RESEARCH BRIEFS



Trends in Intentions to Remain Childless in the United States

Anna Rybińska¹

Received: 25 April 2019 / Accepted: 23 August 2020 / Published online: 1 September 2020 © Springer Nature B.V. 2020

Abstract

The purpose of this study is to describe population-level trends in intentions to remain childless (ITRC) among men and women in the United States in the first decades of the twenty-first century. We use a sample of 31,739 women and 24,524 men aged 18-44 from a cross-sectional and nationally representative survey, the National Survey of Family Growth. Our analyses utilize five of the survey's cycles: from 2002 through 2015–2017. Trends in the unadjusted proportions of men and women who report ITRC are presented, along with predicted probabilities of reporting *ITRC* from multivariate regressions. At the beginning of the twenty-first century, the prevalence of *ITRC* increased in the general population of men and women in the United States as well as among the youngest adults aged 18-24. If ITRC are realized, permanent childlessness rates could increase in the near future, contributing to the ongoing fertility decline in the United States. Further analyses uncover similarities and differences in the ITRC trends and correlates between men and women. Increases in ITRC among women are connected to changes in the sociodemographic composition of the population but *ITRC* increases among men are not connected to population composition changes. In addition, a positive education gradient is observed in ITRC among women but not among men. These variations in ITRC prompt a call for further research into gender and intentions for childlessness.

Keywords Childlessness \cdot Childbearing intentions \cdot Fertility \cdot National Survey of Family Growth

Anna Rybińska a.rybinska@duke.edu

Electronic supplementary material The online version of this article (https://doi.org/10.1007/s1111 3-020-09604-9) contains supplementary material, which is available to authorized users.

¹ Center for Child and Family Policy, Sanford School of Public Policy, Duke University, Duke Box 90539, Durham, NC 27708, USA

Introduction

Fertility rates in the United States have reached record low levels of 1728.0 births per 1000 women in 2018 (Hamilton et al. 2019). In light of these historical declines, recent research has explored the potential causes of low fertility in the United States, including parenthood postponement and the impact of the economic recession (Matthews and Hamilton 2016; Schneider 2015). However, an alternative explanation for this trend: a potential increase in intended childlessness, has received less attention. Is it possible that Americans, instead of postponing parenthood, are rather increasingly developing intentions to remain childless (hereafter *ITRC*)?

Existing empirical evidence on women indicates that *ITRC* are correlated with subsequent childlessness (Berrington 2004; Heaton et al. 1999; Rovi 1994). For instance, childless women who reported *ITRC* at age 24 were 4.5 times more likely to remain childless at age 45, and the association between childlessness intentions and permanent childlessness grew even stronger as women got older (Rybińska and Morgan 2019). An increase in the prevalence of *ITRC* at the population level could thus be associated with future increases in rates of permanent childlessness and further declines in fertility rates in the United States.

Reports of *ITRC* were rare in the United States in the twentieth century (Hagewen and Morgan 2005; Schoen et al. 1997). In 1998, 7.8% of women aged 18–39 reported intentions to remain childless, per authors' own calculations using the Current Population Survey (Ruggles et al. 2017). Research from Europe has however documented an increase in childlessness intentions in the early twenty-first century in 12 countries, including the United Kingdom (Miettinen and Szalma 2014). Given the recent increases in *ITRC* in similar low-fertility contexts in Europe, in this research note we examine whether childlessness intentions might have also increased in the United States over the past two decades.

Importantly, men's childbearing and childlessness intentions are largely omitted from childlessness studies (Blackstone and Stewart 2012) as well as childbearing studies at large (Almeling 2015). At the same time, most children in the United States are born to co-residing parents (Bumpass and Raley 1995; Bumpass and Lu 2000; Kennedy and Bumpass 2008) who make a joint decision about parenthood (for the United States, see e.g., Thomson et al. 1990; Thomson 1997). Consequently, both partners' childbearing intentions might influence the decision about pregnancy and birth. A disagreement about parenthood between partners can lead to further childbearing delay, or even a decision to abandon plans for parenthood (for Italy: Testa et al. 2014). An additional contribution of our study is thus that we provide a rare look at childlessness preferences of American men.

