Extended Abstract

Disparities in Mortality and Its Consequences for Kin Availability and Intergenerational Transfers in the U.S.

HwaJung Choi University of Michigan

> V. Joseph Hotz Duke University

Robert F. Schoeni University of Michigan

Judith A. Seltzer University of California, Los Angeles

Emily E. Wiemers University of Massachusetts, Boston

September 2018

Abstract (150 Words)

In this paper, we pursue and expand the literature on mortality disparities, kin availability, and intergenerational transfers by considering two substantive questions:1) How do disparities in mortality affect the distribution of "kin availability" across demographic groups in the United States? In particular, how does the absence of one's parents due to death affect the availability of kin – where the latter is traditionally measured by the spatial proximity of kin – by race/ethnicity, educational attainment and geography? 2) How does the absence or reduction in the number of one's parents due to death affect the types, incidence and magnitudes of financial and time transfers to and from one's parents? We use the 2013 Panel Study of Income Dynamics (PSID) main interview and the Rosters and Transfers Module data that provide for a national sample of household heads and spouses, the residential locations of each living biological or adoptive parent.

Introduction

While the U.S. has experienced, on average, increases in life expectancy and declines in mortality, these improvements have occurred for all groups in society. It is well-documented that there are clear disparities in life expectancy and mortality by race and ethnicity (Hummer & Chin, 2011; Hummer, Benjamins & Rogers, 2004; Masters et al., 2014), educational attainment (Montez et al. 2011; Montez, Hummer & Hayward, 2012; Meara, Richards & Cutler, 2008; Bound et al., 2015), income (Chetty et al., 2016) and geography (Chetty et al., 2016). Furthermore, these trends, and the disparities in them, have received a great deal of attention with the publishing of studies by Case & Deaton (2015) and Chetty, et al. (2016) that document actual increases (or lack of decline) in mortality rates at middle age for several of these groups.

Such trends and disparities inevitably have a variety of different consequences. For example, a recent National Research Council report (NAS, 2015) noted that the increasing disparities in mortality by socioeconomic status will have significant consequences for public transfers received through Social Security retirement, Medicare, Medicaid, Disability Insurance and Supplemental Security Income programs, with higher-income people receiving disproportionately larger life-time benefits compared to those with lower incomes. Disparities in mortality also affect the availability of kin and *private* transfers of time and money among family members. Umberson et al. (2017) document that racial disparities in mortality rates imply the greater loss of kin (parents, spouses, siblings and children) of Blacks compared to Whites in the U.S.

In this paper, we pursue and expand the literature on mortality disparities, kin availability, and intergenerational transfers by considering two substantive questions:

- 1. How do disparities in mortality affect the distribution of "kin availability" across demographic groups in the United States? In particular, how does the absence of one's parents due to death affect the availability of kin – where the latter is traditionally measured by the spatial proximity of kin – by race/ethnicity, educational attainment and geography?
- 2. How does the absence or reduction in the number of one's parents due to death affect the types, incidence and magnitudes of financial and time transfers to and from one's parents?

Prior studies on kin availability have mostly focused on measures of the spatial proximity of kin, including living in the same household. These studies find that Blacks live closer to their kin compared to Whites (Bianchi, McGarry, & Seltzer, 2010; Compton & Pollak, 2015) and those with low education are more likely to live close to their parents and/or adult children (Chan & Ermisch, 2015a, 2015b; Choi, Schoeni, Langa, & Heisler, 2015; Clark & Wolf, 1992; Compton & Pollak, 2015; Garasky, 2002; Kalmijn, 2006; Lauterbach & Pillemer, 2001; Leopold, Geissler, & Pink, 2012; Malmberg & Pettersson, 2008; Rogerson, Weng, & Lin, 1993). These studies restrict attention to spatial proximity of kin conditional on kin being alive. To our knowledge, no prior study has provided national estimates on kin availability that accounts for both spatial proximity and mortality of family members.

