

ABSTRACT

MAIR, CHRISTINE ARMSTRONG. Older Adults' Health and Preferences for Care in Europe: A Cross-National, Multilevel Study. (Under the direction of Feinian Chen and Theodore N. Greenstein).

Sociological and gerontological perspectives conceptualize individuals' lives as embedded within multiple layers of "social context," such as meso-level social network ties and social structural disadvantage as well as macro-level national characteristics, such as culture or policy/economics. Empirical literature notes the potential positive effect of "social activity network" ties (e.g., activity-related ties and family network ties) on health, yet this relationship may vary cross-nationally. In addition, non-traditional national cultural values, a strong welfare state, and heightened individual-level need (e.g., low income or a lack of family support) are all linked to public support for a variety of state-based provisions and thus may also predict older adults' preferences for state-based (versus family-based) care. Although a few studies conceptualize nation-level and individual-level factors jointly in the lives of older adults cross-nationally, very few scholars attempt to assess cross-national variation in health or preferences for care using empirical measures of national and individual characteristics. In this project, I create a multilevel dataset using individual-level data from the Survey of Health, Ageing, and Retirement in Europe (SHARE) and nation-level data from the World Values Survey (WVS), European Values Study (EVS), World Bank (WB), United Nations (UN), and Organisation for Economic Co-Operation and Development (OECD) in order to empirically assess cross-national variation in older adults' health and preferences for care. The results of this study reveal that a multilevel consideration of national and individual characteristics offers a unique and nuanced view into older adults'

social lives, health outcomes, and preferences for care in old age. Specifically, national familistic culture and public pension expenditures contextualize the effect of social activity network ties on older adults' health. Further, national culture is associated with older adults' preferences for care in old age, while heightened individual-level need may cause individuals to turn to the types of care most commonly available in their country. Overall, the results reveal the dominant role of culture in shaping older adults' social expectations, social activity network health benefits, and care preferences in old age. In addition, although welfare state generosity does not have a direct effect on health or preferences for care, the more subtle influence of economic development frames older adults' opportunities for health promotion and support in old age. I end with a discussion of the short-term and long-term implications of these findings for older adults' social activity networks, health, and care options in light of cross-national inequality.

Older Adults' Health and Preferences for Care in Europe: A Cross-National, Multilevel Study

by
Christine Armstrong Mair

A dissertation submitted to the Graduate Faculty of
North Carolina State University
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

Sociology

Raleigh, North Carolina

2011

APPROVED BY:

Feinian Chen
Committee Co-Chair

Theodore N. Greenstein
Committee Co-Chair

Steve McDonald

Victor W. Marshall

DEDICATION

For my grandparents, Elizabeth (Betty) Wiggins Armstrong, Stacy Woodrow Armstrong,
Helen Moynahan Wilson, and Hugh Miller Wilson

BIOGRAPHY

Christine Armstrong Mair was born on January 29, 1983 at Williams Air Force Base in Mesa, Arizona. She graduated from Stanton College Preparatory School in Jacksonville, Florida in 2001 and then attended college at the University of Florida in Gainesville, Florida. She graduated in 2005 with two Bachelor of Arts degrees in Sociology and Anthropology and a minor in Classics. Christine then began her graduate work in Sociology at North Carolina State University and earned a Master of Science degree in 2007 under the direction of Dr. Feinian Chen. She began pursuing a Doctor of Philosophy degree in Sociology at North Carolina State University. In the fall of 2011, Christine will join the Sociology and Anthropology Department at the University of Maryland, Baltimore County as an Assistant Professor and reside in the DC-Baltimore area.

ACKNOWLEDGMENTS

I would like to start by thanking my skilled and supportive committee members. I met Feinian Chen during my first year of graduate school and view her as the type of sociologist that I would one day like to be. Her intelligence and her compassion for her students are positively unmatched. Her high standards challenge me to continually improve on my own work while her love of sociological research is contagious. Over the last six years, she provided me with mentorship and training while simultaneously encouraging and allowing me to develop into an independent researcher. I am fortunate to have the opportunity to work with her and I look forward our continued friendship and collaborations.

I would also like to thank the other members of my committee. First, Ted Greenstein's methodological skills and practical manner combine to make him an extremely accessible and supportive mentor. His natural ability to offer clear and concise explanations for complex statistical approaches is a unique and valuable trait. I am very thankful for his straightforward guidance over the years and hope that I can emulate his teaching style. Next, I would like to thank Steve McDonald for being the type of sociologist that enacts what he studies: mentorship. Those who are lucky enough to be able to work with Steve receive not only high quality training but also a supportive friendship and opportunities to collaborate on creative and exciting research projects. I am thankful for his detail-oriented, complex perspective on this project and hope that we can continue to collaborate in the future. Last but not least, I would like to thank Victor Marshall for his deep theoretical

insight, high standards, and friendship. His comprehensive understanding of the literature and its theoretical implications allows him to offer fresh, critical perspectives and my entire project has benefitted as a result. Victor is dedicated to his students with the same passion that he is dedicated to his research. Even though we are at different institutions, he has gone out of his way to welcome me as one of his students and his friendship will continue to be an important part of my career.

In addition to my committee, I would like to thank Leonard Beeghley for being my first sociological mentor. He encouraged me to pursue graduate school, mentally prepared me for the challenges I would face, and is still a dear friend of mine. In addition, I would like to acknowledge Maxine Atkinson, Ed Kick, Ron Wimberley, Patty McCall, Jeff Leiter, Brett Clark, Kyriakos Markides, Kristen Peek, and Esteban Calvo for having been particularly supportive of my professional development over the years. I would also like to thank Marcie Mock, Neko Everett, Shawnta White, and Bruce Cheek for working behind the scenes to facilitate the department's success and for providing fun conversations to lighten the work day. Outside of the halls of the 1911 building, I would like to acknowledge my "third places." A special thanks to Cup A Joe and Foster's Market for providing coffee coffee coffee, cakes, and internet to fuel my writing.

No journey like graduate school or a dissertation is possible without a supportive (social activity) network of friends and family. I am lucky to have fantastic officemates (Mindy

Vulpis, Lindsay Maxwell Hamm, Ellen Whiteman, and Joshua Lambert) that respected my space when I needed to write and offered welcomed distractions when I needed to chat, gossip, or see something hilarious on YouTube. My “third place” officemates, Amber Wells and Dawn Carr, make working more enjoyable and I am very thankful for their fun friendship and sociological/gerontological insights. I would also like to thank Malcolm Cutchin for giving me the opportunity to learn about the challenges and benefits of interdisciplinary research and for encouraging me to develop as a scholar. I value his friendship and intelligence and I look forward to our future projects together. Although there are too many to list here, I would like to thank my other friends who have kept graduate school exciting with fun evenings out and in, lunches, jogs, and coffee breaks. Special thanks to Kylie Parrotta for homemade Italian dinners, mixed CDs, shopping, and living room dancing and to Jonathan Brauer for being an excellent companion in coffee/tea-drinking, prelimming, paper-planning, dissertating, job hunting, and graduating!

Finally, I would like to end with my family. As Gretchen McHenry and I like to quote, “They say the family of the 21st century is made up of friends...” Since meeting at graduate school recruitment, Gretchen and I have been inseparable and I consider her to be a sister. She has always been a cheerleader for me. I am very proud of the things that she and I have both accomplished in the last six years and when we are 65, we will still be watching sci-fi and bantering about social problems. I would also like to thank my fantastic sisters and brother (Lisi, Julie, and Brian Armstrong) and my wonderful in-laws (Pat and Bernie Mair) for being

loving distractions from work over the weekends and holidays! Thank you also to my loving parents, Peggy and Bill Armstrong. Their lifelong compassion and concern for those in society who are without material or social resources has been a constant inspiration. I am forever grateful to them. Saving the best for last, I would like to thank my husband, Lamar Mair. His inner joy for world and respect for the people in it is absolutely infectious. He is my best friend in every sense of the word. His humble, generous, and kind nature makes him the most courageous person I know and the most important person in my life.

I know this acknowledgment section is long, but this has been a rare opportunity to thank the diverse set of linked lives that inspire, entertain, and support me across my life course.

TABLE OF CONTENTS

LIST OF TABLES.....	xi
LIST OF FIGURES.....	xii
CHAPTER 1: INTRODUCTION.....	1
“SOCIAL CONTEXT”	5
Previous Uses of Social Context.....	5
Defining Social Context.....	7
Social Structure.....	8
MACRO-LEVEL SOCIAL CONTEXT.....	9
The Principle of Historical Time and Place: Historic, Cross-National Patterns.....	9
Political Economy of Aging Perspective: Macro-Level Material Conditions.....	11
MESO-LEVEL SOCIAL CONTEXT.....	12
Activity Theory: Activity-Related Social Ties.....	13
Linked Lives: Family Network Ties.....	14
Social Structure as Constrained Context: Indicators of Individual “Need”	15
MULTILEVEL SOCIAL CONTEXT.....	16
Ecological Framework of the Family: Bridging Nations and Individuals.....	16
DATA.....	19
RESEARCH CHAPTERS.....	21
REFERENCES.....	24
CHAPTER 2: PAPER 1: “European Older Adults’ Social Activity Networks in National Context: A Cross-National Exploration of National Cultural, Policy, and Economic Characteristics”	32
LINKED LIVES.....	33
Linked Lives and Activity.....	33
The Social Activity Network: Activity-Related Ties and Family Network Tie Availability.....	34
Social Activity Networks Cross-Nationally.....	35
HISTORICAL TIME AND PLACE.....	37
National Culture and Policy/Economics.....	38
Research Questions and Hypotheses.....	41
METHOD.....	42
Measures.....	43
RESULTS.....	47

DISCUSSION.....	50
Traditional Cultures and a Lack of Social Activity Network Ties.....	50
Individualistic Cultures and Prominent Activity-Related Ties.....	51
The (Seeming) Weak Role of Welfare State Generosity.....	53
Dominating “Development”	54
CONCLUSION.....	56
REFERENCES.....	58

