normalizing" the privileged groups: "Gender seems to be about women, race seems to be about people of color, and economic inequality seems to be the property of the poor (Sprague 2005: 95)", thereby not focusing on the privileges of the dominant groups. As Sprague (2005: 96) summarizes: "conventional quantitative methodologies tend to embody the standpoint of privileged groups". Our analysis departs from the default normative/mainstream category and thereby "denaturalizes hegemonic relations, particularly by drawing attention to the unmarked categories where power and privilege cluster" (Choo and Ferree 2010: 146f). We thereby "avoid placing an unmarked standard in the position of exercising normative power" (ibid).

Work-Family Life Courses and Intersectionality

Until recently most studies on parenthood penalties, focused on wage gaps between parents and childless individuals within rather short time periods or at one time point. Few studies also examined changes in occupational prestige, not only wages, after childbirth (Author 2010; Kahn et al 2014). Overall past research shows smaller fatherhood premiums and motherhood penalties for black compared to white men and women (Hill 1979; Glauber 2007, 2008 2013; Waldfogel 1997; England et al. 2016) or no differences between black and white women (Budig and Hodges 2010). Pal and Waldfogel (2016) examine the motherhood penalty over several decades in the United States using Current Population Survey data. Findings show a remarkable decline in the motherhood penalty from 10 percent in 1970 to about 1 percent in 2013. By 2013 the motherhood penalty virtually disappeared in the average. This average conceals diverging trends

and high fluctuations by race and ethnicity. In 1967 motherhood penalties were comparatively small for black women (around 2 percent), but much more sizeable for white women at 13 percent. For white women the motherhood penalty has almost monotonically declined since. Instead for black women the motherhood penalty peaked in the late 1990s at 10 percent. Despite the general trend towards a declining motherhood penalty, the motherhood penalty for non-hispanic black women is on the rise again since 2008 and was estimated at about 5 percent in 2013 (Pal and Waldfogel 2016). Research has also shown that in recent periods, motherhood penalties were highest in the lowest quantiles of the earnings distribution (England et al 2016, Prince Cooke 2014). That is, high earning white women suffer no more motherhood penalties, but other women face greater challenges in combining work and family life (see also Authors 2017).

Overall, research points to large heterogeneity of the motherhood wage penalty both for population subgroups as well as over time, which calls into question the standard fare of simply "controlling" for selection and group difference. Studies that take a life course perspective report a tighter link between work and family lives for women compared to men (Authors 2017; Author 2008). Kahn et al 2014 show that motherhood wage penalties attenuate with age for women with less than three children. In contrast, mothers of more than two children remain at a significant labor market disadvantage. At the same time they face higher demands to provide for a larger number of children as they transition into adulthood.

Explanations for family penalties and premiums are located at the employee and employer side (Correll, Beranrd and Paik 2007). On the employee side, self-selection of less career-oriented women into parenthood as well as lower productivity and flexibility due to childrearing responsibilities are important mechanisms that drive at least part of the motherhood penalty

(Budig and Hodges 2010). On the employer side, employer discrimination in terms of hiring and promotions is well documented by race, gender and parenthood status (Bernard and Correll 2010; Pager 2003).

To date life course research on the motherhood wage penalty (Kahn et al. 2014) and work-family interplay (Authors 2017) in the United States has paid limited attention to race, whereas research focusing on racial differences has not taken a life course perspective. Kahn et al. (2014) use fixed effects models on a pooled sample of women of different racial background. Because race is not time-varying, it cannot enter as a control variable and race-specific analyses are not presented. Authors (2017) focus on the constraints different welfare state context have on the work-family link by looking at men and women in the US and Germany. For the US they control for interaction effects by gender and race on the probability to experience different types of combined longitudinal work-family life courses. Initial findings point in the direction that white men and women have equal chances of entering work careers of high occupational prestige combined with stable co-residential unions and parenthood. This privilege does not extend to black women. These findings resulting from including race as an interacted control variable point to intersectional inequalities in work-family life courses by gender and race but are not further developed in a comparative intercategorical perspective in this study.

Institutionalized intersectional constraints and privileges

Social policies are one way of constructing and institutionalizing constraints and privilege for specific social groups when negotiating work and family life. The United States applies a "universal breadwinner strategy" with gender equity legislation in the labor market and state policies that encourages women's employment, but provides little support for childcare

(Sainsbury 1999). Previous research on liberal regimes, such as the United States, shows that women have better access to top labor market positions, but are at the same time less protected from poverty, compared to continental European or social-democratic welfare states (Mandel & Shalev, 2009; see also Orloff, 2009).

On the one hand from a gender perspective the United States has long been criticized for not supporting women lacking social provisions for families (Gornick & Meyers, 2003). On the other hand the United States can be understood as a "distinctive alternative gender regime" (Orloff, 2009) that provides few social provisions, but more regulations to ensure gender neutrality (Zippel, 2009) and in that sense is a "leader not a laggard, in removing discriminatory occupational barriers" (Orloff, 2009 p.145). Evidence is accumulating that this alternative gender regime might be more supportive of gender equality in the family and on the labor market compared to welfare states with extensive social provision for families (Orloff, 2009, Prince Cooke 2011, Authors 2017). Recent research further shows that the support of gender equality is very likely class specific (REF?). Concerning work-family policies, two important instruments that stratify access to more privileged work careers depending on family lives by gender and race are parental leave policies and the 1996 welfare reform.

