

ERC Starting Grant 2023
Research proposal [Part B1]¹
(Part B1 is evaluated both in Step 1 and Step 2,
Part B2 is evaluated in Step 2 only)

A Social Demography of Widowhood across Ageing Societies

WIDOW

Cover Page:

- Zachary Van Winkle
- Fondation Nationale des Sciences Politiques (Sciences Po)
- 60 months

Widowhood is a critical event entailing profound grief. Although the frequency of this high risk event is increasing across ageing societies, many countries have cut survival benefits exposing more bereaved spouses to dire short- and long-term consequences. Despite its growing relevance, widowhood research remains underdeveloped compared to other disruptive events, such as divorce. This ground-breaking research moves beyond the state-of-the-art in at least four ways to establish a social demography of widowhood. (1) The foundation of my project lies in an innovative conceptual and methodological approach to the risk and vulnerability to widowhood. While risk aims at the probability and duration of widowhood, vulnerability focuses on its mental health and economic consequences. Current assessments of widowhood effects are limited to change in wellbeing directly after bereavement with a special focus on unexpected deaths. However, the most prevalent scenario entails a process of terminal health decline in the years before death. The consequences of the often neglected longer process of expected widowhood may be larger than the shorter process of unexpected widowhood. Three ground-breaking pillars build on risk and vulnerability to examine (2) social inequalities by socioeconomic status, race-ethnicity and nativity, social support networks, gender and age, as well as (3) country differences and (4) change over time. High-quality cross-sectional and longitudinal data sources will be harmonized and applied to an advanced set of statistical methods for up to 60 ageing countries varying in demographic trends and welfare systems from 1985 with projections to 2050. A social demography of widowhood will supplement fragmented evidence with systematic and comprehensive estimates on risk and vulnerability, provide insights into the challenges facing a growing widowed population and their family members, and facilitate new research on sustainable pension and elder care systems.

Section a: Extended Synopsis of the scientific proposal (max. 5 pages, references do not count towards the page limits)

Widowhood is a critical life event entailing declines in both mental health and economic wellbeing. This is certainly the case for surviving spouses of any age; however my research will concentrate on marital spousal loss among adults age 50 and older. In the United States, nearly 15 percent of older widows and widowers live beneath the federal poverty line, compared to only 5 percent of married older adults.² As many countries grow older, the number of marriages ending with the death of a spouse is increasing dramatically, despite high separation rates¹. As an example, roughly 85,000 divorces were recorded in Italy in 2019 compared to just under 270,000 spousal deaths, 20,000 more than a decade earlier.³ Although widowhood is a common and a high-risk life event, many countries have cut survivor benefits targeted at securing the wellbeing of widows and widowers. Whether those reductions increased economic uncertainty and emotional distress among bereaved adults remains unknown.

Despite its high prevalence and far-reaching consequences, social scientific research has been less interested in widowhood when compared to other disruptive life events, such as divorce. For example, ten studies on widowhood were published in sociological journals in 2020, compared to over 35 studies on divorce.⁴ *This ground-breaking research will establish a social demography of widowhood that will realize innovative conceptual and methodological approaches to examine: (1) the risk and the consequences of widowhood, (2) their social inequalities, (3) country differences, and (4) past and future change over time.* My research on the consequences of widowhood will concentrate on common outcomes, particularly mental health and economic wellbeing. Therefore, my findings on social inequalities, country differences, and change over time will be able to speak with an existing literature. However, my conceptual and methodological framework will be adaptable to other outcomes, e.g. physical health, social relationships or life satisfaction.

State-of-the-Art on Research into Widowhood

Previous research on the risk of widowhood conceptualizes and estimates risk as a function of the probability that wives outlive their husbands, the mean age and period of widowhood, and life expectancy at that estimated age and period, i.e. the duration of widowhood in years². Therefore, women's higher risk of widowhood compared to men stems from their advantage in life expectancy. An important limitation of traditional estimates of widowhood risk is that the probability of spousal loss is conditioned on being married, which can lead to bias in high singlehood and divorce contexts. This is because the prevalence of widowhood will decrease with the prevalence of marriage in older age. Other than age and gender, there is little research on whether other social groups are at an increased risk of being widowed³, despite widespread empirical documentation of socially stratified mortality and marriage rates.

Previous research on the consequences of widowhood tends to conceptualize widowhood as a two-stage process consisting of (1) the widowhood period, i.e. the year of spousal death, and (2) the post-widowhood period starting one year after death. The widowhood period is often considered the most intense part of the process, both emotionally and financially. Following spousal death, surviving spouses generally experience profound grief, entailing immediate affective, cognitive, and behavioural reactions⁴. In terms of financial wellbeing, surviving spouses in countries without obligatory insurance are immediately confronted with funeral and burial costs following the death of their spouse as well as a drop in labour or retirement incomes from the deceased.