CHAPTER 3: PAPER 2: “The Health Implications of Social Activity Networks, Familism, and Public Pensions for European Older Adults”	69
BACKGROUND.....	70
Meso-Level Context: Linked Lives and the Social Activity Network (SAN).....	70
Social Activity Networks and Health.....	73
Macro-Level Context: Historical Time/Place and Political Economy of Aging.....	74
Cross-National Variation in Social Activity Networks and Health.....	76
RESEARCH QUESTIONS AND HYPOTHESES.....	80
DATA.....	82
METHOD.....	83
Measurement.....	83
Analysis.....	86
RESULTS.....	89
Descriptive.....	89
Multilevel.....	91
DISCUSSION AND CONCLUSION.....	97
Social Activity Networks: Benefits, Risks, and Diverse Ties.....	97
Moderating Macro-Level Social Context.....	100
Designing Programs with a Consideration of Global Inequality.....	104
REFERENCES.....	108

CHAPTER 4: PAPER 3: “National Culture, Welfare State Generosity, and Individual Need: A Multilevel Analysis of European Older Adults’ Preferences for Family-versus State-Based Care”	124
BACKGROUND.....	126
Culture as Values, Cultural Zones, and Culture-Based Support Preferences.....	126
State-Based Material Influence and Economic Generosity.....	128
Individual-Level “Need”	129
SYNTHESIS, RESEARCH QUESTIONS, AND HYPOTHESES.....	132
DATA.....	134

METHOD.....	136
Measurement.....	136
Analysis.....	140
RESULTS.....	142
Descriptive and Bivariate.....	143
Multilevel.....	147
DISCUSSION.....	151
Self-Expressive National Culture.....	151
The Complex Nature of the Welfare State.....	154
Individuals' Health and Family Needs.....	155
National Factors Accentuated with Age and Socioeconomic Need.....	157
CONCLUSION.....	159
REFERENCES	162
CHAPTER 5: CONCLUSION.....	177
CULTURALLY-DRIVEN SOCIAL NETWORKS AND CARE PREFERENCES.....	178
Historic Traditionalism.....	179
Newly Documented (and Explained) Variation.....	180
Individualized Activity Ties and Non-Family Care Preferences.....	183
CROSS-NATIONAL INEQUALITY, WITHIN-NATION MATERIAL NEEDS.....	183
Privileged Social Network Opportunities.....	184
Structural Disadvantage and the European Elite.....	186
Equalizing Policies?.....	187
LIMITATIONS.....	187
FUTURE RESEARCH.....	188
REFERENCES.....	190

LIST OF TABLES

CHAPTER 2: PAPER 1

Table 1. Social Activity Network Measures and Sample Characteristics by Nation.....	66
Table 2. National Cultural Values and Policy/Economic Characteristics by Nation	67
Table 3. Correlation between Aggregated SAN Measures and National Characteristics.....	68

CHAPTER 3: PAPER 2

Table 1. Descriptive Statistics of All Variables Pooled Across Nations.....	119
Table 2. Means of All Variables by Nation.....	120
Table 3. Multilevel Results: SAN and Health.....	121
Table 4. Multilevel Results: Nation-Level Characteristics and Health.....	122

CHAPTER 4: PAPER 5

Table 1. Descriptive Statistics of All Variables Pooled Across Nations.....	172
Table 2. Means of All Variables by Nation.....	173
Table 3. Multilevel Results: Nation-Level Characteristics, Individual-Level Need, and Preferences for Family-Based Care.....	174
Table 4. Multilevel Results: Cross-Level Interaction Effects and Preferences for Family-Based Care.....	175

LIST OF FIGURES

CHAPTER 1: INTRODUCTION

Figure 1. Multiple Levels of Social Context.....	28
Figure 2. Regional Classifications of the 14 Nations in Wave 2 of the Survey of Health, Ageing, and Retirement in Europe.....	29
Figure 3. Macro-Level Empirical Characteristics Theorized to Compose Cross-National Variation (Chapter 2, “Paper 1”).....	30
Figure 4. Multilevel Analyses Exploring Older Adults’ Health and Preferences for Care in Old Age (Chapter 3, “Paper 2” and Chapter 4, “Paper 3”).....	31

CHAPTER 2: PAPER 1

Figure 1. Social Activity Network Examples by National Cultural Values.....	63
Figure 2. Social Activity Network Examples by National Policy/Economics.....	64
Figure 3. Correlations between Key National Measures.....	65

CHAPTER 3: PAPER 2

Figure 1. Familism Moderating the Association between Activity-Based Ties and Poor Health.....	114
Figure 2. Familism Moderating the Association between Monthly Contact with Parent and Poor Health.....	115
Figure 3. Familism Moderating the Association between Coresident Children and Poor Health.....	116
Figure 4. Public Pension Expenditure Moderating the Association between Contact with Parent and Poor Health.....	117
Figure 5. Public Pension Expenditure Moderating the Association between Coresident Children and Poor Health.....	118

CHAPTER 4: PAPER 5

Figure 1. SHARE Countries by National Cultural Values and Welfare State Generosity.....	167
Figure 2. Preferences for Family-Based Care by National Cultural Values.....	168
Figure 3. Preferences for Family-Based Care by Welfare State Generosity.....	169
Figure 4. Age Moderating the Association between National Cultural Values and Preferences for Family-Based Care.....	170
Figure 5. Socioeconomic Need Moderating the Association between National Welfare State Generosity and Preferences for Family-Based Care.....	171

CHAPTER 1

INTRODUCTION

“...The self cannot be divorced from social context and social structure cannot be severed from its inhabitants.”

(George 1999:47)

Recent sociological and social gerontological literature increasingly highlights the theoretical importance of exploring the effect of context, such as national culture and policy/economics, in shaping older adults' well-being and care options cross-nationally. Indeed, characteristics such as national “modernized” cultural values, welfare state generosity, and economic development may contextualize older adults' health outcomes and provide insight into older adults' preferences for care in old age. In addition, individual-level characteristics such as activity-related ties, family network ties, and health/economic/social disadvantage may also be important predictors to consider. Although some studies explore national or individual characteristics separately, it is unknown how these two levels of consideration combine to shape older adults' health outcomes and preferences for care in old age cross-nationally. Due to the diverse historical, cultural, economic, and policy-related composition of the European Union, European nations offer the ideal opportunity to explore the complex, combined effect of national and individual

characteristics. Yet, no study has empirically documented the role of such multilevel characteristics in shaping older adults' health and care preferences in Europe.

In this dissertation, I conceptualize macro-level national characteristics (e.g., culture, policy, and economics) and meso-level social/individual characteristics (e.g., social ties and social disadvantage) jointly as multilevel "social context" and ask: What are the theoretical components of social context and how does this concept relate to European older adults' health and preferences for care cross-nationally? What empirical measures of national culture and national policy/economics explain cross-national variation in older adults' activity participation and family network availability? Do national familistic culture and public pension expenditures contextualize the relationship between social ties and health for European older adults? Finally, to what extent do national cultural values, welfare state generosity, and individual-level indicators of need offer insight into older adults' preferences for family- versus state-based care in old age? I explore these questions in three separate papers using a uniquely created multilevel, cross-national dataset composed of individual-level data from the Survey of Health, Ageing, and Retirement in Europe (SHARE) combined with nation-level data from the World Values Survey (WVS), European Values Study (EVS), World Bank (WB), Organisation for Economic and Co-Operative Development (OECD), and United Nations (UN).

A contextual view of cross-national variation in older adults' health and preferences for care that uses empirical nation-level and individual-data is a necessary endeavor for a number of reasons. First, although sociologists and social gerontologists have noted cross-

national variation in older adults' social activity participation patterns, family availability, and expectations for care in old age, most studies describe variation crudely as a "regional" effect. Very few studies use empirical nation-level data to assess explanations for this variation. Because of this gap in the literature, we have yet to document broad national patterns of variation in cultural values, economic policies, and older adults' social lives.

Second, although scholars theorize and empirically document the specific health benefits of informal social ties (e.g., activity-related ties and family network ties) across the life course, a majority of studies only examine this relationship domestically or between a few comparative nations. Although some scholars note that a family-oriented culture or strong public supports for older adults may contextualize the relationship between social ties and health, these factors have yet to be empirically assessed. Therefore, we know very little about how and why the relationship between social ties and older adults' health varies cross-nationally and thus are limited in our knowledge about how to promote health in diverse continents, such as Europe.

Third, research suggests that an individual's preference for care in old age is linked to his/her satisfaction with received care and perhaps also the health benefits of that care. Yet, no study has examined national and individual predictors of older adults' preferences for family- versus state-based support. Considering how important preferences for care are in assessing which types of support are the most beneficial for older adults in different national contexts, this is a significant gap in the literature. By better understanding the cultural and material forces that shape older adults' preferences for care, we can more

effectively design support options that match preferences and thus promote satisfaction with support options.

In this introductory chapter, I outline the theoretical orientation of this dissertation by drawing upon a range of theories to explore multilevel social context in the lives of older adults cross-nationally. Specifically, I draw from a life course perspective, political economy of aging perspective, activity theory, structural inequality, and ecological theories of the family to describe the multilevel, nested nature of social context and to pinpoint specific nation-level and individual-level measures that may be important in this construct. In this chapter, I discuss theoretical approaches and indicators broadly, as they will each be elaborated on more thoroughly in the subsequent chapters. I argue that this multilevel perspective is necessary to assess cross-national variation in older adults' well-being and support options and describe the empirical multilevel, cross-national dataset I constructed to explore these topics. Finally, I end with a brief summary of the chapters in this three-paper format dissertation. Each of these three papers asks distinct research questions, yet is loosely connected to the other chapters based upon a common theme: exploring the effect of multilevel social context (macro-level national and meso-level individual characteristics) on European older adults' health and preferences for care cross-nationally.

“SOCIAL CONTEXT”

Previous Uses of Social Context

How is the concept of social context used in sociological and gerontological literature? Social context is broadly defined as “the patterns of human relationships and interactions that characterize social life” (Zusman, Knox, and Gardner 2009:3).