Rising Prevalence of Intentions to Remain Childless: Explanations

Scholars who stress the impact of ideological changes on fertility argue that, increasingly, childbearing behavior is motivated by new ideas that place the individual and individual choice at the center of the unfolding life course (Lesthaeghe and van de Kaa 1986; van de Kaa 1987). Parenthood remains an important component of a meaningful life but in a context in which the decision to parent is optional, other life choices can also contribute to individual self-actualization (Giddens 1991). Simultaneously, social acceptance of intended childlessness is on the rise (Thorton and Young-DeMarco 2001; Chancey and Dumais 2009). In addition, costs of childrearing—in terms of financial resources as well as time investments—are increasing (Gauthier et al. 2004; Kornrich and Furstenberg 2013) which might lead young adults to perceive parenthood as more costly than the generation of their parents. Taken together, these cultural and economic changes might challenge the centrality of parenthood for individual life satisfaction. In line with these arguments, we hypothesize that *ITRC* are on the rise in the United States.

However, the prevalence of *ITRC* might also be affected by compositional changes in the structure of the United States' population. *ITRC* are more prevalent among specific groups of women, such as older women, women with higher educational attainment, and never-married single women (Abma and Martinez 2006). In the United States, levels of college education and singlehood are rising (Ryan and Siebens 2012; Traister 2016). Thus, increases in the shares of these specific populations in the general population might explain increases in *ITRC*. Compositional changes in the racial/ethnic profile of the U.S. population could in contrast result in declines in *ITRC*, because minority women tend to have lower levels of *ITRC* than non-Hispanic white women (Lundquist et al. 2009; Sweeney and Raley 2014). Accordingly, the analyses will account for the age, race/ethnicity, educational attainment, and partnership status of the individuals in the sample.

Very few studies to date have specifically examined the interdependence of socio-demographic correlates and childlessness intentions among men (notable exceptions include Jacobson and Heaton 1991; Lunneborg 1999). However, previous research has documented gendered differences with respect to socio-demographic correlates of reproductive experiences (e.g., with respect to education in Norway: Kravdal and Rindfuss 2008). Thus, while our examination of men's *ITRC* is mainly exploratory, we tentatively expect to observe some variation in factors associated with *ITRC* between men and women.

Data and Methods

We use pooled data from the National Survey of Family Growth (NSFG) cycles 2002, 2006–2010, 2011–2013, 2013–2015, and 2015–2017 to investigate the population-level changes in *ITRC* among American women and men. The NSFG

is a repeated cross-sectional survey that is representative of the civilian, noninstitutionalized population aged 15–44. A previous publication on this topic that focused on the United States by Hagewen and Morgan (2005) used the Current Population Survey (CPS, Ruggles et al. 2017), but the measure of childbearing intentions was discontinued in this survey in 1998. As a sensitivity test, we compare the NSFG trends for women with previous data from the CPS in the online Appendix.

We selected a sample of 31,739 women and 24,524 men aged 18–44 with complete data on the pertinent covariates (we excluded 630 records for women and 273 records for men due to missing data and imputations). If the respondents had no biological, adopted, or step-children, and reported no intentions of having children in the future, they were classified as reporting intentions to remain childless (*ITRC*). The respondents who already had children, or who were childless but said they intend to have children in the future, were assigned to the comparison group. We also classified uncertainty about future childbearing as **not** intending to remain childless. We believe that this approach generated a conservative estimate of childlessness intentions.