There also is a sizable literature on the extent to which kin actually provide assistance to family members in the form of financial and time transfers (e.g., caregiving) to family members

(Eggebeen, 1992; Hogan, Eggebeen & Clogg, 1993; McGarry & Schoeni, 1995; Pezzin & Schone, 1999; McGarry, 1998; Pezzin, Pollak & Schone, 2008; Kahn, McGill & Bianchi, 2011; Hurd, Smith & Zissimopoulos, 2011; McGarry, 2016) and how these transfers differ by demographic characteristics (Uhlenberg & Hammill, 1998; Chelsey & Poppie, 2009; Seltzer & Bianchi, 2013; Grigoryeva, 2017). Much of this work focuses on intergenerational transfers, such as adult children helping to care for elderly parents, grandparents providing help with the chare of grandchildren, or parents helping their adult children finance their adult children's housing or college educations (Hagestad, 1986; Uhlenberg & Hammill, 1998; Luo, LaPierre, Hughes & Waite, 2012; Hotz, Wiemers, Rasmussen & Koegel, 2018). And, related to the spatial proximity of kin literature, some of this work has examined coresidence as a form of a transfer (Wolf & Soldo, 1988; Seltzer, Lau & Bianchi, 2012; Wiemers, Slanchev, McGarry & Hotz, 2017). Again, the question arises as to how these transfers and caregiving are affected by the absence of some parents due to death, an issue that, to our knowledge, has not been the focus in previous investigations of family transfers, especially those across the generations. This study examines this issue.

Data and Methods

We use the 2013 Panel Study of Income Dynamics (PSID) main interview data and the Rosters and Transfers Module data that provide for a national sample of household heads and spouses and the residential locations of each living biological or adoptive parent. Because location of parents was collected for both the head and spouse, it includes location for stepparents and parents-in-law associated with current spouses.

The unit of analysis is adults 25 and older (i.e., PSID heads and spouses ages 25 and older). Distance from the focal person to each parent is determined using the Rosters and Transfers data and the PSID household roster. We examine the following distance categories: living in the same household ("co-resident"); <30 miles or in the same place, but not in the same household ("close"); 30-500 miles ("far"); >=500 miles within the United States ("very far"); and in a foreign country.

The survey included questions about the incidence and amounts of money and time given to parents and received from parents in the previous year. Respondents reported about transfers to both coresident and non-coresident parents (and parents-in-law). Monetary transfers include total transfers of \$100 or more. Questions about time assistance have no lower bound. The questions link transfers to specific parents. For instance, transfers to (from) the household head's father and mother who are still married or living with each other are treated as a joint transfer with the head's parents. If the head's father is married to someone other than the head's mother, the module obtained information about transfers to/from the head's father and stepmother, and separately from the head's mother (if she was still alive) (Schoeni et al., 2015).

Preliminary Results

In our preliminary analysis, we have focused on the role that the mortality of parents have in the demographic distribution of kin spatial availability. We find that the mortality of parents has a decided effect on the distributions of a broader notion of proximity that includes lack of parents living nearby due to deaths by race/ethnicity and educational attainment. For example, restricting analysis to having at least living one parent (left panel in Table 1), those with less than 12 years of education are more likely to live with or close to a parent or parent-in-law compared to those with

at least 16 years of education (52% versus 44%). However, it does not mean that those with lower education have greater availability of parents once we take into account higher mortality among lower educated persons. If we estimate the proximity outcome (i.e., % living in the same household or close-by) after including in the sample those who do not have any living parent, the disparities by education are reversed: we have a lower share of adults who have a parent living nearby for those with less than 12 years of education compared to those with at least 16 years of education (26% versus 32%).

Figure 1 presents estimates of the percent of adults who have at least one parent in the same household or in close proximity by education and age using the sample of adults with a living parent (Panel A) as well as all adults regardless of their parents' vital status (Panel B). Comparison between panels demonstrates the fundamental role of mortality in kin availability. Among adults 55 and older with a living parent (Panel A), lower educated adults are 18 percentage points more likely to live with or close to a parent than higher educated adults (59% vs 41% for <12 vs 16+ years of education). In contrast, among all adults 55 and older, lower educated adults (10% vs 13% for <12 vs 16+ years of education).