Bronfenbrenner envisioned social context as human behaviors and interactions nested ecosystems, macrosystems, mesosystems, and microsystems (Bronfenbrenner 1979, Bronfenbrenner 1998; Goodnow 1995) and incorporated this conceptualization into the ecological framework of family studies. A social context approach also recently gained momentum in life course research:

“The contextual study of lives advanced from near invisibility to a thriving area of sociological research, and particularly of developmental and sociological social psychology. Collectively across disciplines, *this work entails multiple levels*, from the macro structures and social institutions of society to the micro experience of individuals, and draws upon both quantitative and qualitative data in a mixed method approach” (emphasis added, Elder, Johnson, and Crosnoe 2003:7).

“Social context is appropriately examined at a *variety of levels*, ranging from the immediate social environment to the *broad influences of history and*

culture. In this sense, life course perspectives are attentive to macro-micro linkages—a core issue in the discipline that is frequently ignored empirically” (emphasis added, George 2003:672).

“In other words, the relationship between family context and particular outcomes may be contingent on *other economic, social, cultural, and psychological factors*” (emphasis added, Uhlenberg and Mueller 2003:124).

Recent developments in the political economy of aging perspective also explore social context:

“The aging individual is properly placed in a family context but there are *broader contexts related to globalization* that influence family life.” (emphasis added, Marshall, *in press*).

“...Social context and cultural meanings are important...these meanings are shaped through interaction of the aged with the individuals, organizations, and institutions that comprise the social context. Social context, however, incorporates not only situational events and interactional opportunities but also *structural constraints...*” (emphasis added, Estes 1981:400 as quoted in Estes 2001:30).

Defining Social Context

How does this project define social context? From the writings of family, life course scholars, and political economy of aging scholars, we can conclude that *social context is a multi-level perspective of social interaction that includes a broad consideration of historical, political, economic, cultural, and social influences*. The multi-level nature of *social context* can be broken down into a number of categories. For example, Zusman et al. (2009) provide seven organizational categories of social context (groups; social class, race, and ethnicity; gender and age; families and communities; education and religion; politics and economies; networks and societies). In this project, I examine four broad categories of multilevel social context (two macro-level, two meso-level; Figure 1). At the macro-level, I consider national characteristics such as culture (e.g., “modernized” versus not “modernized” cultural values, Inglehart and Baker 2000; and family-oriented versus friend-oriented cultural values) and policy/economics (e.g., welfare state generosity and economic development). At the meso-level, I consider social activity networks (e.g., activity-related ties and family network ties) and indicators of individual-level need (e.g., age, poor health, low socioeconomic status, previous receipt of informal support, lack of family availability). Finally, I do not directly explore the micro-level, although this perspective offers insight into subjective assessments of social relations and support options, which should be explored in future multilevel studies (for a discussion, see Kohli, Hank, and Künemund 2009; Cornwell and Waite 2009).

Social Structure

How does social structure fit with my multilevel conceptualization of social context? In a discussion of linking multiple levels of consideration, Marshall (1995) cautions against using “meso structures, such as family or occupation,” his concern being that “to the extent a Parsonian perspective is adopted, the potential for conflict and change might be overlooked” (Marshall 1995:362). The result of falling into a structural-functionalist trap is that the macro-level may be uncritically considered as merely “context” and will ignore the role of social structure. In order to situate social structure within social context, I draw on the work of Entwisle, Faust, Rindfuss, and Kaneda (2007).

Entwisle et al. (2007) examine social structure as a dual-natured concept. They define social structure as relational (e.g., social activity network ties) and contextual (e.g., the constrained context in which individuals act). This conceptualization of social structure, by definition, includes multiple levels of observation such as the family unit, the social network, the neighborhood, the community, and so on. Therefore, although my broad consideration of multilevel social context draws from some perspectives that lack a serious consideration of social structure (e.g., ecological framework of the family, activity theory), I also deliberately incorporate approaches such as the political economy of aging perspective and concepts of contextual/network-based constraints order to take into account structural inequality at multiple levels. Below, I document the specific perspectives that inform each level of analysis and describe the primary components of macro-level social context and meso-level social context.

MACRO-LEVEL SOCIAL CONTEXT

I conceptualize macro-level social context at the nation-level by including a theoretical consideration of the life course's principle of historical time and place and the political economy of aging perspective. Taken together, these perspectives emphasize the importance of national culture (e.g., "modernized" versus not "modernized values, family-oriented versus friend-oriented values) and national policy/economic characteristics (e.g., welfare state generosity and economic development). I highlight the ways in which these factors create a unique backdrop for each nation that shapes within-nation conditions.

The Principle of Historical Time and Place: Historic, Cross-National Patterns

I begin with a brief description of the life course perspective's principle of historical time and place (Elder 1995). This principle situates individuals within their national context by highlighting the role of historical trajectories and spatial location. This principle particularly resonates when considering the lives of older adults in Europe, whose life courses were shaped across the century by two world wars, the Cold War, and divergent economic, political, and cultural pathways. For example, Germany, Austria, the Czech Republic, and parts of Poland were economically disadvantaged at the end of World War I, and economically isolated through World War II (Bradshaw and Wallace 1996). As Germany struggled to rebuild at the end of WWII, Eastern Europe retracted from the rest of the continent as they entered into decades of Communist rule (Chirot 1977). Also in the years following WWII, the Catholic nations of Europe (Spain, Italy, Greece, and to some extent

Ireland; Murphy 2000) battled within-nation conflicts that detracted from their ability to fully participate in the economic development occurring throughout Protestant Europe (Western and the rest of Northern Europe) for most of the 20th century. Switzerland and Sweden, who remained formally neutral through WWI and WWII, enjoyed political and economic stability that allowed for the development of strong local and national social policies while Western Europe also prospered.

These divergent outcomes, which were shaped by European nations' historical experiences and spatial-regional divisions, led to economic inequality at the nation-level and cultural distinctions along regional and national lines. By taking into account historical time and place as components of national context, one can theorize the ways in which differences in culture (e.g., Catholic versus Protestant Europe, Communist versus non-Communist Europe) and policy/economics (e.g., social protection policies, national wealth) may structure individuals' expectations and opportunities in old age. For example, Catholic and post-Communist nations with more traditional, less individualistic cultures and conflict-induced national economic disadvantage may rely more on family networks and family support. In contrast, Protestant, non-Communist nations with more secular, individualistic cultural values and greater national wealth may participate in more non-family activities and prefer state-based support. These patterns are historically grounded, creating path-dependent influences (e.g., national culture and policy/economics) and outcomes.

Political Economy of Aging Perspective: Macro-Level Material Conditions

Whereas the life course's principle of historical time and place introduces the role of economics within a bundle of historical-spatial "context," the political economy of aging perspective directly theorizes the role of material considerations as a primary driver of social outcomes. The political economy of aging approach has an intrinsically cross-national, comparative focus and explores the role of economics, policy (the welfare state), and political ideology as they relate to older adults (Aboderin 2004, 2006; Guillemand 2000; Walker 2005). With conflict-oriented origins, this perspective explicitly examines unequal resource distribution cross-nationally (and within nations). For example, not all nations possess the economic capacity or political-ideological will to create strong social protection policies. Because the European Union maintains a basic level of economic development, these nations are typically considered globally advantaged. While this is true, there exists a great deal of variation within Europe. Eastern and Southern Europe, for example, have fewer resources than Western and Northern Europe, which likely affects older adults' opportunities for social activities and welfare state provisions.

Economic capacity, however, does not *always* translate into welfare state generosity. Recently, political economy of aging scholars note that certain welfare states are experiencing a "retrenchment" of social protection policies such as public pensions. Some Northern European nations have opted to reduce funding to public pension systems (in favor of privatized, individualized pension plans; Quadagno 1987; Walker 2005). Political economists hypothesize that wealthy nations with individualized, rationalized values are

more likely to privatize their pension systems. In this manner, welfare state generosity and economic development provide the backdrop that shapes older adults' material security. Further, studies find that individuals tend to favor policies already in place. Therefore, older adults' preferences for care in old age may be a function of existing (or lack of) state-based support options. These types of considerations offer important context for understanding the lives of aging adults in the developed world (Marshall In Press).

MESO-LEVEL SOCIAL CONTEXT

In addition to macro-level social context, I view individuals as nested within meso-level environments, such as social activity networks and health/economic/social disadvantage (Figure 1). Although these are all individual-level characteristics, they are a function of individuals' embeddedness within social groups and thus operate at the meso-level. Social activity networks, for example, represent groups of social relationships based upon social activities or a family network. In addition, disadvantages based upon health, economic, or network-based factors are conditions of social structure unequally distributed across populations. For example, health disadvantage, such as functional limitations, will eventually require outside assistance (e.g., from the family or the state, or privately funded sources) and the need for assistance is likely to increase with age. Economic disadvantage, such as being of low income, is a material constraint and a meso-level social condition. Both health and socioeconomic indicators of need may be accentuated by a lack of family availability (e.g., unmarried, no children nearby) or the need to seek informal assistance

from outside of the household. To explore the relationship between these conditions and older adults' health and preferences for care in old age, I draw on activity theory, the life course's principle of linked lives, and general theories of structural inequality.

Activity Theory: Activity-Related Social Ties

Originally an extension of early functionalist theory, activity theory views individuals as a function of their social roles (Havighurst 1957; Maddox 1963; Neugarten, Moore, and Lowe 1965). Generally, this theory posits that participation in social activities promotes well-being for older adults. Empirical tests of activity theory reveal limitations to this perspective. Specifically, not all activities are equally beneficial for health. The most beneficial types of activities are informal activities (Longino and Kart 1982) associated with friendship groups (Lemon, Bengtson, and Peterson 1972). In this way, although activity theorists do not draw directly from the work of George Simmel (1903/1950), empirical tests of activity theory have overlap with symbolic interactionism and generalized social exchange theories (Bengtson, Burgess, and Parrott 1997). For example, Georg Simmel's (1903/1950) essay "The Metropolis and Mental Life" argues that citizens of the modern metropolis are advantaged in that they can participate in numerous social groups simultaneously. He posits that a diverse array of informal affiliations based upon choice enhances mental well-being by providing opportunities for socially-based personal expression. In other words, individuals cultivate well-being through active, diverse, social interactions.