We present our results separately for men and women. First, we discuss estimates for the population aged 18–44, and then present multivariate logistic regression analyses accounting for age, race/ethnicity, partnerships status, and educational attainment. Race/ethnicity categories include non-Hispanic White, non-Hispanic Black, Hispanic, and non-Hispanic other. We distinguish between respondents with less than 12 years of education (equivalent to less than a high school degree), 12 years of education (equivalent to a high school degree), 13–15 years of education (equivalent to completing some post-secondary education), and 16 or more years of education (equivalent to completing a bachelor's degree or higher degrees). Partnership status categories include married, cohabiting, separated single (due to the small sample size, this category includes all women who are divorced, separated, or widowed), and never-married single. All analyses account for the NSFG survey design. Descriptive statistics for the overall sample as well as by NSFG cycle are presented in the online Appendix.

Findings

At the population level, the prevalence of *ITRC* among women aged 18–44 increased from 8.3% in the 2002 cycle to 10.3% in the 2015–2017 cycle (Fig. 1). Bivariate logistic regression estimates indicate that this increase was statistically significant (Table 1, Model 1). However, in a multivariate context (Table 1, Model 2) the increase in the prevalence of *ITRC* among women is shown to be no longer statistically significant. Further analyses indicate that increases in the proportion of single women account for the association between NSFG survey cycles and *ITRC* (see the online Appendix).

For men, we observe a U-shaped tendency in *ITRC*: the prevalence of childlessness intentions declined from 11.8% in the 2002 cycle to 9.8% in the 2006–2010 cycle but increased steadily thereafter to 13.9% in the 2015–2017 cycle (Fig. 1).



Fig. 1 Proportions of women and men aged 18–44 who intend to remain childless in the United States. National Survey of Family Growth cycles from 2002 to 2015–2017. Letters designate statistically significant difference at *p*-value <0.05 between the specific NSFG cycle and the reference cycle of: ^a2002; ^b2006–2010; ^c2011–2013; ^d2013–2015

Because of this trend, we used the 2006–2010 cycle as a reference category for logistic regression modeling for men. In both bivariate and multivariate settings (Table 1, Models 3 and 4), we detect a dip in the odds of reporting *ITRC* between the 2002 and 2006–2010 cycles and an increase in the odds of reporting *ITRC* between the 2006–2010 and 2015–2017 cycles. In other words, in contrast to the findings for women, the increase in *ITRC* across NSFG cycles among men is not associated with changes in the socio-demographic composition of the population.

Models 2 and 4 show differences in *ITRC* across socio-demographic groups including a positive age gradient in *ITRC* and lower odds of reporting *ITRC* among minority respondents (compared to non-Hispanic White respondents). In addition, cohabiting, never-married single, and separated single respondents have higher odds of reporting *ITRC* compared to married respondents. These associations are observed across the subpopulations of men and women. However, educational differences are only present for the population of women: women with 16 or more years of education have higher odds of reporting *ITRC* compared to women with 12 years of education.

In the next step, temporal changes in *ITRC* within the socio-demographic subgroups are examined using marginal effects sourced from Model 2 for women and from Model 4 for men. We use the 2002 survey cycle as our reference point for describing the findings in this paragraph. There are however several non-linear associations, especially among men, which are marked with additional notations in Figs. 2, 3 and 4.