Next Steps

We will extend the analyses by examining how absence of parents affects the types, incidence and magnitudes of financial and time transfers due to the absence or reduction in the number of parents because they are no longer living. In particular, we will use the data on receipt and provision of financial transfers (amounts provided or received in the past year) and time transfers (time spent with relatives) to examine the incidence of each form of transfer and the amounts, in the case of financial transfers, differ for adults when they have some of their parents no longer living.

In particular, we examine whether adults with deceased parents reduce or increase the transfers provided to and received from those who are still living and whether and how this affects transfers provided to and received from the focal person's adult children. We examine how these findings differ by the race/ethnicity, educational attainment and geographic location of heads and wives in order to assess how help and exchanges between generations of families are affected by deaths of parents.

Our manuscript for PAA will also consider the availability of parents-in-law and associated transfers with these family members. For couples, parents-in-law can be just as important as own parents. Examining in-laws requires assessment of not only mortality but partnership status. That is, the availability of in-laws is influenced by both whether the focal person is partnered and whether the partner's parents are alive. Socioeconomic gradients in marriage, like those in mortality, are substantial and likely account for disparities in kin availability. Finally, all of these analyses will be adjusted for the age of focal persons to isolate "premature" deaths from the more "expected" deaths of the parents of older heads and wives in the PSID.

	By Education									By Race					
	Sample: adults 25+ with at least one parent alive					Sample: all adults 25+				Sample: adults 25+ with at least one parent alive			Sample: all adults 25+		
Education level	<12	12	13-15	>=16		<12	12	13-15	>=16	Black, Non- Hispanic	White, Non- Hispanic		Black, Non- Hispanic	White, Non- Hispanic	
N=	1044	2177	2513	2972		1729	3423	3375	3921	2675	4978		3866	7132	
% of persons whose nearest parent is:															
In the same household	5.8	7.1	6.1	3.4		2.9	4.2	4.1	2.4	8.4	4.5		5.3	2.8	
Close	46.4	59.3	57.3	41.0		23.7	35.0	38.1	29.5	63.8	52.7		39.8	32.8	
Far	15.8	17.4	21.5	30.2		8.1	10.3	14.3	21.7	18.2	26.5		11.4	16.5	
Very Far	4.5	8.0	11.3	20.1		2.3	4.7	10.1	14.5	7.7	14.9		4.8	9.3	
In foreign country	27.5	8.1	3.7	5.4		14.1	4.8	10.1	3.9	1.9	1.4		1.2	0.9	
No parent alive	-	-	-	-		48.9	40.9	33.4	28.0	-	-		37.5	37.7	

Table 1. Distance to the nearest parent/parent-in-law, by Education and Race





Panel B: Unrestricted sample (all adults 25+)







Panel A: Restricted sample (adults

Panel B: Unrestricted sample (all adults 25+)