Despite limitations of activity theory, gerontological and sociological scholars view general social engagement as a key component of “successful aging” (Rowe and Kahn 1998) and social participation in activities with friends and family is linked to better health for older adults both theoretically and empirically (e.g., Antonucci, Fuhrer, and Jackson 1990; Connidis and McMullin 1993; Lemon et al. 1972; Litwin and Shiovitz-Ezra 2006; Spakes 1979; Thompson and Heller 1990; Wiggins, Higgs, Hyde, and Blane 2004; see review in George 2006). Therefore, activity-related ties, particularly those formed through informal social interactions, may be important predictors of older adults’ health cross-nationally.

Linked Lives: Family Network Ties

In addition to activity-related ties, family network ties may be an important source of support in old age, potentially facilitating health and shaping preferences for family-based care in old age. The life course perspective’s principle of linked lives captures the importance of the family network by highlighting the role of social ties across the life course (Elder 1985). The family network represents a set of linked lives and acts as a meso-level social institution embedded in broader societal features. The presence of a family network of linked lives provides opportunities for informal support, which may be particularly desirable in more traditional, family-oriented nations. In nations where the family is expected to care for older adults, aging individuals may prefer family-based care to state-based care and therefore, may receive a stronger health benefit from family interactions.

Taken together, activity theory's emphasis on activity-related ties and the life course perspective's emphasis on family network ties forms a meso-level social opportunity structure that I refer to as a "social activity network" (SAN). SAN ties can provide access to many resources such as emotional support, practical or functional support, financial assistance, and socializing companionship across the life course. Therefore, SAN ties may be linked to older adults' well-being and care options cross-nationally.

Social Structure as Constrained Context: Indicators of Individual "Need"

In this project, my focus is cross-sectional and heavily based upon the meaning of context and networks. Therefore, I draw on Entwisle et al.'s (2007) definition of social structure. The authors argue that social structure that includes a consideration both context and networks. The authors argue that context and networks are components of social structure that operate at multiple levels to constrain individuals' opportunities and choices. Although I conceptualize the macro-level role of contextual inequality with the political economy of aging perspective, inequality also operates at the meso-level. Therefore, I apply Entwisle et al.'s (2007) conceptualization of social structure to a consideration of individual-level indicators of "need."

Specifically, I examine individual-level indicators that reflect social disadvantage for older adults, such as poor health, low socioeconomic status, and a lack of family network availability. These factors may all heighten risk for older adults and resonate through their lives to constrain opportunities for social activity network participation as well as family and

state-based care options. For example, older adults with poor health may be less able to interact with SAN ties (particularly, activity-related ties). Similarly, those of lower socioeconomic status may have fewer opportunities to engage in SAN activities such as volunteer/charity work, educational training, recreational sports events, etc. Further, older adults experiencing poor health or poor socioeconomic conditions are more likely to interact with their family network ties based upon need, often financial need, which increases the likelihood of having strained interactions that lead to lowered well-being (Antonucci, Akiyama, and Lansford 1998). Finally, structural inequality also operates through the SAN network itself. Being unmarried or not having children living nearby may be a liability for older adults. Therefore, it is important to examine individual-level indicators of need as a meso-level concern, as these disadvantages arise unequally within society and constrain older adults' SAN ties, health, and care options in old age.

MULTILEVEL SOCIAL CONTEXT

Having outlined the theoretical components of macro-level and meso-level social context, I offer a consideration of ways in which these two levels may affect one another.

Ecological Framework of the Family: Bridging Nations and Individuals

Because the principle of historical time and place and the political economy of aging perspective operate at a macro-level while activity theory, linked lives, and theories of structural inequality operate at the meso-level, I require a theoretical tool to bridge the

explanatory gap between nations and individuals. The ecological framework of the family offers this bridge by envisioning human development as embedded within multiple nested levels of 'environmental' context (Bronfenbrenner 1998; Bubolz and Sontag 1993; Trzcinski 1995). 'Environment' includes a range of social conditions, material and non-material, that surround individuals' lives (Bronfenbrenner 1978, 1998; see also Moen, Elder, and Lüscher 1995). In other words, individuals are nested within multiple levels of social context, from the family to the nation.

The ecological framework includes three main assumptions. First, similar to the life course perspective's emphasis on place, the ecological framework assumes that spatial distinctions distinctly shape social interactions. In Europe, for example, individuals live within different spatial environments that possess various cultural, economic, and political characteristics. In other words, the European experience is spatially-defined. Second, the framework assumes that humans can be understood on multiple levels. Human interaction is within families, communities, local regions, nations, national regions. In other words, individuals' lives are built within layers of social conditions, from their one-on-one interactions within a social activity network, to their national cultural and policy/economic milieu. The third assumption of the ecological framework is that social relationships are a key condition for survival and overall well-being. Similar to activity theory, the life course perspective's principle of linked lives, and Entwisle et al.'s (2007) emphasis on network-based social structure, the ecological framework views individuals as embedded within their social relationships with family, friends, and acquaintances. For older adults, social ties (e.g.,

activity-related and family network ties) may be key components of health and preferences for care in old age. Therefore, the ecological framework of the family complements the macro-level emphases on the historical time and place and the political economy of aging by providing a broad basis for conceptualizing *individuals* as members of a multilevel cultural and economic environment.

In this manner, macro-level characteristics likely contextualize the effect of meso-level characteristics (and vice versa). First, individuals' interactions with their SAN ties may be conditioned by their cultural expectations. For example, older adults nested in nations that emphasize familism may be more likely to prefer family network ties and may receive a stronger health benefit from those interactions, compared to individuals not in family-oriented nations. On the other hand, individuals in nations that emphasize individualistic culture and are friend-oriented may be less reliant upon family network ties and may participate more in activity-related ties with friends and acquaintances. Second, national economic characteristics may contextualize the effect of SAN ties while individual-level need may alter the effect of national characteristics. For example, older adults in nations with low welfare state generosity may be under financial strain and thus may receive less health "payback" from their interactions with family. This lack of welfare state generosity may also cause older adults to express stronger preferences for family-based support simply because this is the most common care option in the absence of state-based care. Yet, if older adults experience poor health, low socioeconomic conditions, or a lack of family availability, they may be more likely to prefer institutionalized state-based support, despite

national cultural orientations toward the family. In addition, individual-level need may be heightened if it occurs within an already weak welfare state, leading to stronger demand for state-based supports.

These examples provide just a few illustrations of the ways in which macro-level national and meso-level individual characteristics combine to shape the lives of older adults. I view these two levels of analyses as intertwined and interdependent. In the chapters that follow, I explore these ideas in depth. Below, I document the dataset I use and offer a brief summary of each chapter.

DATA

I analyze individual-level data from the Survey of Health, Ageing, and Retirement in Europe (SHARE). SHARE is a cross-national European panel dataset of individuals aged 50 and older. The first wave, collected in 2004, includes 11 European nations (Denmark, Sweden, Austria, France, Germany, Switzerland, Belgium, Netherlands, Spain, Italy, and Greece). The second wave of share (2006/2007) includes the original 11 nations with the addition of Czech Republic, Poland, and Ireland. For this project, I focus on Wave 2 (2006/2007; Figure 2) as it contains the most nations and is the most recent wave available.

SHARE is particularly suited to the needs of this dissertation because it provides in-depth detail regarding health (depression, self-rated health, extensive physical measures of health, and health behaviors), social activity networks (participation in activities, family characteristics, and household structure), and potential indicators of need such as economic

status (income, education, insurance status). It also includes a number of other demographic measures such as age, gender, rural/urban location, and nativity status. Another useful component of SHARE is its consideration of the role of the family and state in the lives of older adults. SHARE collected “drop off” survey data from a subsample of respondents. The drop off survey included three items assessing older adults’ preferences for who should provide financial support, household help, and personal care for individuals as they age (the family or the state). Because of these extensive measures and the cross-national nature of the data, SHARE is ideal for exploring meso-level social context in Europe.

In order to incorporate a consideration of macro-level social context, I supplement that SHARE with nation-level measures. I use publicly available nation-level data from a variety of sources in order to create a unique, cross-national, multilevel dataset. Specifically, I use data from the World Values Survey (WVS) and European Values Study (EVS) to assess cultural values in Europe, such as “modernized” secular, self-expressive, friend-oriented versus not “modernized” traditional, survival, family-oriented values (for examples of these data as well as the Inglehart-Welzel scale of cultural values, see Inglehart and Welzel 2005; Inglehart and Baker 2000). I also draw from the World Bank (WB; public health and national wealth data), Organisation for Economic Co-Operation and Development (OECD; public pension data), and United Nations (UN; national development data) to measure welfare state generosity (i.e., public pension and public health expenditures) and economic development (i.e., national development and wealth). This combination of individual- and nation-level data provides the necessary empirical tool for exploring multilevel social

context in the lives of older adults to examine their health outcomes and preferences for care in old age.

RESEARCH CHAPTERS

This first chapter (Chapter 1) provided an introduction to the theories, concepts, and data used in this dissertation. Chapters 2, 3, and 4 offer empirical examinations of these data. Finally, Chapter 5 offers a brief conclusion of the results by noting important limitations of the project, integrating key findings from various chapters, and suggesting directions for my future research.

Chapter 2 (“Paper 1”) is a descriptive chapter that asks: What empirical nation-level measures might explain cross-national variation in older adults’ social activity networks? A majority of studies that examine social ties cross-nationally note regional distinctions (e.g., family-oriented Southern region versus non-family-oriented Northern and Western regions). Yet, region is a crude indicator of cross-national variation. Therefore, I view cross-national variation in SAN as a proverbial ‘black box’ of research on older adults (Figure 3). Drawing on historical descriptions of the nations in the sample, I suggest that cross-national variation actually represents distinct cultural, policy/economic and social differences across Europe. Further, I argue that these differences can and should be empirically assessed. To do so, I examine descriptive data and bivariate (correlation) analysis of national cultural measures, national policy/economic measures, and SAN ties aggregated to the nation-level. I find that self-expressive (i.e., individualistic) cultural values and economic offer a great

deal of insight into patterns of SAN tie variation cross-nationally. I end with a discussion of a potential shift towards individualistic cultural values in Europe, the ambiguous role of the welfare state, the dominating influence of development, and a consideration of activity theory as a privilege reserved for the wealthiest, most developed nations.