The post-widowhood period for mental health is thought to be characterized by a partial if not full recovery^{5,6}, although evidence is mixed on how long and how many bereaved spouses return to pre-loss levels^{6,7}. The economic burden of bereavement is thought to be more persistent in the post-widowhood period, although also here findings are mixed. Research has shown that large decreases in household income and increased risk of poverty following bereavement are due to the loss of spousal annuities and pensions that are not offset by life insurance or wealth holdings⁸. The relative cost of fixed expenditures, such as housing costs, will increase as surviving spouses cope with the loss of income. The observation window likely plays a role in these mixed findings: longitudinal studies on depression and economic wellbeing with prospective data rarely extended past two years⁹⁻¹¹ or two waves of data¹²⁻¹⁸.

Previous research on social inequalities has focused on gender and age variation in the mental health and economic consequences of widowhood, but there is little research on whether and how consequences are unequally distributed across other social groups in society, such as by race-ethnicity or nativity¹². Most research on race-ethnic differences focuses on the consequences of spousal loss for surviving spouses' mortality¹⁹⁻²¹. *Previous research on cross-national differences and change over time* on the consequences of

² Adults aged 65 and older, data from the US Social Security Administration: www.ssa.gov/policy/docs/population-profiles/marital-status-poverty

³ See Eurostat (<https://ec.europa.eu/eurostat>) Demography, population stock and balance data on mortality and divorce for Italy in 2019.

⁴ Web of Science search 'widowhood OR bereavement OR "spousal loss"' compared to 'divorce' for articles published in sociology in 2020.

widowhood for mental health and economic wellbeing are rare and limited to the United States and European countries^{16,22,23}.

A Social Demography of Widowhood across Ageing Societies

1) *The Risk and Vulnerability to Widowhood*

What is the risk of widowhood? This project will focus on three dimensions of widowhood risk. The first dimension is 1) the lifetime risk of widowhood, specifically the overall probability that an individual becomes a widow or widower in older age. Next to life expectancy, selection into marriage, divorce and remarriage will be major contributing factors in determining an individual's lifetime risk. This measure will enable me to examine social inequalities in the risk of widowhood and how they vary across countries and time in a more nuanced manner. The traditional measures that I will analyse – 2) the conditional probability of widowhood and 3) the expected duration of widowhood – are less apt to uncover social inequalities and contextual differences, because they remove individuals who never marry or did not remarry after divorce from the risk set. *I expect that life expectancy and selection into marriage, divorce, and remarriage will be positively associated with the lifetime risk of widowhood, while life expectancy will be positively associated with the conditional probability of widowhood and the expected duration of widowhood.* Note that for brevity, I will use the risk of widowhood below to refer to all three dimensions.

What is the vulnerability to widowhood? I propose a new processual framework that builds on previous research by recognizing that widowhood typically is not caused by a sudden unexpected death, but is preceded by declining health of the dying spouse that often last several years. This means that widowhood should be conceptualized as a three-stage process that includes a pre-widowhood period. The pre-widowhood period is defined by the process leading up to the event, which in the case of widowhood, is the spouse's terminal health decline (THD). The pre-widowhood period entails numerous substantive and THD-related changes that should be included in the assessment of the widowhood process²⁴, such as difficult caregiving duties²⁵, emotional and social isolation²⁶ as well as out-of-pocket medical and long-term care expenses and foregone labour market and retirement incomes. *In cases of expected widowhood where a spousal THD is present, the consequences of spousal loss should arise across all three stages: the pre-widowhood, widowhood, and post-widowhood periods.*

However, the THD process is absent in cases in which the death is not health-related, e.g. traumatic death, in which health problems cause death suddenly, or in ways that are not noticeable. *In these cases of unexpected widowhood, the consequences of spousal loss should arise only in two stages – the widowhood and post-widowhood periods – but not the pre-widowhood period.* Whether the widowhood event is preceded by a THD or not may have implications for the consequences of the widowhood and post-widowhood periods.²⁷ A sudden loss may be an especially traumatic and disruptive experience to the surviving spouse, which may result in a larger mental health and financial shock. Conversely, if widowhood is expected, mental health effects may be alleviated by anticipatory grief and relief, in particular for caregiving spouses. In financial terms, the absence of a THD means less economic hardship and reduced cumulative costs of widowhood prior to spousal loss, but may result in larger sustained losses in the post-widowhood period as spouses had less time to make preparation, for example finalizing wills, downsizing, changing investments and more.

As in other critical life events, whether people's mental health and economic wellbeing recovers partly or fully depends on the comparison. In the presence of a THD, the before-after comparisons made by previous studies may be misleading given that the widowhood process already lowers the pre-widowhood baseline. One solution has been to conceptualize surviving spouses as "treated" individuals compared to a "control" sample of continuously married individuals and then using statistical approaches, e.g. matching, to make both groups similar on a range of indicators. However, a continuously married group of individuals matched with a group of widowed individuals will also be implicitly matched on the widowhood process. This means that the group of continuously married individuals will show a similar THD process as the treated groups of widows and widowers, but without a spousal death.