REFERENCES

- Bianchi, S., McGarry, K. M., & Seltzer, J. (2010). Geographic dispersion and the well-being of the elderly. Michigan Retirement Research Center Research Paper 2010–234.
- Bound, J., Geronimus, A. T., Rodriguez, J. M., & Waidmann, T. A. (2015). Measuring recent apparent declines in longevity: the role of increasing educational attainment. *Health Affairs*, 34(12): 2167–2173.
- Case, A. & Deaton, A. (2015). Mortality and Morbidity in the 21st Century. *Brookings Papers on Economic Activity*, Spring 2017: 397-476.
- Case, A. & Deaton, A. (2015). Rising morbidity and mortality in midlife among white non-Hispanic Americans in the 21st century. *Proceedings of the National Academy of Sciences*, 112(49): 15078–15083.
- Chan, T. W., & Ermisch, J. (2015a). Proximity of couples to parents: influences of gender, labor market, and family. *Demography*, 52, 379–399.
- Chan, T. W., & Ermisch, J. (2015b). Residential proximity of parents and their adult offspring in the United Kingdom, 2009–10. *Population Studies*, 69(3), 355–372.
- Chesley, N., & Poppie, K. (2009). Assisting parents and in-laws: gender, type of assistance, and couples' employment. *Journal of Marriage and Family*, *71*(2), 247-62.
- Chetty, R. M. Stepner, S. Abraham, S. Lin, B. Scuderi, N. Turner, A. Bergeron, D. Cutler (2016). The Association between Income and Life Expectancy, in the United States, 2001-2014, *Journal of the American Medical Association*, 315(16):1750-1766.
- Choi, H., Schoeni, R. F., Langa, K. M., & Heisler, M. M. (2015). Spouse and child availability for newly disabled older adults: Socioeconomic differences and potential role of residen-tial proximity. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 70(3): 462–469.
- Clark, R. L., & Wolf, D. A. (1992). Proximity of children and elderly migration. In A. Rogers (Ed.), *Elderly migration and population redistribution: A comparative study*. London: Belhaven.
- Coate, P. (2013). Parental influence on labor market outcomes and location decisions of young workers. Unpublished Manuscript. Duke University.
- Coate, P., Krolikowski, P. M., & Zabek, M. (2017). Parental proximity and earnings after job displacements. Federal Reserve Bank of Cleveland WP 17-22. https://doi.org/10.26509/frbc-wp-201722
- Compton, J., & Pollak, R. A. (2014). Family proximity, childcare, and women's labor force attachment. *Journal of Urban Economics*, 79, 72–90.

- Compton, J., & Pollak, R. A. (2015). Proximity and co-residence of adult children and their parents in the United States: Descriptions and correlates. *Annals of Economics and Statistics*, (117–118), 91–114.
- Dawkins, C. J. (2006). Are social networks the ties that bind families to neighborhoods? *Housing Studies*, 21(6): 867–881.
- Eggebeen, E.J. (1992). Family structure and intergenerational exchanges. *Research on Aging*, *14*, 427-447.
- Garasky, S. (2002). Where are they going? A comparison of urban and rural youths' locational choices after leaving the parental home. *Social Science Research*, *31*(3), 409–431.
- Grigoryeva, A. (2017). Own gender, sibling's gender, parent's gender: The division of elderly parent care among adult children. *American Sociological Review* 82(1), 116-146.
- Grundy, E., & Shelton, N. (2001). Contact between adult children and their parents in Great Britain 1986–99. *Environment and Planning A*, 33(4): 685–697.
- Hagestad, G. O. (1986). The family: Women and grandparents as kin-keepers. In A. Pifer & L. Bronte (Eds.), *Our aging society: Paradox and promise* (141–60). New York: W. W. Norton.
- Hank, K. (2007). Proximity and contacts between older parents and their children: A European comparison. *Journal of Marriage and Family*, 69(1), 157–173. https://doi.org/10.1111/j.1741-3737.2006.00351.x
- Hogan D.P., Eggebeen D.J., & Clogg C.C. (1993). The structure of intergenerational exchanges in American families. *American Journal of Sociology*, *98*(6), 1428–58.
- Hotz, V.J., Wiemers, E.E., Rasmussen, J. & Koegel, K. (2018), The Role of Parental Wealth and Income in Financing Children's College Attendance and Its Consequences, unpublished manuscript, August 2018.
- Hummer, R.A. & Chinn, J.J. (2011), Race/Ethnicity and U.S. Adult Mortality: Progress, Pro-spects and New Analyses. *Du Bois Review*, 8:1 5–24.
- Hummer, R.A., Benjamins, M.R. & Rogers, R.G. (2004) Racial and Ethnic Disparities in Health and Mortality Among the U.S. Elderly Population. in National Research Council. *Critical Perspectives on Racial and Ethnic Differences in Health in Late Life*. N.B. Anderson, R.A. Bulatao, and B. Cohen, Editors. Washington, DC: The National Academies Press, 53-94.
- Hurd, M., Smith, J.P., & Zissimopoulos, J. (2011). Intervivos Giving Over the Lifecycle. *Rand Labor and Population Working Paper*, WR-524-1.
- Joseph, A. E., & Hallman, B. C. (1998). Over the hill and far away: distance as a barrier to the provision of assistance to elderly relatives. *Social Science & Medicine*, 46(6): 631–639.
- Kahn, J.R., McGill, B.S., & Bianchi, S.M. (2011). Help to family and friends: Are there gender differences at older ages? *Journal of Marriage and Family*, 73(1), 77-92.