Comparing parental leave policies of 21 high income economies Ray et al (2009) found the US to be the only nation that doesn't provide any financial support for parental leave times (Ray et al. 2009). With the Family/Medical Leave Act (FMLA) the US introduced in 1993 the first nation wide option for parental leave. Men and women are thereby equally entitled to a three month long leave for caring for family members, including newborn children. The FMLA requires that employers with 50 or more employees provide 12 weeks of unpaid leave to employees who have worked at least 1,250 hours in the previous 12 months. As a result of these

restrictions only 45 percent of employees have access to a family leave that is supported by the FMLA (Waldfogel 2001). In strong contrast to parental leave policies in most other countries – eligibility for FMLA leave is extremely class-based. Parents in higher income levels have more access to FMLA benefits than parents in lower income categories (Ray et al. 2009). In addition to these statutory provisions there is also a great deal of variation in firm-specific parental benefits. Many companies provide no more than six weeks paid leave and, overall, only a quarter of all companies in the U.S. offer paid parental leave. There are hardly any studies of who has access to these different benefits, even more so than is the case with statutory benefits, are class-dependent (Boushey 2008). Women with higher education have more access to paid parental leave (47%) than women with lower levels of educational attainment (33%). Further evidence for class-based access to benefits is provided by an analysis of parental leave policies in U.S. high schools, which concluded that "[p]aid parental leave policies are rare and concentrated among elite, private schools" (Yoest 2004).

Another important set of social policies constructing and institutionalizing constraints and privilege in work-family lives is the welfare reform from 1996. The 1996 welfare reform eliminated the entitlement status of welfare and established time limits on receiving aid and work requirements (Fang, Keane 2004, Iceland 2013, Mazelis 2017), without providing childcare. These changes put especially single parents at risk of living in poverty and not being able to establish occupational careers. Before 1996 federal social policy at least guaranteed a minimum level of aid to those in poverty. With the new policies welfare eligibility ended "after two years, regardless of whether they had found jobs by that time. It also set a lifetime limit on assistance at five years." (Iceland 2013, page 126). Overall the 1996 welfare reform is another factor in

creating cumulative disadvantages for single parents and putting them at economic risks instead of supporting all families equally, thereby structurally exacerbating privilege as well as the constraints of possibilities.

In addition to parental leave and the 1996 welfare reform, access to family planning and health care, as well cultural norms about the economic preconditions for marriage stratify when people enter parenthood and marriage differently by gender and race. Raley and coauthors (2015) argue that socioeconomic standing has become increasingly important for marriage over the past decades in the United States. As the cultural imperative to marry has weakened and marriage has become more optional, reaching "the marriage bar" economically has gained relevance. Not being white continues to have increasing economic disadvantages and as one result racial gaps in marriage have also grown. Marriage is increasingly more common among whites compared to non-whites (ibid.). There are also important gender and race differences in contraceptive use resulting from differential access to education about contraceptives and access to contraceptives. Both affecting the incidences of unplanned pregnancies and large families. For example, in the 2002 National Survey of Family Growth 35 percent of women who had no high school diploma and 25 percent of women with only a high school diploma reported not using any contraceptive method at last intercourse compared to 8 percent of women with a completed college education (Chandra et al 2005, p. 101). Related to their higher prevalence of educational and economic disadvantage hispanic and black women were less likely to use any contraceptive method at 30 and 27 percent compared to only 12 percent of white women who did not use any contraceptive method at last intercourse (ibid). Not only access to contraceptives but also the likelihood of healthy pregnancy and delivery, as well as the ability to fully participate in the labor market more generally depends on adequate health care. Research has shown that racial and ethnic

disparities in health care exist even after accounting for insurance status, income, age and severity of conditions (Nelson 2002). These findings point to ethnic and race discrimination in health care in addition to structural disadvantages in access to health insurance that economically more vulnerable racial groups face in the first place.

In sum, the lack of welfare state policies and health care combined with the stratification of access to the limited existing entitlements in the United States might open up possibilities for some groups, but at the same time, overexposes instead of protect other groups to the forces of the market.

Our analysis has an exploratory component. Similar to Author 2017 we "examine holistic workfamily trajectories (...) for a long life course window conceptualizing them as a process outcome". At the same time we focus on and analyze institutionalized intersectional constraints and privileges of distinct social groups so we can formulate expectations about more or less prevalent work-family processes and patterns for those specific groups.

When we refer to groups either having privilege or constraints of possibilities we want to acknowledge that every individual in this group has the possibility to enter a work family combination of any form. But individuals who are part of certain socially constructed and structurally constrained groups have higher probabilities (privilege) or lower probabilities (constraints) of combining all possible family life courses with all possible work careers.

Expectations

Theoretical explanations on the link between work and family life courses usually focus on either the unidirectional impact of education and employment on family outcomes, including fertility and union formation, or the unidirectional impact of family states like parenthood and partnering on employment, wages and occupational prestige (see Authors 2017). This article seeks to

identify longitudinal complex "population level regularities" (Goldthorpe 2015) in intertwined work and family life courses. We conceptualize intertwined work-family life courses as longitudinal process outcomes (Abbott 2016) and specify social inequality in this more complex outcome that warrants explanation in the next step. To first assess the existence of intersectional inequalities in work and family life courses by race and gender we first conceptualize social inequality in longitudinal joint work and family life courses as "Privilege of possibility" as opposed to "Constraint of possibility":

1) "*Privilege of possibility*": There is no association between family life courses and work careers, that is any type of family life course can be combined with any type of work career.

2) "*Constraint of possibility*": Specific family life courses go along with specific work careers, that is constraining factors limit the extent to which specific types of family life course can be combined with different types of work careers. If we find systematic associations between family life courses and work careers, they can take different forms that signify different complex inequalities (McCall 2005). The results warrant careful interpretation of the content of different typical combinations of work and family life courses, for example either combining single parenthood with precarious careers, or single parenthood with stable middle class careers.

Following this conceptualization, the most socially equal, and from a perspective of liberal self-determination advantagoues situation would be, if "privilege of possibility" was equally present among all social groups. We could speak of high within group inequality, in a situation where "constraints of possibility" and "privilege of possibility" were unequally divided within intersectional groups, for example if we would find constraints of possibilities for the

lower educated, but not for the higher educated in each intersectional group. In contrast, we could speak of high between group inequality, if for some intersectional groups "privilege of possibility" is the most common experience, whereas all members of another intersectional groups are strongly characterized by "constraints of possibility". This would arguable signify the most socially unequal situation from an intersectional perspective.