Chapter 3 and Chapter 4 offer more advanced, multilevel statistical analyses predicting older adults' health and preferences for care in old age, respectively (Figure 4). In Chapter 3 ("Paper 2"), I examine the extent to which national characteristics (e.g., culture of familism and public pension expenditures) contextualize the relationship between social activity networks and health in Europe (Figure 4A). Although the relationship between SAN-like ties and health is documented in previous studies of single nations, few studies explore cross-national variation in this relationship. The few that do offer theoretical considerations of potential cultural and economic differences in Europe but do not empirically test the role of nation-level characteristics. I test these contextualized forces empirically and make suggestions for promoting older adults' health in Europe through diverse social ties. I end with a discussion that considers designing programs to match cultural expectations, while critically examining the manner in which public pension expenditures may mask within-nation inequality and the gendered implications of familism.

After having documented the importance of cultural expectations for health promotion, I turn to a consideration of predictors of older adults' preferences for care in Chapter 4 ("Paper 3"; Figure 4B). Here, I explore cultural and material explanations for older adults' preferences for family- versus state-based care in old age. Specifically, I examine the

direct effects of cultural values, welfare state generosity, and individual-level indicators of heightened “need.” Next, I examine if and to what extent individual-level need alters the relationship between nation-level factors and preferences for care. I find evidence of direct associations between national characteristics and preferences, as well as between individual-level need and preferences. Further, individual-level need partially conditions the relationship between national culture and welfare state generosity. I discuss the meaning of these findings in light of culture and material influences at multiple levels and highlight the importance of considering older adults’ preferences for care when designing programs and policies aimed at their well-being.

In the final chapter (Chapter 5), I offer a brief conclusion of the three empirical papers. I discuss the meaning of their findings as a whole for the well-being of older adults cross-nationally. I also outline major limitations of these data (e.g., cross-sectional nature, missing national measures), and make suggestions for future research in Europe and elsewhere. I end by arguing that a multilevel consideration of macro- and meso-level social context is an essential first step to broadening our substantive understanding of the social lives, health, and care preferences of aging world.

REFERENCES

- Aboderin, I. 2004. "Decline in Material Family Support for Older People in Urban Ghana, Africa: Understanding Processes and Causes of Change." *Journals of Gerontology Series B-Psychological Sciences and Social Sciences* 59:S128-S137.
- Aboderin, I. 2006. *Intergenerational Support and Old Age in Africa*. New Brunswick, NJ: Transaction Publishers.
- Antonucci, T. C., H. Akiyama, and J. E. Lansford. 1998. "Negative Effects of Close Social Relations." *Family Relations* 47(4):379-384.
- Antonucci, T. C., R. Fuhrer, and J. S. Jackson. 1990. "Social Support and Reciprocity - A Cross-Ethnic and Cross-National Perspective." *Journal of Social and Personal Relationships* 7:519-530.
- Bengtson, V. L., E. O. Burgess, and T. M. Parrott. 1997. "Theory, explanation, and a third generation of theoretical development in social gerontology." *Journals of Gerontology Series B-Psychological Sciences and Social Sciences* 52:S72-S88.
- Bradshaw, Y.W. and M. Wallace. 1996. *Global Inequalities*. Thousand Oaks, CA: Pine Forge Press.
- Bronfenbrenner, U. 1979. *The Ecology of Human Development*. Cambridge, MA: Harvard University Press.
- Bronfenbrenner, U. 1998. "Strengthening Family Systems." Pp. 143-160 in *The Parental Leave Crisis: Towards a National Policy*, edited by E. Zigler and M. Frank. Yale University Press.
- Bubolz, M. M. and M. S. Sontag. 1993. "Human Ecology Theory." Pp. 419-447 in *Sourcebook of Family Theories and Methods: A Contextual Approach*, edited by P. G. Boss, W. J. Doherty, R. LaRossa, W. R. Schumm, and S. K. Steinmetz. Plenum Press.
- Chirot, D. 1977. *Social Change in the Twentieth Century*. New York, NY: Harcourt Brace Jovanovich, Inc.
- Connidis, I. A. and J. A. McMullin. 1993. "To Have or Have Not: Parent Status and the Subjective Well-Being of Older Men and Women." *Gerontologist* 33:630-636.

- Cornwell, E. Y. and L. J. Waite. 2009. "Social Disconnectedness, Perceived Isolation, and Health among Older Adults." *Journal of Health and Social Behavior* 50:31-48.
- Elder, G. H. Jr. 1985. "Perspectives on the Life Course." Pp. 23-49 in *Life Course Dynamics*, edited by Glen H. Elder Jr. Ithaca, NY: Cornell University Press.
- Elder, G. H. Jr. 1995. "The Life Course Paradigm: Historical, Comparative, and Developmental Perspectives." in *Examining Lives in Context: Perspectives on the Ecology of Human Development*, edited by P. Moen, G. H. Elder, and K. Luscher. Washington, DC: American Psychological Association Press.
- Elder, G. H. Jr., M. K. Johnson, and R. Crosnoe. 2003. "The Emergence and Development of Life Course Theory." Pp. 3-22 in *Handbook of the Life Course*, edited by J. T. Mortimer and M. J. Shanahan. New York, NY: Kluwer Academic/Plenum Publishers.
- Entwisle, B., K. Faust, R. R. Rindfuss, and T. Kaneda. 2007. "Networks and Contexts: Variation in the Structure of Social Ties." *American Journal of Sociology* 112(5):1495-1533.
- Estes, C. 2001. *Social Policy and Aging*. Thousand Oaks, CA: Sage Publications, Inc.
- George, L. K. 1999. "Social Perspectives on the Self in Later Life." Pp. 42-66 in *The Self and Society in Aging Processes*, edited by C. D. Ryff and V. W. Marshall. New York, NY: Spring Publishing Company.
- George, L. K. 2003. "Life Course Research: Achievements and Potential." Pp. 671-680 in *Handbook of the Life Course*, edited by J. T. Mortimer and M. J. Shanahan. New York, NY: Kluwer Academic/Plenum Publishers.
- George, L. K. 2006. "Perceived Quality of Life." Pp. 320-336 in *Handbook of Aging and the Social Sciences*, edited by R. H. Binstock and L. K. George. San Diego, CA: Elsevier.
- Goodnow, J. J. 1995. "Differentiating Among Social Contexts: By Spatial Features, Forms of Participation, and Social Contracts." Pp. 269-302 in *Examining Lives in Context: Perspectives on the Ecology of Human Development*, edited by P. Moen, G. H. Elder, and K. Lüscher. Washington, DC: American Psychological Association.
- Guillemard, A.-M. 2000. *Aging and the Welfare-State Crisis*. Newark, NJ: University of Delaware Press.

- Havighurst, R. J. 1957. "The Leisure Activities of the Middle-Aged." *The American Journal of Sociology* 63:152-162.
- Inglehart, R. and W. E. Baker. 2000. "Modernization, cultural change, and the persistence of traditional values." *American Sociological Review* 65:19-51.
- Inglehart, R. and C. Welzel. 2005. *Modernization, Cultural Change and Democracy: The Human Development Sequence*. Cambridge, MA: Cambridge University Press.
- Kohli, M., K. Hank, and H. Künemund. 2009. "The social connectedness of older Europeans: patterns, dynamics and contexts." *Journal of European Social Policy* 19:327-340.
- Lemon, B. W., V. L. Bengtson, and J. A. Peterson. 1972. "An Exploration of the Activity Theory of Aging: Activity Types among In-Movers to a Retirement Community." *Journals of Gerontology* 27:511-523.
- Litwin, H. and S. Shiovitz-Ezra. 2006. "Network type and mortality risk in later life." *Gerontologist* 46:735-743.
- Longino, C. F. and C. S. Kart. 1982. "Explicating activity theory: A formal replication." *Journals of Gerontology* 37:713-722.
- Maddox, G. L. 1963. "Activity and Morale: A Longitudinal Study of Selected Elderly Subjects." *Social Forces* 42(2):195-204.
- Marshall, V. W. 1995. "The Micro-Macro Link in the Sociology of Aging." Pp. 337-371 in *Images of Aging in Western Societies*, edited by C. Hummel and C. J. L. D'Epina. Geneva: Centre for Interdisciplinary Gerontology, University of Geneva.
- Marshall, V. W. In Press. "Global Aging and Families: Some Policy Concerns about the Global Aging Perspective." in *Generation to Generation: Continuity and Discontinuity in Aging Families*, edited by M. Silverstein. Baltimore, MD: Johns Hopkins University Press.
- Moen, P., G. H. Elder Jr., and K. Lüscher. 1995. "Examining Lives in Context: Perspectives on the Ecology of Human Development." Washington, DC: American Psychological Association.
- Murphy, A. E. 2000. "The 'Celtic Tiger'—An Analysis of Ireland's Economic Growth Performance." Working Paper No 2001/16. Department of Economics, Trinity

College, Dublin, Ireland. Robert Schuman Centre for Advanced Studies. European University Institute.

Neugarten, B. L., J. W. Moore, and J. C. Lowe. 1965. "Age Norms, Age Constraints, and Adult Socialization." *American Journal of Sociology* 70:710-717.

Quadagno, J. 1987. "Theories of the Welfare State." *Annual Review of Sociology* 13:109-128.

Rowe, J. and R. Kahn. 1998. *Successful Aging*. New York, NY: Random House.

Simmel, G. H. 1903/1950. "The Metropolis and Mental Life." Pp. 409-424 in *The Sociology of George Simmel*, edited by D. Weinstein. New York, NY: Free Press.

Spakes, P. 1979. "Family, Friendship and Community Interaction as Related to Life Satisfaction of the Elderly." *Journal of Gerontological Social Work* 1:279-293.

Thompson, M. G. and K. Heller. 1990. "Facets of Support Related to Well-Being: Quantitative Social Isolation and Perceived Family Support in a Sample of Elderly Women." *Psychology and Aging* 5:535-544.

Trzcinski, E. 1995. "An Ecological Perspective on Family Policy: A Conceptual and Philosophical Framework." *Journal of Family and Economic Issues* 16(1):7-33.