A meaningful group of continuously married individuals should consist of those who are similar at the starting point, but experience neither the THD process nor the widowhood event. This leads to the creation of two meaningful comparison groups: (1) "unexpected widowhood" that compares continuously married and surviving spouses who did not experience a THD and (2) "expected widowhood" that compares surviving spouses who experienced a THD and continuously married who did not. The first comparison, unexpected widowhood, follows the logic of a research design using exogenous death, e.g. caused by a traffic accident, to estimate the consequences of widowhood and represents a two-stage process. The second comparison, expected widowhood, estimates the consequences of spousal loss as a three-stage process model.

My approach defines the consequences of widowhood as the difference between the continuously married and widowed groups at any given point in the process, while vulnerability is the sum of those differences across the three stages of the process. *I expect (1) there will be no pre-widowhood period consequences for*

the unexpected widowhood comparison group, but large pre-widowhood period consequences for the expected widowhood comparison group. (2) The widowhood period consequences will be larger for the unexpected widowhood comparison group than for the expected comparison group. (3) The post-widowhood consequences will persist longer for the unexpected comparison group than for the expected comparison group. (4) The total vulnerability to widowhood will be larger for the expected comparison group than for the unexpected comparison group.

2) Social Inequalities in the Risk and Vulnerability to Widowhood

My research will concentrate on three dimensions of social stratification: (1) socioeconomic status, i.e. higher vs. lower educational and occupational attainment, (2) race-ethnicity and nativity, i.e. majority-white vs. race-ethnic minority or native-born individuals vs. individuals with a background of migration, and (3) social support networks, i.e. childless adults vs. parents or larger vs. smaller extended family networks. Not only are these dimensions standard elements of social stratification across the life course, but they are also tightly intertwined with the risk of widowhood and individual wellbeing following spousal loss. For brevity, social groups will simply be referred below to as advantaged, e.g. high educational attainment, or disadvantaged, e.g. those belonging to the minority race-ethnicity groups.

Are there social inequalities in the risk of widowhood? Social inequalities in the risk of widowhood should emerge if selection into marriage, divorce and remarriage and/or life expectancy differs by socioeconomic status, race-ethnicity and nativity, or social support networks. There is evidence that socioeconomic status, race-ethnicity and nativity, and social support networks are associated with the probability of marriage²⁸⁻³⁰, the likelihood of divorce³¹⁻³⁵, and life expectancy³⁶⁻⁴⁰. It is important to note that these associations not only vary starkly across countries, as will be discussed below, but also interact with one another as well as with gender and age⁴¹⁻⁴³. Advantaged social groups tend to marry more often, divorce less and live longer. *Therefore, I expect that older adults from advantaged social groups will be at a higher risk of widowhood compared to those from disadvantaged social groups.* However, this may not always be the case. For example, ethnic minorities and migrant groups have higher marriage rates and lower separation rates in many countries³⁰, which could lead to the expectation that older adults from some disadvantaged social groups will be at a higher risk of widowhood compared to those from certain advantaged social groups.

Are there social inequalities in the vulnerability to widowhood? Social inequalities in the vulnerability to widowhood may emerge if there are differences in access to protective factors or relief from risk factors, for example prior economic or mental health wellbeing. Research has shown that minority race-ethnicity groups and migrants not only have fewer economic resources in older age^{44,45}, but also are more likely to have experienced mental health issues^{46,47}. Compared to older adults without children, parents tend to have more economic and material resources⁴⁸, which can be used to outsource caregiving duties, and higher psychological wellbeing^{49,50}. Overall, advantaged social groups are more likely to be equipped with the economic and social resources to shield themselves from the consequences of spousal loss. *Therefore, I expect that older adults from advantaged social groups may be less vulnerable to widowhood compared to those from disadvantaged social groups.*

It is important to highlight that gender and age will be assessed throughout the project as crosscutting factors that influence the risk of widowhood and its consequences. This is necessary from an analytical standpoint, because women are at a greater risk of losing their spouse. When assessing how the risk of widowhood varies, for example, women will continue to be at a higher risk of widowhood compared to men, regardless of socioeconomic status. However, gender and age gaps in the risk of widowhood may vary in interesting ways within and between social groups. For example, the socioeconomic difference in the risk of widowhood may be larger for men if the gender gap in life expectancy decreases with higher socioeconomic status. In this manner, addressing issues surrounding widowhood also addresses gender inequalities in older age.