Given the limited and stratified work-family and health care policies combined with a legacy of gender and race discrimination in the labor market (Pager 2003, Correll et al 2007), we assume "privilege of possibility" in work and family life courses to be most pronounced among white men, whereas black women's work and family life courses will face the strongest "constraints of possibility." Black men and white women will take an intermediate position, but with different specific dynamics in combing work and family lives.

Research Design, Data and Methods

Our goal is to bridge the quantitative work-family and intersectionality with a longitudinal life course perspective on intersectional group comparisons. One reason why intersectional inequalities have been relatively understudied in quantitative stratification research – with notable exceptions (e.g. McCall, 2005) – are methodological challenges of defining and measuring intersectional categories and modeling their interaction effects on relevant outcomes of social status. "Although it is challenging to conceptualize and measure these intersecting systems of stratification, systematic and thoughtful attention to how labor market experiences are shaped by the intersection of race and gender is our best hope of truly understanding economic inequality." (Brown, Misra, 2003, 507). Two central challenges concern the complexity of 1)

within and between group comparisons, and 2) how to conceptualize outcome measures that capture relevant labor market experiences.

First, concerning the group comparisons, with few exceptions (e.g. Glauber 2007; 2008) it is still standard fare in research on family penalties to either focus on white women only (England et al 2016) or simply control for race (e.g. Killwald and Gough 2013). Both approaches neglect intersectional inequalities and could not identify them if they exist. The stratification literature on cumulative disadvantage (DiPrete and Eirich, 2006; DiPrete and McManus 2003) routinely uses interaction effects between gender and race in panel regression models but usually only focuses on the impact of selected family transitions on specific labor market outcomes. In addition the concept of "cumulative disadvantages" already implies a focuses on "the deprived" and "disadvantaged" that is less salient in the more encompassing view on within and between group differences from an intersectional perspective. Following Sprague (2005) we examine each of the four intersectional categories of black men and black women, as well as white men and white women separately as a strategy that is more "sensitive to potential dynamics of power relations in an unequal society" (96). We do not include an "other" race category, since it would comprise too many heterogenous subgroups to generate meaningful results (Brown and Misra 2003). Second, concerning the choice of outcome family wage penalties have been the most used indicator. They are aggregate trend outcomes (Abbott 2016), that is "period measures" that come the known advantages and disadvantages. On the one hand, they are easily to calculate with little time lags and have a relative intuitive interpretation. On the other hand they are highly sensitive to short-term fluctuations, obscure sub-group heterogeneity and do not describe the actual experiences of specific birth cohorts. Short-term fluctuations in wage penalties can arise from many different processes that do not necessarily accurately reflect social advantages or

disadvantages that accumulate over individual life courses. Sub-group heterogeneity may cancel each other out in average wage penalties, which is particularly problematic given that recent research has demonstrated a large variation in motherhood wage penalties by education, location in the earnings distribution and race/ethnicity (England et al. 2016; Cooke 2014; Pal and Waldfogel 2016). In addition, studies show that family penalties are not time constant, but on average tend to attenuate across the life course by mid-life (Kahn et al 2014) and are lower for women who enter marriage and parenthood later in the life course (Loughran and Zissimopolous 2009). We argue for complementing period measures of inequality in work family life courses, such as family wage penalties with cohort measures of inequality, that is "process outcomes" (Abbott 2016). Process outcomes more accurately reflect the life course experience of given birth cohorts and can capture the timing, order and sequencing of family and labor market events as they unfold in parallel over time. Specifically, we adopt a unique and holistic approach to understanding the interplay of gender and race over the life course, conducting what Abbott (1992) refers to as longitudinal "thick description." We use sequence analysis to identify and compare typical life course profiles between intersectional groups.

Data

We use the National Longitudinal Survey of Youth (NLSY79) (for a detailed description of the NLSY79 and the NLS data, see Bureau of Labor Statistics 2004). The NLSY79 is a nationally representative sample of 12,686 young men and women born between 1957 and 1964. The sample is re-interviewed every two years. We construct complete monthly family and employment histories from ages 22 to 44. We observe the sample during the "prime fertility" and "career building" age in affluent democracies. This age window can be pinpointed between age

20 and 40. Mother's mean age for all births was 24 in 1990 in the United Sates (Mathews & Hamilton, 2002) Occupational maturity is reached on average in the mid-thirties in both countries (Author). The analysis sample comprises 5.283 respondents after excluding individuals who did not participate in all waves, or report "other" race than black African American and white Caucasian (see Authors 2017 for details on the construction of a similar analysis sample). The family sequences are specified based on six states 1) "Single, no child", 2) "Single, 1+ children", 3) "Partnered, no child", 4) "Partnered, 1 child", 5) "Partnered, 2 children", 6) "Partnered, 3 children". For our analysis cohorts cohabitation primarily occurred as a brief prelude to marriage and did not replace marriage (Smock 2000). As a result, separating marriage and cohabitation, or focusing only on marriage yielded qualitatively very similar results (available upon request). We therefore present findings with the simplified family states only distinguishing whether individuals were in any either married or unmarried coresidential union or not.

The employment trajectories are constructed using occupational prestige, since prestige is not as strongly affected by short-term career fluctuations as e.g. hourly income and is remarkably consistent across time and countries (Hout and DiPrete 2006; Author 2016). Occupational prestige is a powerful concept for assessing mothers' future potential to realize a career and to provide for themselves and their children, if needed, without a breadwinning spouse. For mothers, occupational prestige also serves as a proxy for their ability to enact agency (Author 2016).