Uhlenberg, P. and M. Mueller. 2003. "Family Context and Individual Well-Being: Patterns and Mechanisms in Life Course Perspective." Pp. 123-148 in *Handbook of the Life Course, Handbooks of Sociology and Social Research*, edited by J. T. Mortimer and M. J. Shanahan. New York, NY: Kluwer Academic/Plenum Publishers.

Walker, A. 2005. "Towards an international political economy of ageing." *Ageing and Society* 25:815-839.

Wiggins, R. D., P. F. D. Higgs, M. Hyde, and D. B. Blane. 2004. "Quality of life in the third age: key predictors of the CASP-19 measure." *Ageing & Society* 24:693-708.

Zusman, M., D. Knox, and T. Gardner. 2009. *The Social Context View of Sociology*. Durham, NC: Carolina Academic Press.

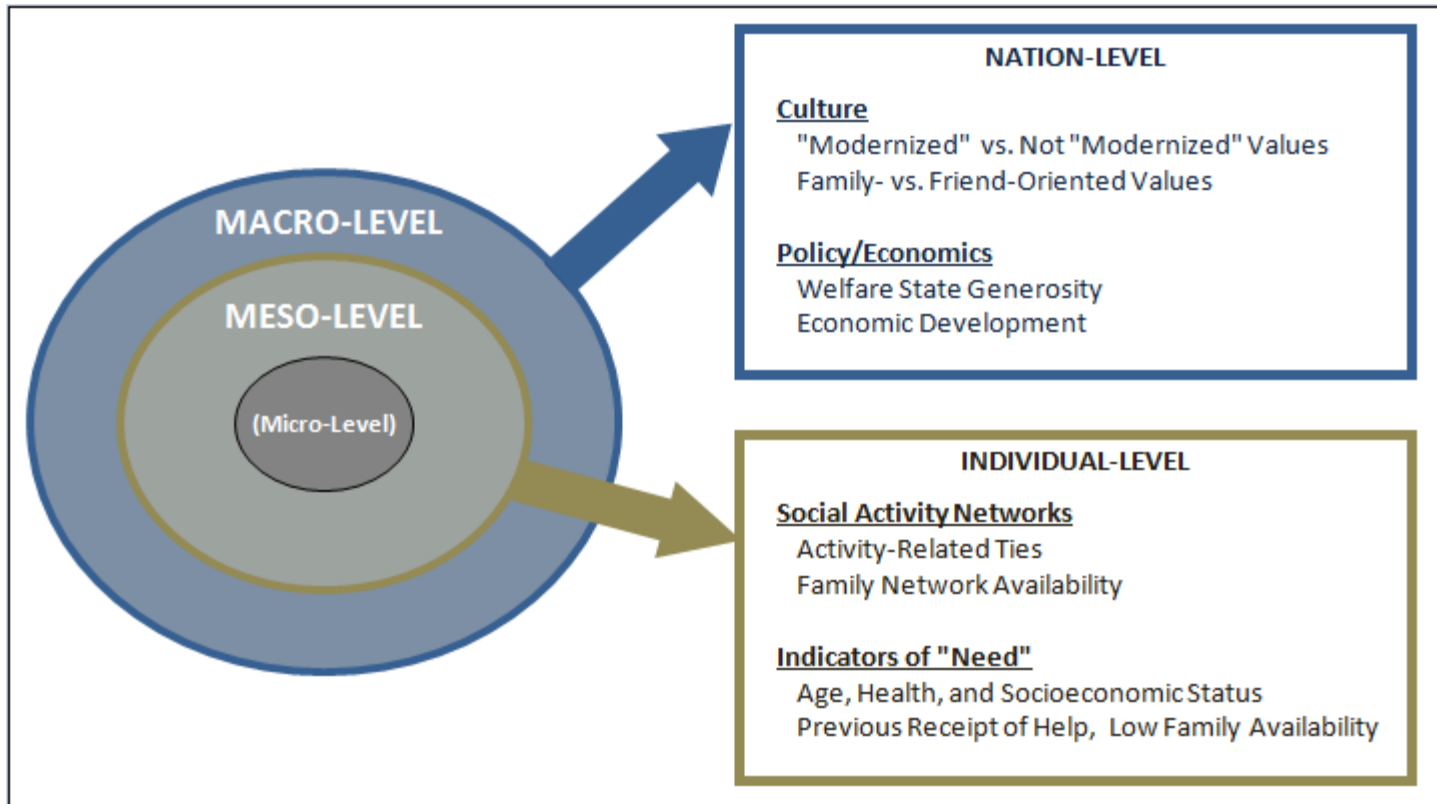


Figure 1. Multiple Levels of Social Context

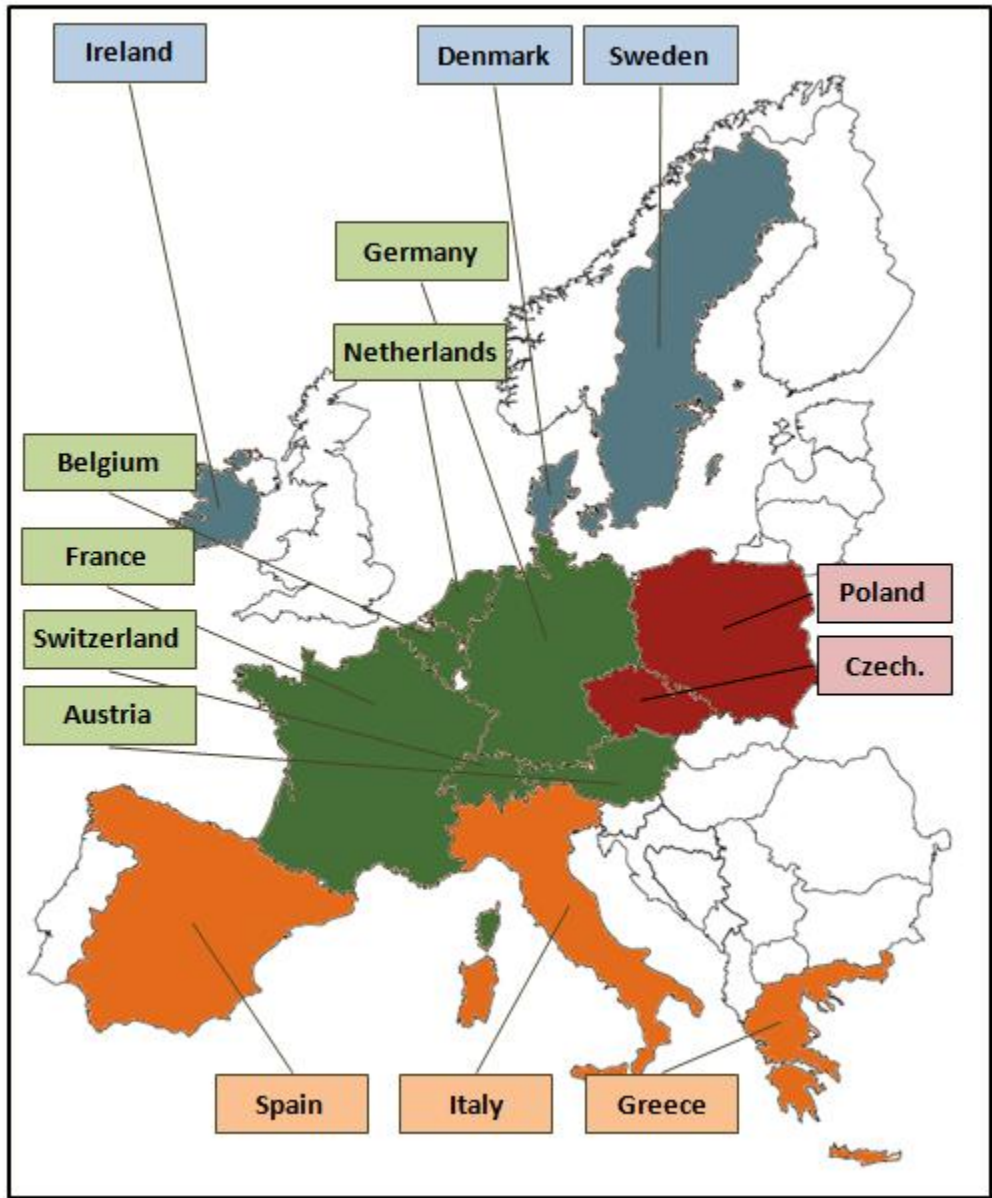


Figure 2. Regional Classifications of the 14 Nations in Wave 2 of the Survey of Health, Ageing, and Retirement in Europe (SHARE 2006/2007)

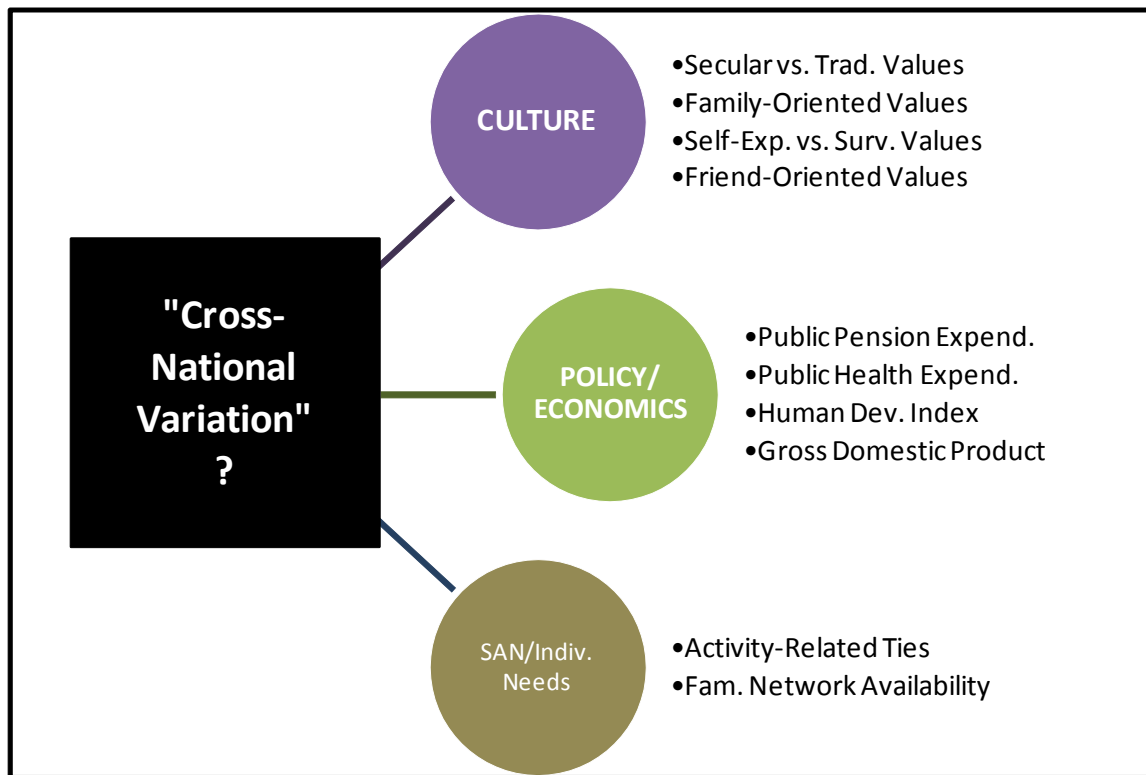


Figure 3. Macro-Level Empirical Characteristics Theorized to Compose Cross-National Variation (Chapter 2, "Paper 1")