3) Country Differences in the Risk and Vulnerability to Widowhood

The geographic scope of my project comprises high- and middle-income ageing countries that vary in demographic trends and welfare schemes. Therefore, my research will be as comprehensive as possible and analyse all data sources from these countries that can be harmonized, which includes, for example, European and East Asian countries, the United States, Canada, Australia and New Zealand.

Are there country differences in the risk of widowhood? Country differences in selection into marriage, divorce, and remarriage and/or life expectancy should translate into cross-national variation in the risk of widowhood. In addition, country differences in social inequalities in the risk of widowhood should emerge if there is cross-national variation in differential selection into marriage, divorce, remarriage and/or life expectancy. Indeed, there is evidence that the socioeconomic selection into marriage and divorce as well as socioeconomic differences in life expectancy vary starkly across countries^{28,33,37}. Other research shows cross-national differences in the life expectancy of migrants^{51,52}. Although these lines of research have not been extended to the risk of widowhood, *it can be expected that the country-specific risk of widowhood may*

increase with higher marriage and remarriage rates, lower divorce rates, and longer life expectancy. Moreover, social inequalities in the risk of widowhood are likely smaller in countries where marriage, divorce, and remarriage rates as well as life expectancies are less socially stratified.

*Are there country differences in the vulnerability to widowhood? My research will focus on survivor benefit schemes as a primary policy instrument that countries use to mitigate the consequences of widowhood⁵³. Survivor benefits for older adults, which differ in their administration, financing, target population, benefit type and duration of payment and their eligibility criteria, are often used in combination with old-age pensions either to prevent old-age poverty or to additionally smooth consumption levels and living standards following spousal death. Therefore, two dimensions of survivor benefits – coverage and generosity – are integral to the economic wellbeing of widows and widowers. Where survivor benefits are meagre and access is restricted to certain groups, for example means-based eligibility, the focus tends to lie on poverty reduction and may miss vulnerable social groups. In contrast, where survivor benefits are generous and access is universal, widows and widowers will be more likely to maintain their standard of living and it is unlikely that social groups will be neglected. *Therefore, I expect that the vulnerability to widowhood will be smaller in countries with universal and generous pension and survivor benefit schemes, and that social inequalities in the vulnerability to widowhood will be smaller in countries with universal and generous pension and survivor benefit schemes.**

4) Change over Time in the Risk and Vulnerability to Widowhood

*Have the risks and vulnerabilities to widowhood changed over time? As outlined above, change in the overall risk of widowhood requires temporal change in either selection into marriage, divorce, and remarriage and/or life expectancy. Change in social inequalities requires, in addition, change in differential selection or life expectancy across social groups. There is indeed evidence for such changes, such as an increasingly negative socioeconomic gradient in divorce³² and even life expectancy³⁸. Temporal change in the overall vulnerability to widowhood may be caused by reforms in pension and survivor benefit systems, which tie access to benefits to prior labour market activity and income. This could prove to be especially detrimental for social groups that have a higher likelihood of falling into unemployment or earning low wages just above the poverty threshold. In sum, most temporal changes point to an overall increasing risk and vulnerability to widowhood as well as increasing social inequalities. *Therefore, I expect that the risk and the vulnerability to widowhood have increased over time, and that social inequalities in the risk and the vulnerability to widowhood have increased over time.**

*Has the size and composition of the widowed population changed over time? One of the riskiest undertakings of this project will be to extend the cross-temporal comparisons at the individual level to the population level. Across all ageing societies, it can be expected that the size of the widowed population will increase as larger birth cohorts, such as the so-called Baby Boomer generation, continue to age. However, whether the widowed population becomes more or less diverse in terms of the relative size of social groups depends on whether the risk of widowhood diverges or converges in the future. As outlined above, *I expect that the size of the widowed population has and will continue to increase and become more diverse over time.* However, marriage rates have also been declining, which could lead to a decrease in an otherwise more diverse widowed population.*

Methodological Approach

The foundation of my project lies in estimating the risk and the vulnerability of widowhood. I will estimate the risk of spousal loss using three approaches with harmonized cross-sectional data from pooled International Social Survey Programme and comparable data sources. I will estimate risk on a lower bound, i.e. guaranteed sample, of 40 countries that have enough observations across ten waves of pooled data, although the upper bound, i.e. the ambition, is to use supplemental datasets to reach 60 countries. The first approach will use standard logistic regression analysis to estimate the lifetime risk of widowhood. The second approach will use life table analysis, commonly used to calculate life expectancy, to estimate the probability of widowhood among married individuals. It is relatively straightforward to estimate the risk of widowhood with data that allow the reconstruction of marriage histories. However, many cross-sectional data sources do not include marriage start or end dates. Therefore, this project will build on a Bayesian extension of Sullivan's method, which has not yet been applied to studying the risk of widowhood, to obtain life table distributions from cross-sectional data⁵⁴. This enables the calculation of risk for a larger set of subpopulations, countries, and periods than previously possible. Finally, the duration of widowhood will be calculated based on Goldman & Lord's² formula as a function of the life table estimates.