- Kalmijn, M. (2006). Educational inequality and family relationships: Influences on contact and proximity. *European Sociological Review*, 22(1): 1–16.
- Lauterbach, W., & Pillemer, K. (2001). Social structure and the family: a United States-Germany comparison of residential proximity between parents and adult children. *Zeitschrift Für Familienforschung*, 13(1), 68–88.
- Lawton, L., Silverstein, M., & Bengtson, V. (1994). Affection, social contact, and geographic distance between adult children and their parents. *Journal of Marriage and the Family*, 56(1), 57–68.
- Leopold, T., Geissler, F., & Pink, S. (2012). How far do children move? Spatial distances after leaving the parental home. *Social Science Research*, *41*(4), 991–1002.
- Litwak, & Kulis. (1987). Technology, proximity, and measures of kin support. *Journal of Marriage and Family*, 49(3): 649–661.
- Luo, Y., LaPierre, T. A., Hughes, M. E., & Waite, L. J. (2012). Grandparents providing care to grandchildren: A population-based study of continuity and change. *Journal of Family Issues*, 33(9), 1143-67.
- Malmberg, G., & Pettersson, A. (2008). Distance to elderly parents: Analyses of Swedish register data. *Demographic Research*, 17(23), 679–704.
- Massey, D. S., & Espinosa, K. E. (1997). What's driving Mexico-U.S. migration? A theoretical, empirical, and policy analysis. *American Journal of Sociology*, 102(4), 939–999. https://doi.org/10.1086/231037
- Masters, R.K. Hummer, R.A., Power, D.A., Beck, A., Lin, S-F. & Finch, B.K. (2014). Long-Term Trends in Adult Mortality for U.S. Blacks and Whites: An Examination of Period- and Cohort-Based Changes. *Demography*, 51:2047–2073.
- McGarry, K. (1998). Caring for the elderly: the role of adult children. In D. A. Wise (Ed.), *Inquiries in the economics of Aging* (133–63). Chicago: Univ. Chicago Press.
- McGarry, K. (2016). Dynamic aspects of family transfers. *Journal of Public Economics*, 137, 1-13.
- McGarry, K., & Schoeni, R.F. (1995). Transfer behavior in the Health and Retirement Study: Measurement and the redistribution of resources within the family. *Journal of Human Resources*, *30*, S184-S226.
- Meara, E.R., Richards, S. & Cutler, D.M. (2008). The Gap Gets Bigger: Changes In Mortality And Life Expectancy, By Education, 1981-2000. *Health Affairs* 27(2): 350-360.
- Montez, J.K., Hummer, R.A., Hayward, M.D. (2012). Educational Attainment and Adult Mortality in the United States: A Systematic Analysis of Functional Form. *Demography*, 49:315–336.