cycles from 2002 to 2015				in and in the second		0				
	Women					Men				
	Model 1		Model 2			Model 3		Model 4		
	Odds Ratio	<i>p</i> -value	Odds ratio	<i>p</i> -value	Predicted probability	Odds ratio	<i>p</i> -value	Odds ratio	<i>p</i> -value	Predicted probability
Survey cycle										
2002	Ref. cat		Ref. cat		8.8%	1.2	0.018	1.3	0.005	12.1%
2006-2010	1.0	0.817	0.9	0.486	8.3%	Ref. cat		Ref. cat		9.8%
2011-2013	1.1	0.211	1.1	0.495	9.3%	1.0	0.667	1.0	0.730	10.1%
2013-2015	1.2	0.115	1.1	0.437	9.4%	1.2	0.077	1.2	0.037	11.5%
2015-2017	1.3	0.035	1.2	0.191	10.0%	1.5	0.000	1.5	0.000	13.6%
<u>Age group</u>										
18-24 years old			Ref. cat		6.1%			Ref. cat		7.0%
25-29 years old			1.3	0.012	7.6%			1.4	0.001	9.3%
30-34 years old			1.4	0.004	8.1%			2.2	0.000	13.8%
35-39 years old			2.5	0.000	13.4%			2.6	0.000	15.9%
40-44 years old			3.2	0.000	16.3%			3.5	0.000	19.9%
Race/ethnicity										
Non-Hispanic white			Ref. cat		10.9%			Ref. cat		13.3%
Non-Hispanic black			0.5	0.000	6.5%			0.6	0.000	8.4%
Hispanic			0.5	0.000	6.3%			0.6	0.000	8.1%
Non-Hispanic other			0.7	0.012	7.9%			0.8	0.027	10.8%
Educational attainment										
<12 years			0.7	0.000	6.1%			0.9	0.094	10.5%
12 years			Ref. cat		8.7%			Ref. cat		11.9%

Table 1 Logistic regression estimates for intentions to remain childless, samples of women and men aged 18–44 in the United States. National Survey of Family Growth

	Women					Men				
	Model 1		Model 2			Model 3		Model 4		
	Odds Ratio	<i>p</i> -value	Odds ratio	<i>p</i> -value	Predicted probability	Odds ratio	<i>p</i> -value	Odds ratio	<i>p</i> -value	Predicted probability
13-15 years			1.0	0.813	8.5%			1.0	0.734	11.7%
16+years			1.4	0.000	11.7%			0.9	0.457	11.3%
Partnership status										
Married			Ref. cat		4.4%			Ref. cat		5.2%
Cohabiting			2.8	0.000	11.2%			3.0	0.000	14.0%
Separated single*			1.5	0.000	6.6%			1.6	0.000	8.3%
Never-married single			5.6	0.000	19.5%			5.0	0.000	20.9%
Constant	0.1	0.000	0.0	0.000		0.1	0.000	0.0	0.000	
Ν	31,739		31,739			24,524		24,524		
F-statistic	2.04		39.08			4.67		25.53		
Prob. > F	0.0881		0.0000			0.0011		0.0000		

 Table 1
 (continued)

	o-residential relation-
0.0000	owed) and not in a new co
0.0011	eparated, divorced, or wid
	from their spouse (i.e., s
0.0000	re at present separated f
0.0881	were previously married but a
Prob. > F	*respondents, who v ship

667



Fig. 2 Marginal predicted probabilities of intentions to remain childless among women and men aged 18–44 in the United States by survey cycle and age group. National Survey of Family Growth cycles from 2002 to 2015–2017. Predicted probabilities represent marginal effects from a multivariate logistic regression including age, race/ethnicity, educational attainment, partnership status, and survey cycle indicators. Letters designate statistically significant difference at *p*-value <0.05 between the specific NSFG cycle and the reference cycle of: ^a2002; ^b2006–2010; ^c2011–2013; ^d2013–2015



Fig. 3 Marginal predicted probabilities of intentions to remain childless among women and men aged 18–44 in the United States by survey cycle and educational attainment. National Survey of Family Growth cycles from 2002 to 2015–2017. Predicted probabilities represent marginal effects from a multivariate logistic regression including age, race/ethnicity, educational attainment, partnership status, and survey cycle indicators. Letters designate statistically significant difference at *p*-value <0.05 between the specific NSFG cycle and the reference cycle of: ^a2002; ^b2006–2010; ^c2011–2013; ^d2013–2015



Fig. 4 Marginal predicted probabilities of intentions to remain childless among women and men aged 18–44 in the United States by survey cycle and partnership status. National Survey of Family Growth cycles from 2002 to 2015–2017. Predicted probabilities represent marginal effects from a multivariate logistic regression including age, race/ethnicity, educational attainment, partnership status, and survey cycle indicators. Letters designate statistically significant difference at *p*-value <0.05 between the specific NSFG cycle and the reference cycle of: ^a2002; ^b2006–2010; ^c2011–2013; ^d2013–2015