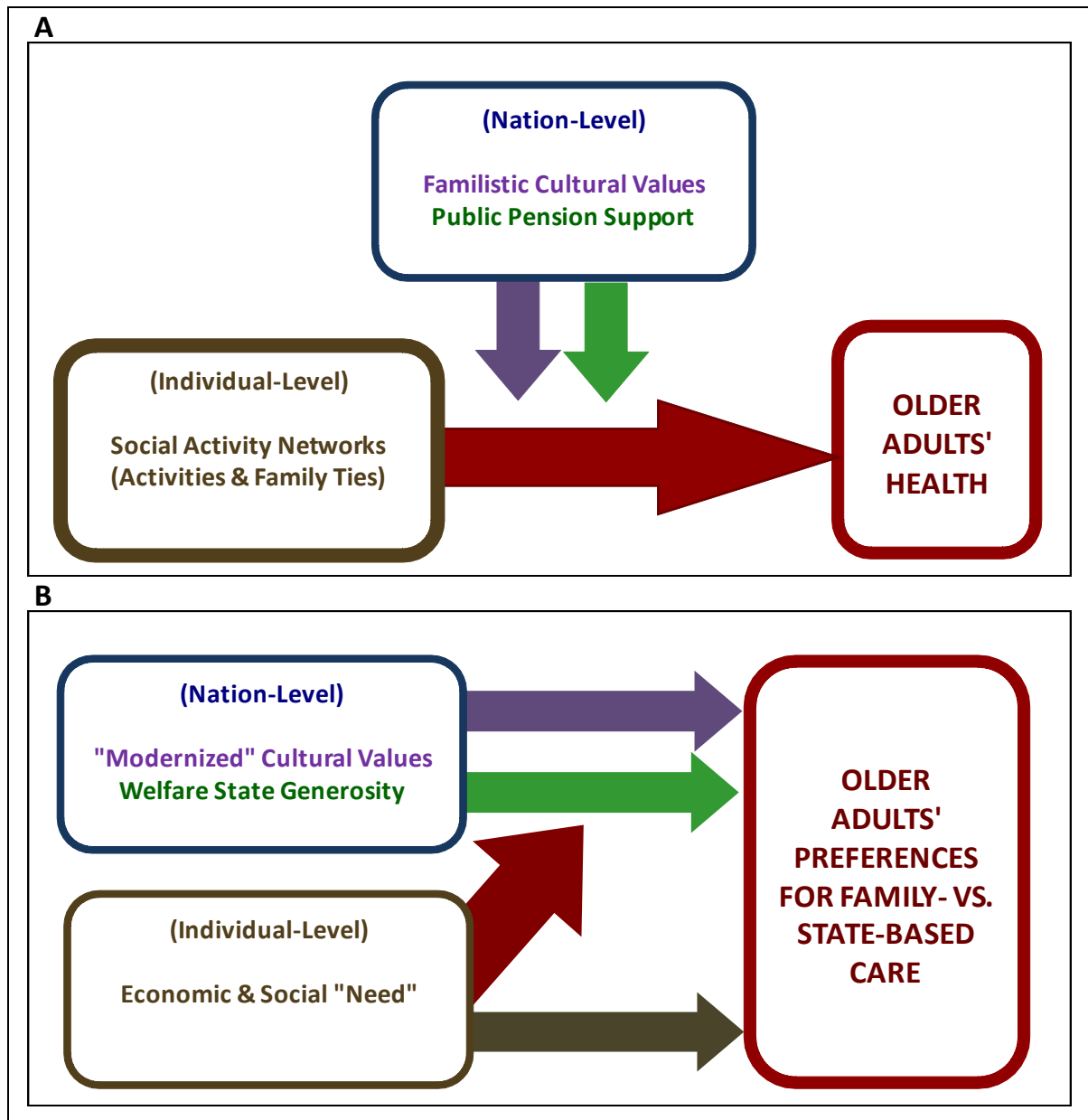


Figure 4. Multilevel Analyses Exploring Older Adults' Health and Preferences for Care in Old Age (Chapter 3, "Paper 2" and Chapter 4, "Paper 3")

CHAPTER 2

PAPER 1

EUROPEAN OLDER ADULTS' SOCIAL ACTIVITY NETWORKS IN NATIONAL CONTEXT: A CROSS-NATIONAL EXPLORATION OF NATIONAL CULTURAL, POLICY, AND ECONOMIC CHARACTERISTICS

Previous sociological and gerontological research documents the benefit of social ties for older adults. By integrating literature on linked lives, activity theory, and social networks, I suggest the concept of a “social activity network” (SAN), which is a broad network composed of activity-related ties and family network ties. Studies of older adults’ social activity networks cross-nationally reveal regional and national differences. Scholars suggest that variation in older adults’ ties may reflect cultural, economic, and policy differences between nations. Few studies, however, specifically examine the potential contextualizing role of national culture and economy/policy using empirical cross-national measures. In this chapter, I combine data from six sources including the Survey of Health, Ageing, and Retirement in Europe (SHARE), World Values Survey (WVS), European Values Study (EVS), Organisation for Economic Co-Operation and Development (OECD), World Bank (WB), and United Nations (UN). Utilizing this unique combination of data, I empirically document cross-national patterns in social activity networks in Europe and discuss the implications of national measures for the study of older adults’ social lives.

LINKED LIVES

Linked Lives and Activity

Because social ties are associated with well-being, older adults' social lives are an important component of aging. Linked lives are a key aspect of the life course and include family, friends, acquaintances, and other relationships (Elder 1985). Family network ties, such as spouses or adult children, can serve as an important system of emotional, functional, and financial support (Hareven 2001). Historically, the family network represents the primary source of elder care. Although not all family ties are supportive (Wellman 1981), lacking a family network may be a social and health risk factor for older adults.

Family network ties, however, are not the only social linkage of importance for older adults. Although a majority of studies on linked lives tend to focus on family, the life course perspective's conceptualization of linked lives is explicitly inclusive and, by definition, includes a range of tie types. Friend ties, for example, may provide resources like social support or social integration (e.g., "the convoy model", Kahn and Antonucci 1980; "socioemotional selectivity theory"; Carstensen 1995). A broad approach to social ties is particularly useful for studying older adults' social relationships and there is mounting empirical evidence that diverse networks of multiple tie types are linked to well-being for older adults (Litwin 2001, 2007). Gerontological literature also explores the role of non-family ties through activity theory. Activity theory posits that participation in groups, events, and organizations is advantageous to well-being (Havighurst 1957; Maddox 1963). Empirical studies find limits to the benefit of activity participation and conclude that

activities are most beneficial when they occur with high quality informal, friendship ties (Lemon, Bengtson, and Peterson 1972; Litwin and Shiovitz-Ezra 2006; Longino and Kart 1982). Thus, I conceptualize activity participation as yielding the *potential* for social relationships and therefore, activity-related and family network ties as jointing composing a “social activity network” (SAN).

The Social Activity Network: Activity-Related Ties and Family Network Tie Availability

The basic unit of a social activity network (SAN) is a social tie, which is embedded in a larger set of social relationships that can include family, friends, neighbors, acquaintances, or other affiliations formed through informal and formal interactions across the life course. Therefore, a SAN is composed of two types of ties: 1) activity-related ties (which can include kin ties, but emphasize ties formed through informal and formal participation in groups, events, organizations, etc.), and 2) family-network ties (which are kin-based ties such as partners/spouses, children, etc.). The SAN concept is similar to a general social network, yet is distinct because it directly incorporates a consideration of activity participation but is generally not focus on work-based ties. I do not conceptualize SAN ties as inherently delivering beneficial social resources (e.g., emotional support). Therefore, a SAN is broader than the convoy model, which focuses on confidant relationships (Kahn and Antonucci 1980) and a SAN does not offer explicit network composition typologies, as such classifications are thoroughly explored elsewhere (e.g., Litwin and Shiovitz-Ezra 2006). Rather, a social activity network is a wide-ranging, fluid, social opportunity structure with

the *potential* to facilitate social engagement, integration, and support across the life course from multiple sources. This general conceptualization of a SAN is an intentional decision that allows me to formulate a starting point for exploring activity engagement and family support availability within a wide variety of contexts.

Social Activity Networks Cross-Nationally

Few studies examine SAN-like ties cross-nationally and those that do find regional distinctions. For example, studies report distinct North-South differences across Europe. Individuals in Mediterranean, Southern Europe place a higher value on family network ties (Alber and Köhler 2004; Kalmijn and Saraceno 2008). Older adults in Mediterranean nations have more frequent interaction with children, live closer to children (Litwin 2010), and provide more family support (Lowenstein and Daatland 2006). Older adults in non-Mediterranean, Northern nations participate in more activities (Hank and Stuck 2008; Litwin 2010), such as volunteering (Erlinghagen and Hank 2006). The general North-South divide noted by these scholars is also observed in other SHARE studies (e.g., Albertini, Kohli, and Vogel 2007; Attias-Donfut, Ogg, and Wolff 2005; Hank 2007; Ploubidis and Grundy 2009).