- Montez, J.K., Hummer, R.A., Hayward, M.D., Woo, H. & Rogers, R.G., (2011), Trends in the Educational Gradient of U.S. Adult Mortality From 1986 Through 2006 by Race, Gen-der, and Age Group. *Research on Aging*, 33(2): 145–171.
- Mulder, C. H., & van der Meer, M. J. (2009). Geographical distances and support from family members. *Population, Space and Place*, 15: 381–399. https://doi.org/10.1002/psp.557.
- National Academies of Sciences, Engineering, and Medicine. (2015). The Growing Gap in Life Expectancy by Income: Implications for Federal Programs and Policy Responses. Committee on the Long-Run Macroeconomic Effects of the Aging U.S. Population-Phase II. Committee on Population, Division of Behavioral and Social Sciences and Education. Board on Mathematical Sciences and Their Applications, Division on Engineering and Physical Sciences. Washington, DC: The National Academies Press.
- Pezzin, L. E., Pollak, R. A., & Schone, B. S. (2008). Parental marital disruption, family type, and transfers to disabled elderly parents. *Journal of Gerontology, Social Sciences*, 63B, S349– S358.
- Pezzin, L. E., & Schone, B. S. (1999). Parental marital disruption and intergenerational transfers: An analysis of lone elderly parents and their children. *Demography*, *36*, 287–97.
- Rogerson, P. A., Weng, R. H., & Lin, G. (1993). The Spatial Separation of Parents and Their Adult Children. *Annals of the Association of American Geographers*, 83(4), 656–671.
- Rossi, P. P. H., & Rossi, A. (1990). *Of human bonding: Parent-child relations across the life course*. New York: Aldine de Gruyter.
- Schoeni, R. F., S. Bianchi, S. M., Hotz, V. J., Seltzer, J. A., and Wiemers, E. E. (2015). Intergenerational transfers and rosters of the extended family: A new substudy of the Panel Study of Income Dynamics. *Longitudinal and Life Course Studies*, 6(3), 319-330.
- Seltzer, J. A., & Bianchi, S. M. (2013). Demographic change and parent-child relationships in adulthood. *Annual Review of Sociology*, *39*, 275-290.
- Seltzer, J. A., Lau, C. Q., & Bianchi, S. M. (2012). Doubling up when times are tough: A study of obligations to share a home in response to economic hardship. *Social Science Research*, 41(5), 1307-19.
- Seltzer, J. A., Yahirun, J. J., & Bianchi, S. M. (2013). Coresidence and Geographic Proximity of Mothers and Adult Children in Stepfamilies. *Journal of Marriage and the Family*, 75(5): 1164–1180. https://doi.org/10.1111/jomf.12058
- Spilimbergo, A., & Ubeda, L. (2004). Family attachment and the decision to move by race. *Journal of Urban Economics*, 55(3): 478–497. https://doi.org/10.1016/j.jue.2003.07.004
- Spitze, G., & Logan, J. (1990). Sons, daughters, and intergenerational social support. *Journal of Marriage and the Family*, 52(2): 420–430.

- Spring, A., Ackert, E., Crowder, K., & South, S. J. (2017). Influence of proximity to kin on residential mobility and destination choice: Examining local movers in metropolitan areas. *Demography*, 54(4), 1277–1304. <u>https://doi.org/10.1007/s13524-017-0587-x</u>
- Uhlenberg, P., & Hammill, B. G. (1998). Frequency of grandparent contact with grandchild sets: Six factors that make a difference. *The Gerontologist* 38(3), 276-285.
- Umberson D., Skalamera J., Crosnoe R., Liu H., Pudrovska T. (2017). Death of family members as an overlooked source of racial disadvantage in the United States. *Proceedings of the National Academy of Sciences*, 114(5): 915-920.
- Wiemers, E. E., Slanchev, V., McGarry, K. & Hotz, V.J. (2017). "Living Arrangements of Mothers and their Adult Children over the Life Course," *Research on Aging*, 39(1): 2017, 111-134.
- Wolf, D.A., & Soldo B.J. (1988). Household composition choices of older unmarried women. *Demography* 25, 387–403.
- Zorlu, A. (2009). Ethnic differences in spatial mobility: the impact of family ties. *Population, Space and Place*, 15(4), 323–342. https://doi.org/10.1002/psp.560