To estimate vulnerabilities in line with the processual framework introduced above, data sources need to be long-running longitudinal panels that allow for the observation of the THD process and the widowhood event. This project will rely on longitudinal data sources found within the Gateway to Global Ageing harmonization programme. I will estimate vulnerability on a lower bound, i.e. guaranteed sample, of 20

countries that have enough observations across five waves (ten years) of panel data, although the upper bound, i.e. the ambition, is to augment observation windows of other studies with retrospective information to reach 35 countries. The analytical strategy consists of (1) propensity score matching to match continuously married and widowed groups based on the event of widowhood, (2) random coefficient modelling to identify trends in spousal health and separate the continuously married and widowed groups into those that experience a THD and those that do not, and finally (3) estimating vulnerabilities for the expected and unexpected widowhood comparison groups using regressions with impact functions⁵⁵. Mental health, as is common in the social scientific literature on older adults, will be measured by elements of the Center for Epidemiological Studies Depression score, such as feeling sad, lonely, and happy or being able to enjoy life. Other grief-related psychological measures may include feelings of anxiety or distress as well as insomnia. Economic wellbeing will be measured by means of household income and wealth, as well as whether households fall under the relative poverty threshold. I have already conducted a proof-of-concept study for this methodological approach using data from the US Health and Retirement Study⁵⁶.

The additional segments of the project include documenting social inequalities, cross-national differences, and change over time in the risk and vulnerability to widowhood. The main approach will be to conduct the statistical analyses for the risk of widowhood, e.g. logistic regression and life table analysis, and the vulnerability to widowhood, e.g. matching on process and event, separately by social groups, countries and periods. Point estimates will be compared and conclusions on differences will be drawn based on conventional criteria of statistical and social significance⁵⁷. To account for cross-national and cross-temporal variation, I will pool countries or periods and analyse them in a random effects framework, e.g. based on standard simultaneous maximum likelihood estimation⁵⁸ or two-step approach estimated dependent variables model^{59,60}. Therefore it can be assessed whether the inclusion of macro-level variables reduce country- or period-random intercepts, i.e. account for differences, or moderate country- or period-differences in social inequalities. Two sets of country-level indicators will be included in the models. The first reflects country differences in selection into marriage, divorce, and remarriage and differences in life expectancy. The second set of factors relates to survivor benefits.

Finally, I will use existing data provided by national statistics agencies and apply risk parameters estimated in previous segments to generate probabilistic projections on the evolution of the widowed populations in terms of size and composition. Standard demographic methods will be applied, such as Autoregressive Integrated Moving Average, which are used for short-term projections based on historic time series data⁶¹.

Work Stream, Team and Risk Management Overview

My project is divided into four work streams that reflect the four objectives. Each work stream begins with one year to access and prepare the data and master the statistical approaches outlined above. In the following two years, each work stream will produce at least four articles to be published in internationally recognized peer-reviewed journals, such as *the Journal of Marriage and Family* or *Demography*. I will employ one PhD candidate within the remit of each work stream who will receive funding for methods training and international conferences. My project will profit from input by an expert committee including Thomas Leopold (University of Cologne), Matthijs Kalmijn (University of Groningen), Aart-Jan Riekhof (Finnish Centre for Pensions), and Ridhi Kashyap (University of Oxford). The project promises to be of great use to the social scientific community and beyond by establishing a social demography of widowhood, but, the ambitious scope in terms of data and methods as well as a steep learning curve for PhD students comes with risks. However, I designed my project with elements in mind to mitigate that risk, such as prior review and use of project data sources⁶²⁻⁶⁵ and methods^{66,67}. Moreover, each project work stream begins with one year entirely focused on data access and preparation as well as methodological training, which gives team members time to acquire skills in data preparation and analysis.

Impact and Valorisation

Establishing a social demography of widowhood is both ground-breaking and ambitious with a high potential impact, yet remains feasible. This research project will address important challenges surrounding the consequences of population aging across numerous countries, specifically the increasing frequency of spousal loss and its consequences for individuals and societies. If successful, the project will establish a new systematic field of research that will provide scholars with the conceptual and methodological tools for the further social demographic study of widowhood. The objectives are ambitious and beyond the state-of-the-art by introducing novel concepts and methodological approaches for the risk and vulnerability to widowhood as well as documenting social inequalities, cross-national differences and change over time. A social demography of widowhood will supplement fragmented evidence with systematic and comprehensive estimates on risk and vulnerability, provide insights into the challenges facing a growing widowed population and their family members, and facilitate new research on sustainable pension and elder care systems.