The employment sequences are specified using eleven states, seven of which summarize categories of the Treimann prestige scale for time spent in employment: 1) "10/19", 2) "20/29", 3) "30/39", 4) "40/49", 5) "50/59", 6) "60/69", 7) "70/79", 8) "parental leave", 9) "education",

10) "unemployed", 11 "gap/out of the labor force". The lowest Treiman prestige category of 10/19 includes construction and maintenance laborers and assembly workers. The highest Treiman prestige category of 70/79 comprises judges, architects and university professors. The Treiman prestige scale captures an additional dimension of social status and does not perfectly correspond with income. It is well known that some typically male low prestige occupations are higher payed than typically female medium prestige occupations (England 1979). These differences should be taken into account when comparing Treiman prestige across genders, but do not distort the within gender comparison between black and white Americans. In the following empirical analysis, we want to compare occupational prestige both within and across intersectional groups. For easier interpretation we categorize occupational prestige into high, medium and low prestige that we consider as reference categories across all intersectional groups. This is necessary to take into account that the highest occupational prestige that we empirically observe among black women might correspond to medium occupational prestige among white women. We grouped values into high, low and medium based on the distribution in the data and on the actual Treiman job behind the numbers. High prestige includes groups with an average prestige higher than 48 prestige points, (e.g. Business and administration associate professionals = 48), medium prestige includes groups with an average prestige between 40 and 47. We consider occupations low prestige below 40 points (Metal workers = 39). We use this classification of high, medium and low prestige as a reference point for interpreting the findings for all four intersectional groups.

Methods

The analysis proceeds in two steps. First we use a recent innovation in sequence analysis, Mantel coefficients (Picarretta & Elzinga 2013, Picarretta 2017), to study whether linear associations exist between the longitudinal sequences in the family and work domain (see hypothesis 1 and 2a). Linear associations would signify strong deterministic associations between work and family trajectories, such that specific family life courses are uniquely combined with specific employment trajectories. Mantel coefficients separately take into account the family and employment sequences as distinct life course dimensions. For each of the two dimensions Optimal Matching with substitution costs of 2 and indel costs of 1 is used to calculate a pairwise distance matrix that summarizes the similarity of work and family sequences, respectively. This cost specification proved efficient for identifying similarities both in terms of timing and the order of states (MacIndoe and Abbott 2004; Studer and Ritschard, 2016). Sensitivity analyses with other cost specifications (Hamming Distance, Dynamic Hamming Matching) generated qualitatively similar results. Mantel coefficients calculate the matrix correlation between the two separate distance matrixes for the family and work domain. High Mantel coefficients indicate that individuals, who are similar in the family domain, are also similar in the work domain. This implies that specific family life courses, such as early single parenthood would be uniquely linked to specific work trajectories, such as interrupted low prestige careers ("constraint of possibility"). Low Mantel coefficients indicate that individuals, who have similar family life courses, tend to have a wide range of different work careers without any systematic linear association. Mantel coefficients around zero indicate that any family trajectory occurs in combination with any employment trajectory ("privilege of possibility"). We calculate Mantel coefficients separately for the four intersectional comparison groups including bootstrap confidence intervals to assess the statistical significance of between-group differences.

In a second step we turn to interactive inequalities between work and family and life courses (hypothesis 2b and 2c). Whereas Mantel coefficients are suitable to identify linear/deterministic associations between the two life course domains, they cannot uncover interactive relationships. For instance, specific family life courses, such as unpartnered childlessness might be strongly associated with a polarized grouping into either interrupted low prestige careers or steep upward mobility. This would lead to positive and negative associations in the Mantel correlations in different regions of the two distance matrices that would cancel out in the average. Therefore after establishing, whether linear associations between work and family life courses exist with Mantel coefficients, we assess whether there are interactive associations with multichannel sequence analysis (Pollock 2007, Gauthier et al 2010) and Partitioning around the Medoid (PAM) cluster analysis (Studer 2013). Multichannel sequence analysis classifies holistic longitudinal experiences in terms of interactions between the dimensions considered, in our case family and employment (Pollock 2007: 176). Two multidimensional life courses are considered similar when they are similar on both the family and the employment dimension. Optimal matching calculates the distance between two sequences as the minimum possible 'cost' of turning one sequence into another based on three transformation operations that are assigned specific costs. We again use Optimal Matching with substitution costs of 2 and indel costs of 1 in the multichannel sequence analysis. The alignment yields a pairwise distance matrix that is then entered into a PAM cluster analysis to identify groups of typical joint work and family life courses. Several cluster-cut off criteria determine whether any meaningful structure exists for each of the four intersectional groups and select the most appropriate number of clusters (details below). Finally, we provide a detailed description of the typical work family clusters including social background variables.

Since all analyses are calculated separately for the four intersectional groups, the final analyses do not apply the NLSY weights, which correct for the oversampling of non-hispanic black Americans. In joint analysis including all groups these weights would be necessary, but they are not essential for sub-group specific analyses. Weights might still be important to correct for selective attrition and the probability to remain in the sample long enough to be included in our analysis sample. Analyses with and without weights provided qualitatively very similar results. All analyses were calculated using the TraMineR package Version (Gabadinho et al 2011) and Weighted Cluster Package Version (Studer 2013) in R (R Version 3.3.2). The Mantel coefficients were calculated using code kindly provided by Matthias Studer based on Piccarreta and Elzinga's 2013 proposition.

Results

Linear associations between work and family life courses (hyp1 and 2a)

To assess linear deterministic associations between work and family life courses (Hyp 1 and 2a) Figure 1 shows the Mantel coefficients for the four intersectional groups with 90 percent bootstrap confidence intervals based on 100 repetitions. As expected for white men, there is no deterministic association between the two life course domains with a Mantel coefficient of 0.01 that is not significantly different from zero. White men have the "privilege of possibility" to combine different types of family life courses with any type of work careers. Note that this does not imply that all white men "get what they want", but on the population level there is no systematic linear association between the two life course dimensions, that is it is in principle possible to combine all types of work careers with all types of family life courses. For white women and black men, we find moderate associations of 0.05 that are significantly higher compared to white men indicated by non-overlaping confidence intervals in Figure 1.

Figure 1: Mantel coefficient to measure (linear) association between work and family life courses (NLSY 1979).

As expected, for black women the linear association between work and family lives is highest at 0.09 with non-overlapping confidence intervals compared to white women and black men. Given that this is a very new measure, to date we have little experience to assess whether the absolute values can be interpreted as high or low. We therefore only focus on the differences between the four intersectional groups that clearly show significant differences in line with expectations.