We document a distinct upward trend in the probability of reporting *ITRC* among women and men aged 18–24: from 4.5% in the 2002 cycle to 7.8% in the 2015–2017 cycle for women and respectively from 5.8 to 8.8% for men (Fig. 2). We also observe increases in the probability of reporting *ITRC* among men aged 25–29 and declines among men aged 35–39. The findings further indicate that the probability of reporting *ITRC* increased among men with 13–15 years of education (Fig. 3). Finally, we observe increases in reporting *ITRC* for never-married single women (from 17.1% in the 2002 cycle to 21.9% in the 2013–2015 cycle) and for separated single men (from 6.2% in the 2002 cycle to 11.9% in the 2015–2017 cycle, Fig. 4). Because we detected no changes in the temporal *ITRC* trends within race/ethnicity subpopulations (in comparison to the 2002 NSFG cycle), we omitted these findings from the manuscript, and included them in the online Appendix.

Conclusion and Discussion

The purpose of this paper was to identify population-level trends in the prevalence of intentions to remain childless (*ITRC*) in the United States in the early decades of the twenty-first century. We used the National Survey of Family Growth cycles from 2002 to 2015–2017 to investigate *ITRC* among men and women aged 18–44.

We found increases in the prevalence of *ITRC* among women aged 18-44 from 8.3% in the 2002 survey cycle to 10.3% in the 2015–2017 survey cycle. To our

knowledge, this study is the first to report rises in preferences regarding childlessness among women in the United States. The prevalence of *ITRC* among American men followed a U-shaped trend with a decline from 11.8% in the 2002 NSFG cycle to 9.8% in the 2006–2010 cycle and an increase to 13.9% in the 2015–2017 cycle. Because intentions to remain childless correlate with subsequent childlessness (Rovi 1994; Rybińska and Morgan 2019), increases in *ITRC* might indicate that childlessness rates will increase in the coming decades, further depressing fertility rates in this country.

In addition, distinct increases in *ITRC* are observed among young women (aged 18–24) and men (aged 18–24 and 25–29). As these young Americans are in the middle of exploring different life choices and of drawing up plans for adulthood, they might be especially attuned to current social norms regarding the importance of parenthood and acceptance of childlessness, as well as to the perceived costs of childrearing. Indeed, young Americans have recently verbalized concerns about the financial burdens of parenthood (Brinton et al. 2018). Are worries about the costs of raising children driving young Americans to choose childlessness? Future studies could explore the spread of intentions to remain childless among young adults with connection to social norms and economic conditions.

Finally, benefiting from data on *ITRC* among men, in this study, we uncover interesting differences in childlessness intentions among men and women. First, increases in the prevalence of *ITRC* among women are connected to the compositional changes in the socio-demographic profile of the population. Specifically, increases in the proportion of single women account for the higher prevalence in *ITRC* in the twenty-first century. However, the increases in the prevalence of *ITRC* among men are irrespective of compositional population changes. Second, while we observe a positive association between educational attainment and *ITRC* among men.

These associations suggest that tensions between professional and family responsibilities might continue to play an important role in shaping permanent childlessness trends among women but not among men in the United States. Over the past decades, tensions between private and public social roles for women have increased due to women's entry into the labor force (Gerson 1985; Hochschild 1989) and research indicates that the created work-family life conflict has disproportionately affected women with higher educational attainment (Blain-Loy 2005). Meanwhile, the expectations for men have changed to a lesser extent (Gerson 2010). Thus, women, especially college educated women, might continue to face a trade-off between education/professional career and marriage/parenthood while men are less affected by such considerations.