Section b: Curriculum vitae (max. 2 pages)**PERSONAL INFORMATION**

Family name, First name: Van Winkle, Zachary

Researcher unique identifier: <https://orcid.org/0000-0001-7756-6799>

Date of birth: 12.01.1989

Nationality: United States of America

URL for web site: www.zachary-vanwinkle.com

- **EDUCATION**

- 2018 PhD in Sociology
 Department of Social Sciences, Humboldt University Berlin, Germany
 Anette Fasang
- 2015 Master of Arts in the Social Sciences
 Department of Social Sciences, Humboldt University Berlin, Germany

- **CURRENT POSITION**

- 2020 – Assistant Professor of Sociology
 Centre for Research on Social Inequalities, Sciences Po Paris, France

- **PREVIOUS POSITIONS**

- 2018 – 2020 Postdoctoral Fellow in Sociology and Social Demography
 Department of Sociology, University of Oxford, United Kingdom
- 2015 – 2018 Pre-Doctoral Research Fellow in Microsociology
 Department of Social Sciences, Humboldt University Berlin, Germany

- **FELLOWSHIPS AND AWARDS**

- 2020 – Associate Member in Sociology, Nuffield College/Department of Sociology, University of Oxford, United Kingdom
- 2018 – 2020 Non-Stipendiary Research Fellow in Sociology, Nuffield College, University of Oxford, United Kingdom
- 2020 Best PhD Thesis Award (1st Place), German Society for Demography
- 2020 Merit Award of Excellence, Department of Sociology, University of Oxford, United Kingdom
- 2019 Best PhD Thesis Prize (1st Place), European Consortium for Sociological Research
- 2019 Best PhD Thesis Prize (Finalist), German Academy of Sociology

- **SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS**

- 2022 1 Postdoctoral Fellow, 1 PhD Student
 Centre for Research on Social Inequalities, Paris Institute of Political Studies, France
- 2020 1 Masters Student
 Department of Sociology, University of Oxford, United Kingdom

- **TEACHING ACTIVITIES (selected since 2020)**

- 2020 – Family and Inequality, Paris Institute of Political Studies (Nancy Campus), France
- 2020 – Social Demography, Paris Institute of Political Studies (Nancy Campus), France
- 2022 – Comparative Social Survey Research, Paris Institute of Political Studies, France
- 2020 Adjunct Lecturer – Introduction to Family Sociology/The Second Demographic Transition, University of Oxford, United Kingdom

- **ORGANISATION OF SCIENTIFIC MEETINGS**

- 2022 Workshop on the Covid-19 Pandemic and Widowhood, 20 participants, France
- 2020 Workshop on Family Demographic Transitions and In-Work Poverty, 30 participants, United

Kingdom (Cancelled due to Covid-19)

• **INSTITUTIONAL RESPONSIBILITIES**

- 2020 – Graduate Program Admissions Jury, Paris Institute of Political Studies, France
- 2022 – MA Thesis Jury, Paris Institute of Political Studies, France
- 2022 – Member of the PhD in Sociology Scholarship Committee, Paris Institute of Political Studies, France
- 2019 – 2020 Family and Social Demography Internal Seminar Organizer, University of Oxford, United Kingdom
- 2016 – 2017 Microsociology Internal Seminar Organizer, Humboldt University Berlin, Germany
- 2019 – 2020 Member of Athena SWAN Committee on Gender Equality, Department of Sociology, University of Oxford, United Kingdom

• **REVIEWING ACTIVITIES**

- 2022 Proposal Evaluation for the Scientific Commission of Lower Saxony, Germany
 - 2022 – Journal of Family Research Editorial Board, University of Bamberg, Germany
 - 2021 – Frontiers in Genetics – Behavioural and Psychiatric Genetics Review Editor, Lausanne, Switzerland
- Occasional Reviewer for the American Sociological Review, PNAS, Demography, the Journal of Marriage and Family, the European Sociological Review, Social Forces, the European Journal of Population, the Journal of European Social Policy, Advances in Life Course Research, Acta Sociologica, Demographic Research, Population Studies, the Nordic Journal of Working Life Studies, Social Sciences and Medicine – Population Health and SAGE Open

• **MEMBERSHIPS OF SCIENTIFIC SOCIETIES**

- 2020 – Member, Research Network “*PRESAGE: Research and Educational Programme on Gender Studies*”
- 2018 – 2022 Member, Research Network “*CRITEVENTS: Critical Life Events and the Dynamics of Inequality: Risk, Vulnerability, and Cumulative Disadvantage*”
- 2018 – 2022 Member, Research Network “*EQUALLIVES: Inequality, early adult life courses and economic outcomes at mid-life in comparative context*”
- 2018 – Founding Member of the Sequence Analysis Association, LIVES, Universities of Lausanne and Geneva, Switzerland