Interactive associations between work and family life courses (hyp 2b and 2c)

Figure 2 shows three cluster cut-off criteria to assess whether any meaningful clusters exist in each intersectional group and guide our selection of the most discriminant number of clusters (Studer 2013). The "ASW" (Average Silouhette Width), "HGSD" (Hubert's Somer's D) and "PBC" (Point Biserial Correlation) all vary between -1 and 1 with higher values indicating more discriminant/better cluster solutions (Studer 2013: 13). Because the average values for each measure differ, it can be cumbersome to identify local maxima and minima that are supported by all measures. Therefore Studer (2013) recommends inspecting a standardized (Zscore) version of the measures presented in Figure 2. While one should be cautious in interpreting the exact values of these measures, if several indicators share a local maximum for a specific number of clusters , this can be considered a reliable indication for meaningful structure in the data. Some

existing rules of thumbs on acceptable absolute values of cluster cut-off criteria (e.g. at least .25 for the ASW to indicate any structure in the data, Studer 2013), have been developed in very different fields of applications and are therefore not necessarily transferrable to sequence analysis applications, especially multichannel sequence analysis. Sequence distance matrices are based on complex longitudinal trajectories that are very different from the usual cluster analysis application on a few simple random variables. Consequently groups identified with sequence analysis will often be quite heterogeneous, even if there is a meaningful underlying structure. We therefore do not interpret absolute values of the cut-off criteria, but instead focus on whether there are clear local maxima, that are supported by all three cluster-cut-off criteria. Figure 2 shows local maxima for black men (6 and 8 cluster), black women (3 and 5 clusters) and white women (5 and 8 clusters). In contrast, there is no clear local maximum for white men. Consequently we do not find a discernible interactive grouping between work and family life courses for white men, which further substantiates findings based on the Mantel coefficients: We find no evidence for a systematic association between longitudinal work and family life courses for white mean. On the population level for this group it is possible to combine any family life with any working life ("privilege of possibility"). For the remaining three intersectional groups, we balanced parsimony, and additional substantive information with a higher number of groups in the final selection of groups. We retain 6 clusters for black men and 5 clusters for black and white women as the best grouping. This resonates with the additional substantive criterion of construct validity in the selection of the best number of clusters that relates to their theoretical and substantive interpretability (Authors 2010).

Figure 2: Cluster Cut-off criteria for PAM cluster analysis based on multichannel sequence

distances for four intersectional groups (NLSY 1979)

Figures 3, 4 and 5 show proportional sequence distribution plots of the multidimensional work and family clusters for black men, black women and white women. Family lives are presented on the left and parallel work trajectories on the right. The size of the groups corresponds to their size within the respective population. The clusters in figures 3, 4 and 5 are sorted descending according to average Treiman prestige in the employment trajectories, with the highest average prestige cluster at the top and the lowest average prestige cluster at the bottom of figure 2. The cluster names on the left include the average prestige value for each group in parentheses. Tables 1 and 2 present descriptive information for men and women, including average prestige, education and parental background information for the total samples and by work-family clusters. We jointly discuss the groups visualized in Figures 3, 4 and 5 with the respective descriptive information in Tables 1 and 2.

Typical work-family life courses of black men

For black men Figure 3 shows two extreme groups of very low occupational prestige (mean = 29) combined with unpartnered fatherhood (Cluster 1) and very high occupational prestige (mean = 49) combined with having mostly one child within a stable co-residential union relatively late (Cluster 6) (descriptive information in table 1). Cluster 5 combines low prestige, but stable work careers (low occurrence of unemployment) with stable co-residential unions and fatherhood. In between there are three interactive groups that show very similar unstable low prestige employment careers ranging between an average prestige of 34 in cluster 2 and 36 in cluster 4 with relatively high shares of unemployment. Their family lives, however, differ considerably: either unpartnered childlessness (Cluster 2), single fatherhood (Cluster 3), or early onset with

multiple children outside of co-residential partnerships and later re-partnering into step family arrangements (Cluster 4). These three groups represent an interactive association described in hypotheses 2c ("one type of work career goes along with multiple types of family life courses"): Cluster 6 signifies the only stable high prestige employment career for black men. Together Clusters 5 and 6 support that for black men stable employment careers are only attainable in combination with no more than one or two children within a stable co-residential partnership. Whereas previous research has shown a lower marriage premium for black men than for white men (Glauber 2008), our comparison within the group of black men points to the crucial role of stable co-residential partnerships for their career development. Moreover, our findings show that for black men childlessness is not "the price" for upward mobility, but on the contrary is associated with low prestige interrupted careers (Cluster 2). Finally, we also find an association of type 2b ("specific family life course goes along with different types of work careers") for unpartnered fathers. Whereas Cluster 1 signifies a life course of early unpartnered fatherhood combined with very low prestige (mean = 29) interrupted careers, Cluster 3 shows a pattern of later unpartnered fatherhood combined with somewhat higher prestige careers (mean = 34).

Table 1: Descriptive information for black and white men

Figure 3: State distribution plots of 6 multidimensional work and family clusters for black men (view in color)

Typical work-family life courses of black women

Figure 4 shows five clusters of typical work-family life courses for black women (descriptive information in Table 2). In addition to the strongest linear association between work and family

lives indicated by the Mantel coefficients for in Figure 1, we also find clear interactive associations in the typology of work-family life courses. For black women both types of interactive associations occur, that is one family type being associated with different work lives (Hyp 2b) and one type of work career occurring in combination with multiple family life course profiles (Hyp 2c). In particular there is a polarization of single mothers into either interrupted low prestige careers and extended periods out of the labor force (Cluster 1) or relatively medium prestige upward mobility careers (Cluster 5) (association of type 2b). A distinguishing feature between these two groups is that the single mothers in Cluster 1 have many children (2.4) and enter single motherhood very early, almost all before age 22 and are mostly single mothers at birth. In contrast the single mothers in Cluster 5 have fewer children (1.7), enter single motherhood later in their twenties and often through separation. Our longitudinal process perspective thereby highlights that not the status of being a single mother as such, but it's timing and life course context (from birth or through separation) are decisive for career development (see Zagel 2013, 2018).