Given the observed similarities and differences in the *ITRC* trends and correlates between men and women, we encourage future empirical research into factors contributing to gendered socio–demographic variations in *ITRC* and *ITRC* development. Emerging theoretical approaches to men's roles in biological and social processes of reproduction (Almeling 2015) offer compelling frameworks for such research. However, active data collection efforts are also necessary to fill the gap in the existing knowledge about men's childbearing intentions. Measures of reproductive intentions could be for instance introduced to ongoing longitudinal social surveys, such as the 1997 National Longitudinal Survey of Youth, to complement information from cross-sectional sources.

Acknowledgements The Author is grateful for comments on this paper to Kenneth A. Bollen, Yong Cai, Kathleen M. Harris, S. Philip Morgan, Lisa D. Pearce, and Katherine I. Tierney. Preliminary stages of this research were conducted during Author's stay at the Carolina Population Center, University of North Carolina at Chapel Hill, which receives funding from the Eunice Kennedy Shriver National Institute of Child Health and Human Development (P2C HD050924).

Compliance with Ethical Standards

Conflict of interest The authors confirm that there are no known conflicts of interest associated with this publication and there has been no significant financial support for this work that could have influenced its outcome.

Ethical Approval We further confirm that no aspect of the work covered in this manuscript has involved either animals or human patients. The research covered in this manuscript was conducted solely using secondary data from publicly available sources.

References

Almeling, R. (2015). Reproduction. Annual Review of Sociology, 41, 423-442.

- Abma, J. C., & Martinez, G. M. (2006). Childlessness among older women in the United States: Trends and profiles. *Journal of Marriage and Family*, 68(4), 1045–1056.
- Berrington, A. (2004). Perpetual postponers? Women's, men's and couple's fertility intentions and subsequent fertility behaviour. *Population Trends*, 117, 9–19.
- Blackstone, A., & Stewart, M. D. (2012). Choosing to be childfree: Research on the decision not to parent. Sociology Compass, 6(9), 718–727.
- Blair-Loy, M. (2005). Competing devotions: Career and family among women executives. Cambridge: Harvard University Press.
- Bumpass, L. L., & Raley, R. K. (1995). Redefining single-parent families: Cohabitation and changing family reality. *Demography*, 32(1), 97–109.
- Bumpass, L., & Lu, H. H. (2000). Trends in cohabitation and implications for children s family contexts in the United States. *Population Studies*, 54(1), 29–41.
- Brinton, M. C., Bueno, X., Oláh, L., & Hellum, M. (2018). Postindustrial fertility ideals, intentions, and gender inequality: A comparative qualitative analysis. *Population and Development Review*, 44(2), 281–309.
- Chancey, L., & Dumais, S. A. (2009). Voluntary childlessness in marriage and family textbooks, 1950– 2000. Journal of Family History, 34(2), 206–223.
- Ruggles, S., Genadek, K., Goeken, R., Grover, J., & Sobek, M. (2017). Integrated public use microdata series, current population survey: Version 4.0. Minneapolis: University of Minnesota.
- Gauthier, A. H., Smeeding, T. M., & Furstenberg, F. F., Jr. (2004). Are parents investing less time in children? Trends in selected industrialized countries. *Population and Development Review*, 30(4), 647–672.
- Gerson, K. (1985). *Hard choices: How women decide about work, career, and motherhood*. Berkeley: University of California Press.
- Gerson, K. (2010). *The unfinished revolution: Coming of age in a new era of gender, work, and family.* Oxford: Oxford University Press.
- Giddens, A. (1991). *Modernity and self-identity: Self and society in the late modern age*. Palo Alto: Stanford University Press.
- Hagewen, K. J., & Morgan, S. P. (2005). Intended and ideal family size in the United States, 1970–2002. Population and Development Review, 31(3), 507–527.