• **MAJOR COLLABORATIONS**

- 2021 – Yao Lu (Columbia University), Jia Yu (Peking University), and Fangqi Wen (Australian National University), Social and life course change in China
- 2018 – Christian Monden (University of Oxford, United Kingdom), Johannes Giesecke (Humboldt University Berlin, Germany), & Emanuela Struffolino (University of Milan), Family demographic transitions and in-work poverty

• **COVID-19 IMPACT TO SCIENTIFIC PRODUCTIVITY (if applicable)**

Please specify which of the following situations apply to you:

- Increased caring responsibility for dependent person, including home schooling of children;
- No access to laboratory facilities, archives, or other necessary facilities;
- No access to field work;
- Adaptation to online teaching;
- Physical and/or mental health issues;
- Other(s) _____

***Appendix: All current grants and on-going / submitted grant applications of the PI
(Funding ID)***

Mandatory information (does not count towards page limits)

Current research grants (Please indicate "No funding" when applicable):

<i>Project Title</i>	<i>Funding source</i>	<i>Amount (Euros)</i>	<i>Period</i>	<i>Role of the PI</i>	<i>Relation to current ERC proposal⁵</i>
Assessing the Individual and Societal Economic Consequences of Premature Widowhood following the Covid-19 Pandemic (WIDOW19)	Agence Nationale de la Recherche (RÉSILIENCE-COVID-19)	73,920	6/2021 – 12/2022	Mentor one postdoctoral fellow (9 months), two research assistants (12 months) and organize one workshop.	This project entailed data preparation and analysis on the association between widowhood and household income across European countries with the Survey of Health, Ageing, and Retirement. The working papers produced served as a proof of concept for the ERC proposal.
A Holistic Approach to Social & Life Course Change in China	Trilateral Initiatives in Emerging Regions Grant from the Columbia Alliance	15,000	3/2021 – 6/2023	Mentor two PhD students and organize one workshop	None
No Funding					

On-going / submitted grant applications (Please indicate "None" when applicable):

<i>Project Title</i>	<i>Funding source</i>	<i>Amount (Euros)</i>	<i>Period</i>	<i>Role of the PI</i>	<i>Relation to current ERC proposal²</i>
None					
None					
None					

⁵ Describe clearly any scientific overlap between your ERC application and the current research grant or on-going grant application.

Section c: Early achievements track-record (max. 2 pages)⁶

My research has focused on the interaction between family demographic processes and social inequality from a life course and comparative perspective. To date my research has addressed three overarching questions: (1) how do individual and institutional factors shape work and family life courses, (2) what consequences do work and family life course patterns and transitions have for individual wellbeing, and (3) what methodological approaches need to be developed in order to appropriately address those questions. A social demography of widowhood is both an extension of my research interests, which began as the PI of an ANR funded project on the Covid-19 pandemic and bereaved spouses' wellbeing, but also represents an entirely new project by systematizing a novel field of research.

Peer-reviewed Publications (up to 5)

- Van Winkle, Z. (2018) Family Trajectories Across Time and Space: Increasing Complexity in Family Life Courses in Europe? *Demography*, 55(1), 135–164. <https://doi.org/10.1007/s13524-017-0628-5>
- Van Winkle, Z. (2019) Family Policies and the Complexity of Family Life Courses in 20th Century Europe. *Journal of European Social Policy*, 30(3), 320-338. <https://doi.org/10.1177/0958928719880508>
- Van Winkle, Z. (2020) Family Life Course Standardization in Sweden: the Role of Compositional Change. *The European Journal of Population*, 36, 765-798. <https://doi.org/10.1007/s10680-019-09551-y>
- Van Winkle, Z., Conley, D. (2021) Genome-Wide Heritability Estimates of Family Life Course Complexity. *Demography*, 58(4), 1575–1602. <https://doi.org/10.1215/00703370-9373608>
- Van Winkle, Z., Ferragina, E. & Recchi, E. (2021) The unexpected decline in feelings of depression among adults aged 50 and older in eleven European countries amidst the Covid-19 pandemic. *Socius: Sociological Research for a Dynamic World*. <https://doi.org/10.1177%2F23780231211032741>

Note: My publications, both sole authored and co-authored, have been published in internationally renowned peer-reviewed journals. My early publications (Van Winkle 2018, 2019, 2020, 2021 above) studied the individual and institutional as well as genetic factors that shape family formation and family life courses. These were at the core of my PhD thesis, which was the winner of the European Consortium for Sociological Research and the German Society for Demography best thesis prizes. In subsequent research, I shifted towards assessing the consequences of work and family transitions^{35,68,69} and the wellbeing of older adults in light of the Covid-19 pandemic (e.g., Van Winkle et al., 2021 above). My mix of sole and co-authored publications across the disciplines of sociology, demography, evolutionary anthropology and more demonstrate my ability to work independently but also collaboratively. The majority (3 of roughly 20) of my publications are not co-authored with my PhD supervisor.