The second lowest prestige group, Cluster 2 signifies work-family experiences of multiple children at a young age with re-partnering into step family arrangements combined with higher prestige and less interrupted careers. While Cluster 1 has the lowest average prestige (mean = 34.2) followed by Cluster 2 with a gap (mean = 38.8), the remaining Clusters 3, 4 and 5 have very similar medium average prestige scores ranging from 45 to 46. The employment careers of these three groups are very similar. Their family lives differ widely ranging from late single motherhood (Cluster 5), single childlessness (Cluster 4) to two children in a stable partnership (Cluster 3) (association of type 2c).

Only 14 percent of black women combine a medium prestige career with two children and a stable partnership (Table 2), arguable the normative work-family life course in contemporary US-American society. Either late single parenthood and childlessness are the most common family life courses for black women with medium prestige careers (22 and 18 percent). In contrast, for black men, these family lives only occur in combination with low prestige employment careers (Figure 3). Also unlike black men, following our categorization of low, medium and high prestige (see data section) there is no high prestige employment cluster for black women. High prestige careers are so rare among black women that they are not identified as a "typical" work-family profile.

Our findings thereby highlight highly gender-specific dynamics in combining work and family lives for African Americans. The five groups in Figure 4 further demonstrate the heterogeneity of black women's work-family experiences. This heterogeneity has received little attention in previous research on black women that tends to focus on early single mothers with precarious employment and high welfare dependency, that is Cluster 1 in our analysis (Edin and Lein 1997; Edin and Kefalas 2011). Displaying the full variety of black women's work-family experiences over time highlights a "deficit orientation" of much previous research that explicitly focuses on "problematic" work-family lives of black women and neglects the remarkably resilient and successful careers of black women in Clusters 3, 4 and 5 in Figure 4.

Figure 4: State distribution plots of 5 multidimensional work and family clusters for black women (view in color)

Table 2: Descriptive information for black and white women

Typical work-family life courses of white women

Figure 5 shows state distribution plots for the combined work-family clusters for white women. In line with the much more abundant research on this group compared to black men and women, high fertility and single motherhood appear as the prime obstacles to high prestige employment careers (e.g. Abendroth et al. 2014; Kahn et al 2014). Unlike for black women we can identify two high prestige clusters for white women. The highest average prestige group has an average prestige 4 points higher than the highest prestige cluster for black men. In contrast to black women, for white women single motherhood only occurs in sizeable numbers in combination with low prestige interrupted careers and not with stable middle class careers.

Figure 5: State distribution plots of 5 multidimensional work and family clusters for white women (view in color)

Similar to black women, the lowest prestige cluster for white women also combines early single motherhood with interrupted low prestige employment and welfare dependence. However, this pattern only characterizes work-family experiences of 13 percent of white women compared to 34 percent for black women (Tables 3 and 4) and the average prestige even among this lowest prestige cluster is 4 points higher for white women than for black women.

Conclusions

In this paper we bring together a longitudinal life course and intersectionality perspective to uncover complex longitudinal population level inequalities in work-family life courses at the intersection of gender and race. Our findings highlight the wide variety of systematic workfamily profiles within each intersectional category – with the exception of white men - and debunk the deficit orientation of previous studies focusing on black men and women's family and work life courses. For example the sampling strategy of the Fragile Families Survey focuses on obtaining a nationally representative sample of non-marital births in urban areas and thereby by design neglects typical work-family life course experiences of black Americans that are more resilient and "successful" in terms of labor market outcomes.

In line with expectations, white men's work-family life courses, at least for our study cohorts, are characterized by the "privilege of possibility". We neither find significant linear associations between work and family life courses (Mantel coefficients), nor a meaningful structure of typical multidimensional work family profiles (multichannel sequence analysis). In contrast, for black men and white owmne, findings support moderate linear associations between work and family life, albeit with somewhat different substantive content. The multichannel sequence analysis further showed that for black men and white women the privilege of high prestige employment is constrained to family life courses of late parenthood and having few children. The work-family patterns we uncover for black men polarize into high or low occupational prestige careers, underlining research on the erosion of the black middle class. There is no common career path for black men in "secure middle class" jobs. Black women's work-family life courses are most constrained by a strong association between the two life course dimensions. Importantly, a stable high prestige employment cluster that exists for black men and also white women is not viable for black women. For them the privilege of high prestige employment is unattaianable in significant numbers irrespective of their family lives. For black women the highest medium prestige careers are constrained by specific family life courses with either delayed or foregone fertility.

Our results provide a new perspective on past findings of lower motherhood penalties and fatherhood premia for black compared to white women and men (Glauber 2007; 2008). Previous findings on family penalties only compare within intersectional groups, if they assess family wage gaps all else controlled. A lower motherhood penalty among black women compared to white women might suggest that black mothers are less disadvantaged compared to white mothers, but our findings suggest the opposite. Black mothers have a lower earnings gap compared to black childless, because childless black women are disadvantaged compared to childless white women. This is indicated by the absence of a typical work-family profile of high prestige careers for black women, regardless of their family life course.

We innovatively apply recent developments of sequence analysis to bridge the work-family and intersectionality literatures and argue for complementing period measures of social inequality in work-family life courses with process outcomes. Using these new tools allowed us to establish complex longitudinal population level regularities in intersectional inequalities in work-family life courses that are not easily seen or immediately accessible (Goldthorpe 2015). Identifying complex population level regularities is an important precondition for assessing their causes and consequences.

We highlighted structural factors, including class-specific gender, work-family and health care policies as important conditions likely contributing to the intersectional inequalities in work family life courses for our study cohorts in the United States. Future research should further disentangle the micro mechanisms that link different structural conditions to individual level life course outcomes. Possibly and likely different theoretical mechanisms have more predictive power in explaining the work-family patterns for black men, black women, white women and white men. For instance, for white women employee side characteristics, such as traditional

gender norms, selection into motherhood of less career oriented women, and mother's limited ability to comply with the ideal worker norm (productivity) might be most predictive for sorting into different work-family life course clusters. Moreover given frequently high earning husbands, employment is less of an economic necessity for many middle and upper class white women compared to black women. Among black men and women a lack of parental resources and employer side characteristics of discrimination might be more powerful explanatory factors for who sorts into which work-family life course type. In particular discrimination on combined intersectional categories (e.g. black single mother) is likely to be much larger than the additive effect of each of these categories separately (Pager 2003). In addition the availability of support with child care in kinship networks, including the availability of grandparent care might be a crucial factor especially for black men and women who try to balance parenthood with unstable, inflexible and irregular work hours (Carrillo et al 2017). These and other theoretical mechanisms that drive intersectional social inequalities in work and family life courses should be explored in future research.