- Hamilton, B. E., Martin, J. A., Osterman, M. J. K., & Rossen, L. M. (2019). Births: Provisional data for 2018. Vital Statistics Rapid Release; no 7. Hyattsville, MD: National Center for Health Statistics. May 2019.
- Heaton, T. B., Jacobson, C. K., & Holland, K. (1999). Persistence and change in decisions to remain childless. *Journal of Marriage and the Family*, 61, 531–539.
- Hochschild, A. R. (1989). The second shift: Working parents and the revolution at home. New York: Viking.
- Jacobson, C. K., & Heaton, T. B. (1991). Voluntary childlessness among American men and women in the late 1980's. Social Biology, 38(1–2), 79–93.
- Kennedy, S., & Bumpass, L. (2008). Cohabitation and children's living arrangements: New estimates from the United States. *Demographic Research*, 19, 1663.
- Kornrich, S., & Furstenberg, F. (2013). Investing in children: Changes in parental spending on children, 1972–2007. Demography, 50(1), 1–23.
- Kravdal, Ø., & Rindfuss, R. R. (2008). Changing relationships between education and fertility: A study of women and men born 1940 to 1964. *American Sociological Review*, 73(5), 854–873.
- Lesthaeghe, R., & Van de Kaa, D. J. (1986). Twee demografische transities (Two demographic transitions?). In: DJ. van de Kaa, R. Lesthaeghe (eds) Bevolking: groei en krimp.(Population: Growth and Decline), pp. 9–24. Deventer: Van Loghum Slaterus.
- Lundquist, J. H., Budig, M. J., & Curtis, A. (2009). Race and childlessness in America, 1988–2002. Journal of Marriage and Family, 71(3), 741–755.
- Lunneborg, P. (1999). The chosen lives of childfree men. Contemporary Sociology, 30, 31.
- Mathews, T.J. & Hamilton, B.E. (2016). Mean age of mothers is on the rise: United States, 2000–2014. NCHS data brief, no 232. Hyattsville, MD: National Center for Health Statistics.
- Miettinen, A., & Szalma, I. (2014). Childlessness intentions and ideals in Europe. Finnish Yearbook of Population Research, 49, 31–55.
- Rovi, S. L. (1994). Taking 'no'for an answer: Using negative reproductive intentions to study the childless/childfree. *Population Research and Policy Review*, 13(4), 343–365.
- Ryan, C. L., & Siebens, J. (2012). Educational attainment in the United States: 2009. Population Characteristics. Current Population Reports. P20-566. US Census Bureau.
- Rybińska, A., & Morgan, S. P. (2019). Childless expectations and childlessness over the life course. Social Forces, 94, 1571.
- Schneider, D. (2015). The great recession, fertility, and uncertainty: Evidence from the United States. Journal of Marriage and Family, 77(5), 1144–1156.
- Schoen, R., Kim, Y. J., Nathanson, C. A., Fields, J., & Astone, N. M. (1997). Why do Americans want children? *Population and Development Review*, 23, 333–358.
- Sweeney, M. M., & Raley, R. K. (2014). Race, ethnicity, and the changing context of childbearing in the United States. Annual Review of Sociology, 40, 539–558.
- Testa, M. R., Cavalli, L., & Rosina, A. (2014). The effect of couple disagreement about child-timing intentions: A parity-specific approach. *Population and Development Review*, 40(1), 31–53.
- Thomson, E. (1997). Couple childbearing desires, intentions, and births. *Demography*, 34(3), 343–354.
- Thomson, E., McDonald, E., & Bumpass, L. L. (1990). Fertility desires and fertility: Hers, his, and theirs. Demography, 27(4), 579–588.
- Thornton, A., & Young-DeMarco, L. (1990s). Four decades of trends in attitudes toward family issues in the United States: The 1960s through the 1990s. *Journal of Marriage and Family*, 63(4), 1009–1037.
- Traister, R. (2016). All the single ladies: Unmarried women and the rise of an independent nation. New York: Simon and Schuster.
- Van de Kaa, D. J. (1987). Europe's second demographic transition. Population Bulletin, 42(1), 1–59.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.