Conference Presentations (selected from 2022)

- Rowold, C. & Van Winkle, Z. Cohort Change in the Family Complexity of Adults and Children in the United Kingdom. Paper presented at the 2022 annual meeting of the *European Consortium for Sociological Research*, Amsterdam, Netherlands.
- Zagel, H. & Van Winkle, Z. Early Family Life Courses and Sex Education Policies in the United States. Paper presented at the 2022 annual meeting of the *European Population Association*, Groningen, Netherlands.
- Busetta, A., Mendola, D., Struffolino, E. & Van Winkle, Z. The Role of the Accumulation of Poverty and Unemployment for Health Disadvantages. Paper presented at the 2022 annual meeting of the *European Population Association*, Groningen, Netherlands.
- Rowold, C. & Van Winkle, Z. Cohort Change in the Family Complexity of Adults and Children in the United Kingdom. Paper presented at the 2022 annual meeting of the *European Population Association*, Groningen, Netherlands.
- Van Winkle, Z. & Baier, T. Genetic Influences on Educational Attainment Across U.S. Birth Cohorts: The Role Of Parental Separation and Death. Paper presented at the 2022 annual meeting of the *European Population Association*, Groningen, Netherlands.
- Busetta, A., Mendola, D., Struffolino, E. & Van Winkle, Z. The Role of the Accumulation of Poverty and Unemployment for Health Disadvantages. Paper presented at the 2022 annual meeting of the *Population Association of America*, Atlanta, Georgia.

⁶ Please list the order of authors as indicated in the original publication.

Rowold, C. & Van Winkle, Z. Cohort Change in the Family Complexity of Adults and Children in the United Kingdom. Paper presented at the 2022 annual meeting of the *Population Association of America*, Atlanta, Georgia.

Van Winkle, Z. & Baier, T. Genetic Influences on Educational Attainment Across U.S. Birth Cohorts: The Role Of Parental Separation and Death. Poster presented at the 2022 annual meeting of the *Population Association of America*, Atlanta, Georgia.

Note: I am a member of numerous scientific associations and am regularly accepted to present my sole and collaborative work at the annual meetings of numerous scientific associations, such as the Population Association of America, the European Population Association, the Sequence Analysis Association, the German Society for Demography, ISA RC28, and the International Chinese Sociological Association.

Invited Talks (selected since 2021)

- 2021 Using sequence analysis to test if human histories are coherent strategies, Bavarian State Institute for Family Research (ifb) Colloquium
- 2021 The complexity of employment life courses across 20th century Europe, Finnish Centre for Pensions
- 2021 A Chinese Second Demographic Transition? A Holistic Approach to Family Life Courses, European University Institute
- 2021 Family Structure & Genetic Influences on Children's School Performance, ENSAE Social Science Genetics Paris

Note: Interest in my interdisciplinary work on how genes and institutions shape life courses has led to invitations for talks at various events and a number of institutions.

Previous Grants and Scholarships (since 2020)

- 2020 Seed Grant from the John Fell Fund, University of Oxford, for the project "The Consequences of Family Complexity for Adults & Children in the UK": £8,440
- 2018 Seed Grant Funding from the Oxford/Berlin Research Partnership for the project "Understanding Family Demographic Processes and In-Work Poverty in Europe": ca. 15,000€
- 2018 Strategic Initiative Funding from the International Strategy Office, Humboldt University Berlin for the Humboldt University – Princeton University Partnership Project "Far from the Tree? Social and biological determinants of the intergenerational transmission of family demographic behaviour": 3,250€
- 2017 Grant from the Institute of Social Sciences, Humboldt University Berlin to finance Demography publication costs: 500€
- 2017 Grant from the European Consortium for Sociological Research to finance research stay at Stockholm University's Linnaeus Center on Social Policy and Family Dynamics in Europe, SPaDE: 1,200€
- 2017 Grant from the German Academic Exchange Service to attend the 2017 Annual Meeting of the Population Association of America: 1,400€
- 2015 Grant from the European Campus of Excellence to attend the summer school "The Welfare State and Inequality": 850€

Note: I have been awarded numerous grants and scholarships to develop diverse lines of research, such as the association between genes and family life courses, family instability and children's wellbeing, and family demographic transitions and in-work poverty. The majority of my grants and scholarships since 2018 and all since 2020 have been without the involvement of my PhD supervisor.

Visiting Positions

- 2018 University of Amsterdam, Faculty of Social and Behavioural Sciences
- 2018 Princeton University, Office of Population Research
- 2017 Stockholm University, Linnaeus Center on Social Policy and Family Dynamics in Europe
- 2012 Northwestern University, Searle Center for Teaching Excellence

Note: My many research visits demonstrate the breadth of my international networks.

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