References

- Abendroth, A. K., Huffman, M. L., & Treas, J. (2014). The parity penalty in life course perspective: Motherhood and occupational status in 13 European countries. *American Sociological Review*, 79(5), 993-1014.
- Aisenbrey, S. and Fasang, A. E. (2017): "The Interplay of Work and Family Trajectories over the life course: Germany and the United States in Comparison". *American Journal* of Sociology 122(5):1448–1484.
- Aisenbrey, S. Evertsson, M & Grunow, D. (2010): "Is there a career penalty for mothers' time out? A comparison of Germany, Sweden and the U.S.". *Social Forces* 88(2): 573-606.
- Aisenbrey, S. & Fasang, AE (2010): "New life for old ideas: The 'Second Wave' of Sequence Analysis Bringing the 'Course' Back into the Life Course", *Sociological Methods and Research* 38(3): 420-462.
- Benard, S., & Correll, S. J. (2010). Normative discrimination and the motherhood penalty. *Gender & Society*, 24(5), 616-646.
- Bowleg 2008: When black+lesbian+women=black lesbian women: the methodological challenges of qualitative and quantitative intersectionality research. *Sex Roles*, 59, 312-325.
- Boushey, H. (2008). Family friendly policies: Helping mothers make ends meet. Review of Social Economy, 66(1), 51–70.
- Browne, I., & Misra, M. (2003). "The Intersection of Race and Gender in the Labor Market." *Annual Review of Sociology* 29(1):487–514.
- Carrillo, D., Harknett, K., Logan, A., Luhr, S., & Schneider, D. (2017). Instability of Work and Care: How Work Schedules Shape Child-Care Arrangements for Parents Working in the Service Sector. *Social Service Review*, 91(3), 422-455.
- Chandra, A., Martinez, G. M., Mosher, W. D., Abma, J. C., & Jones, J. (2005). Fertility, family planning, and reproductive health of US women; data from the 2002 National Survey of Family Growth.
- Choo, Hae Yeon and Myra Marx Ferree. (2010). "Practicing Intersectionality in Sociological Research: A Critical Analysis of Inclusions, Interactions and Institutions in the Study of Inequalities." *Sociological Theory* 28(2): 129-149.
- Cooke, L. P. (2014). Gendered parenthood penalties and premiums across the earnings distribution in Australia, the United Kingdom, and the United States. *European Sociological Review*, *30*(3), 360-372.
- Correll, S. J., Benard, S., & Paik, I. (2007). Getting a job: Is there a motherhood penalty?. *American journal of sociology*, 112(5), 1297-1338.
- Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford law review*, 1241-1299.
- DiPrete, T. A., & McManus, P. A. (2000). Family change, employment transitions, and the welfare state: Household income dynamics in the United States and Germany. *American Sociological Review*, 343-370.
- Edin, K., & Lein, L. (1997). *Making ends meet: How single mothers survive welfare and low-wage work*. Russell Sage Foundation.
- Edin, K., & Kefalas, M. (2011). Promises I can keep: Why poor women put motherhood before marriage. Univ of California Press.

- England, P., Bearak, J., Budig, M. J., & Hodges, M. J. (2016). Do Highly Paid, Highly Skilled Women Experience the Largest Motherhood Penalty? *American Sociological Review*, 81(6), 1161-1189.
- England, P. (1979). Women and occupational prestige: A case of vacuous sex equality. *Signs: Journal of Women in Culture and Society*, 5(2), 252-265.
- Fang H., & Keane M. (2004). Assessing the Impact of Welfare Reform on Single Mothers. Brookings Papers on Economic Activity, 1
- Glauber, R. (2008) "Gender and Race in Families and at Work: The Fatherhood Wage Premium." *Gender & Society* 22(1): 8-30.
- Glauber, R. (2007) "Marriage and the Motherhood Wage Penalty among African mericans, Hispanics, and Whites." *Journal of Marriage and the Family* 69(4):951–61.
- Goldthorpe, J. H. (2015). Sociology as a population science. Cambridge University Press.
- Grunow, D., & Aisenbrey, S. (2016). Economic instability and mothers' employment: A comparison of Germany and the US. *Advances in Life Course Research*, 29, 5-15.
- Reichman, N. E., Teitler, J. O., Garfinkel, I., & McLanahan, S. S. (2001). Fragile families: Sample and design. *Children and Youth Services Review*, 23(4-5), 303-326.
- Hout, M., & DiPrete, T. A. (2006). What we have learned: RC28's contributions to knowledge about social stratification. *Research in social stratification and mobility*, 24(1), 1-20.
- Iceland, J. (2013) *Poverty in America: A Handbook*, 3rd ed., University of California Press, Berkeley; Los Angeles; London.
- Kahn, J. R., García-Manglano, J., & Bianchi, S. M. (2014). The Motherhood Penalty at Midlife: Long-Term Effects of Children on Women's Careers. Journal of Marriage and Family, 76(1), 56-72.
- Killewald, A., & Gough, M. (2013). Does specialization explain marriage penalties and premiums?. *American sociological review*, 78(3), 477-502.
- Loughran, D. S., & Zissimopoulos, J. M. (2009). Why wait? The effect of marriage and childbearing on the wages of men and women. *Journal of Human resources*, *44*(2), 326-349.
- Mazelis, Joan M. (2017) "Surviving Poverty, Creating Sustainable Ties among the Poor." *NYU Press.*
- McCall, Leslie: The Complexity of Intersectionality, *Signs: Journal of Women in Culture and Society* Mar 2005, Volume 30, Issue 3, pp. 1771 – 1800
- McCall, Leslie 2000. "Explaining Levels of Within-Group Wage Inequality in U.S. Labor Markets." *Demography* 37(4):415–30.
- Nash, Jennifer. 2008. "Re-Thinking Intersectionality." Feminist Review 89: 1-15.
- Nelson, A. (2002). Unequal treatment: confronting racial and ethnic disparities in health care. Journal of the National Medical Association, 94(8), 666.
- Phoenix, Ann, and Pamela Pattynama. 2006. "Intersectionality." *European Journal of Women's Studies* 13 (3): 187–192.
- Pal, Ipshita, and Jane Waldfogel. (2016) "The Family Gap in Pay: New Evidence for 1967 to 2013." *Russel Sage Foundation*.
- Penner, Andrew M and Saperstein A. (2013): "Engendering racial perceptions: An Intersectional Analysis of How Social Status Shapes Race" Gender and Society, 27 (3) 319-344
 Pew research institute (2017).
- Pager, D. (2003). The mark of a criminal record. American journal of sociology, 108(5), 937-975.

- Raley, R. K., Sweeney, M. M., & Wondra, D. (2015). The growing racial and ethnic divide in US marriage patterns. The Future of Children/Center for the Future of Children, the David and Lucile Packard Foundation, 25(2), 89.
- Piccarreta, R., & Elzinga, C. H. (2013). Mining for Association Between Life Course Domains. Chapter 8 in Contemporary Issues in Exploratory Data Mining in the Behavioral Sciences, 190.
- Piccarreta, R. (2017). Joint Sequence Analysis: Association and Clustering. *Sociological* Methods & Research, 46(2), 252-287.
- Ray, Rebecca, Gornick, J., & Schmitt, John. (2009). Parental leave policies in 21 countries:
- Assessing generosity and gender equality. Center for Economic and Policy Research.
- Sirniö, O., Kauppinen, T. M., & Martikainen, P. (2017). Intergenerational determinants of joint labor market and family formation pathways in early adulthood. Advances in Life Course Research, 34, 10-21.
- Sprague, J. (2005): Feminist methodologies for critical researchers, briding differences.
- Studer, M., & Ritschard, G. (2016). What matters in differences between life trajectories: a comparative review of sequence dissimilarity measures. *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, 179(2), 481-511.
- Jones, K. and Skendall (2012). Re-framing authenticity: considering multiple social indentities using autoethnographic and intersectional approaches. *The Journal of Higher Education*. 83 (5). 698-723
- Smock, P. J. (2000). Cohabitation in the United States: An appraisal of research themes, findings, and implications. *Annual review of Sociology*, 26(1), 1-20.
- Walby, S. (2009). Globalization and inequalities: Complexity and contested modernities. Sage.
- Waldfogel, J. (2001). International Policies toward Parental Leave and Child Care. The Future of Children, 11, 98–111.
- Zagel, H. (2013). Are all single mothers the same? Evidence from British and West German women's employment trajectories. *European sociological review*, *30*(1), 49-63.
- Zagel, H. (2018). Lebensbedingungen Alleinerziehender. In *Alleinerziehen im Lebensverlauf* (pp. 5-14). Springer VS, Wiesbaden.

Yoest 2004

Zinn, M. B., & Dill, B. T. (1996). Theorizing difference from multiracial feminism. *Feminist studies*, 22(2), 321-331.

Figures

Figure 1: Mantel coefficient to measure (linear) association between work and family life courses (NLSY 1979).



Figure 2: Cluster Cut-off criteria for PAM cluster analysis based on multichannel sequence distances for four intersectional groups (NLSY 1979)



Figure 3: State distribution plots of 6 multidimensional work and family clusters for black men

(view in color)



Figure 4: State distribution plots of 5 multidimensional work and family clusters for black

women (view in color)





Figure 5: State distribution plots of 5 multidimensional work and family clusters for white women (view in color)





Tables

				Black				White
Clusters	1)	2)	3)	4)	5)	6)	Total	Total
Ν	180	158	175	107	98	109	827	1757
%	22	19	21	13	12	13	100	100
Average Treimann	28.9	33.7	34.0	35.7	38.1	49.2	35.6	42.2
% No HS	34.3	29.7	25.7	29.0	18.4	10.1	25.9	17.7
% Just HS	49.4	32.3	49.1	41.1	39.8	19.3	40.3	35.5
Father Edu years	9.3	10.2	10.5	9.5	11.0	11.3	10.3	11.8
Mother Edu years	10.3	10.9	10.9	10.6	10.9	11.9	10.9	11.4
Child start	0.6	0.01	0.5	0.7	0.3	0.2	0.4	0.2
Child end	2.2	0.3	2.2	3.5	1.9	1.5	1.9	1.7

Table 1: Descriptive information for black and white men

	Black					White						
Clusters	1)	2)	3)	4)	5)	Total	1)	2)	3)	4)	5)	Total
N	299	115	118	153	188	873	236	372	535	473	210	1826
%	34	13	14	18	22	100	13	20	29	26	12	100
Average Treimann	34.2	38.8	45.2	45.7	46.3	41.1	38.0	42.3	46.7	48.6	53.7	
% No HS	38.5	17.4	1.7	7.2	7.4	18.7	36.0	18.8	14.2	5.7	4.3	14.6
% Just HS	35.8	34.8	38.1	22.2	28.7	32.1	41.9	32.2	35.7	38.3	18.1	34.3
Father Edu years	9.4	10.0	10.7	11.3	10.4	10.3	10.2	11.7	11.5	12.2	12.7	11.7
Mother Edu years	9.9	10.9	11.1	11.2	10.9	10.7	9.9	11.1	11.4	11.7	12.2	11.3
Child start	1.2	0.9	0.4	0.0	0.8	0.8	0.9	0.7	0.4	0.1	0.01	0.4
Child end	2.4	2.9	1.9	0.2	1.7	1.9	2.3	3.2	2.0	0.9	0.7	1.8

Table 2: Descriptive information for black and white women