Despite sharing a continent, the nations of Europe experienced different historical trajectories, which have led to path-dependent divergent development. Previous studies of SAN-like ties with SHARE suggest cultural differences between the family-oriented South and the non-family-oriented North (e.g., Hank 2007; Litwin 2010). Macro-level examinations of the state and the family in the lives of older adults point to the role of economic/policy

differences across regions, such as welfare state type and global development (Bengtson, Kim, Myers, and Eun 2000; Bengtson and Lowenstein 2003; Blome, Kick, and Alber 2009).

Although these authors note cultural and economic differences between nations, very few studies empirically test the extent to which nation-level measures account for this variation. A focus on the North-South divide illustrates general patterns, yet it is a crude characterization of key differences in historical, cultural, economic and political national contexts in Europe. There are many nations that do not fit neatly into region-based comparison. Ireland, for example, is located in Northern Europe (according to regional classifications by the United Nations), yet shares political similarities to Western Europe. Ireland also experienced a tumultuous relationship with the United Kingdom, which led to a trajectory of periodic political turmoil and slowed economic growth for nearly all of the 20th century, unlike Western and Northern Europe (Murphy 2000). There are similar examples of regional outliers in Southern Europe. For example, although Spain and Italy are both Southern European nations with a cultural emphasis on familism, Italy has a stronger public pension system, which may influence older adults' choices about their social ties in later life. Very few studies, however, have empirically explored beyond region to examine the role of specific national characteristics in shaping patterns of activity-related ties and family network ties cross-nationally (for family-based studies, see Katz et al. 2003; Leira 1999). I address this gap in the literature by documenting the historical context behind these differences, hypothesizing patterns, and exploring in-depth descriptive and bivariate patterns cross-nationally. To do so, I take advantage of the extensive availability of cross-

national nation-level data, in combination with cross-national individual-level data from sources such as SHARE, to create a unique dataset that assesses cross-national variation in older adults' SAN ties.

HISTORICAL TIME AND PLACE

Although cultural, policy, and economic differences existed throughout Europe historically, the world wars and the Cold War of the last century played a recent and direct role in the modern manifestations of Europe. I draw upon the life course's emphasis on historical time and place, which encourages scholars to consider individuals' life course trajectories as inseparably embedded within geographic locations and time periods (Elder 1995; Elder, Johnson, and Crosnoe 2003; George 2003). Historical events (e.g., world wars) and spatial conditions (e.g., proximity to other nations) contextualize culture, policy, economics, and individuals' social lives (Uhlenberg and Mueller 2003).

Older adults surveyed in SHARE were born between 1905 and 1956 and thus their lives are conditioned by a tumultuous period in European history. Following the two world wars, distinctions emerged in Europe along regional lines, resulting in a war-torn Western Europe, a Communist Eastern Europe, economic disadvantage in Southern Europe, and continued neutrality in the North (Bradshaw and Wallace 1996; Chirot 1977). These regional distinctions, however, mask important cross-national variation, as each country played a different role in the conflicts and outcome of the wars (Chirot 1977). Modern-day Germany, Austria, Czech Republic, and parts of Poland were economically disadvantaged after WWI

and WWII. This created more permanent divisions across Europe and within nations as communist rule persisted in East Germany, Czech Republic, and Poland until the 1980s. Thus, Eastern Europe is shaped by its communist history and the economic disadvantage resulting from isolation from the capitalist economic development occurring elsewhere in Europe (Bradshaw and Wallace 1996). On the other hand, much of Western and Northern Europe prospered after WWII. West Germany, France, Austria, Belgium, and Denmark emerged relatively economically sound. Neutral Switzerland and Sweden remained stable and were able to develop well-funded social safety nets. Southern Europe and Ireland, however, experienced decades of within-nation post-WWII conflict and thus were also isolated from the booming prosperity of Western and Northern Europe for many decades.

National Culture and Policy/Economics

Traditional Familism and Secular Individualism

Culture and economics are deeply intertwined. Europeans are embedded within cultural traditions that stem from historic religious and political differences (Beugelsdijk, Van Schaik, and Arts 2006; Inglehart and Baker 2000). Using historical and cross-national data on a range of cultural values, global development scholars identify enduring global “cultural zones” (Inglehart and Baker 2000; Inglehart and Welzel 2005), such as Catholic Orthodox, Ex-Communist, and Protestant Europe. Inglehart and Baker (2000) postulate that individuals in traditionally Catholic nations (Southern Europe) and Post-Communist Europe (Eastern Europe) demonstrate stronger support for traditional, “survival-oriented” values

that emphasize religiosity, national pride, respect for authority, conservative family views, and a de-emphasis on independence (Inglehart and Welzel 2005). Familism, or a cultural emphasis on the precedence of the family over individuals, is an aspect of traditional culture. Although the family was historically the primary support system for older adults across multiple continents (Bengtson et al. 2000), contemporary studies suggest that familism is most common in Southern Europe (Katz et al. 2003). Focusing on regional trends, however, ignores variation within regions. Greece, for example, despite a Catholic history and strong familistic values is ranked similar to Switzerland in terms of non-traditional values (Inglehart and Welzel 2005). Similarly, the Czech Republic shares a family-based orientation with Poland yet non-traditional views more similar to Germany.

At the other end of the cultural spectrum are nations that emphasize secular and self-expressive values (Inglehart and Baker 2000; Inglehart and Welzel 2005). Secular values place a lower emphasis on religiosity, national pride, and liberal family views while self-expressive values endorse individual liberty and choice, willingness to sign political petitions, and other similar values (Inglehart and Welzel 2005). These nations are also more likely to emphasize the importance of non-family ties, such as friends. Inglehart and Baker (2000) find that more secular, individualistic cultural values are common in the 'Protestant Europe' cultural zone. This cultural zone includes Western and Northern European nations such as Germany, the Netherlands, Switzerland, Sweden, and Denmark. Yet, the existence of secular, individualistic values is not purely due to Protestant heritage. They identify a wide-scale, global cultural shift towards these values, which they attribute to economic

development. Yet again, regional characterizations miss within-region diversity. Although the North is considered the least familistic, Ireland's Catholic traditions yield conservative views on the family (Inglehart and Welzel 2005). Germany shares a secular Protestant orientation with Western Europe, yet has the lowest self-expressive values in the region and shares survival-oriented values comparable to Greece and the Czech Republic.

Welfare State Generosity and Development

Cultural differences are intertwined with material considerations such as welfare state policies and economic development. These factors are important to the study of older adults' social activity networks because they are associated with standard of living and support resources. Both welfare state provisions and economic development establish a minimum standard of living for older adults, which is particularly important if an individual lacks financial support or family network tie availability. Esping-Andersen's (1990) typology of welfare states attempts to capture development-based divergence, classifying nations into three "worlds": Liberal (e.g., Switzerland), Conservative (e.g., Austria, Belgium, Germany, France, and Italy), and Social Democratic (e.g., Denmark, Netherlands, and Sweden). Northern and Western Europe's post-war economic advantage permitted the establishment of strong policies to protect against poor health and poverty. Wealthier nations, however, do not always spend more on state-based supports. For example, a number of wealthy European nations recently transitioned towards privatized pension systems (e.g., Denmark; Anderson 2004), yet still maintain strong public health systems.

Esping-Andersen (1990) did not classify Southern and Eastern European nations in his welfare state typology because of their unique features (with the exception of Italy; see also Ahlquist and Breunig 2009). Post-war disadvantage in these nations inhibited state development. Welfare state generosity relies on strong state-based funding fueled by a productive labor force, both of which are more common in highly developed nations. Southern Europe still maintains strong public pensions but has weaker public health systems. Whereas some Northern and Western nations privatize their systems to offset costs to the state (e.g., Denmark), this is a privilege of national wealth that Southern and Eastern Europe (e.g., Greece and Poland) do not necessarily possess. Therefore, I also consider national wealth and economic development. Although all European Union nations are “fully developed” by global standards, their divergent histories led to economic and policy-based diversity that likely shapes activity opportunities and support availability.

Research Questions and Hypotheses

Considering cross-national variation in social activity networks, I ask the following questions: To what extent do older adults’ SAN ties vary across Europe? Do national culture and policy/economic characteristics offer insight into SAN variation in Europe? What are the implications of these findings for future empirical cross-national studies of older adults’ social lives? Because of the cultural and policy/economic-based diversity across Europe, I anticipate that cross-national differences in older adults’ SAN ties are partially explained by national characteristics. More traditional cultures, for example, place stronger emphasis on the family.

Therefore, my first hypothesis is that there is an association between traditional, familistic values and higher utilization of family network ties. Second, I also hypothesize an association between secular, self-expressive values and a stronger emphasis on affiliations of choice, such as activity-related ties. As individuals age, however, financial support is an important consideration. State-based provisions, such as welfare generosity, may offer additional support to older adults, making individuals less likely to provide or receive care from their SAN ties. Thus, my third hypothesis is that welfare state generosity is associated with a lower proportion of older adults caring for a sick/disabled adult or with proximal children. Welfare state generosity, however, is intricately linked to the state's capacity to provide funds. More economically developed nations have more resources (public or private) and more opportunities for activity participation. Therefore, my fourth hypothesis is that there is a relationship between economic development and higher utilization of activity-related ties, but lower utilization of family network ties. The hypotheses presented here are intentionally broad and association-based, which I explore through descriptive and bivariate patterns.

METHOD

I begin by documenting SAN variation cross-nationally through descriptive data of SAN ties by nation using SHARE data (Table 1). Next, I utilize five sources of national empirical data (Table 2) and explore bivariate correlations between national characteristics and key SAN ties (Table 3). I present scatter plots to illustrate the relationships between aggregated SAN participation and nation-level culture (Figure 1) and policy/economics

(Figure 2). Finally, I explore the overlap between national measures with correlations of national variables (Figure 3). This analytical approach takes advantage of this unique combination of data by noting broad, cross-national patterns and providing a first step to understanding contextualized SAN ties.

Measures

Social Activity Networks: Survey of Health, Ageing, and Retirement in Europe (SHARE)

To examine the SAN ties cross-nationally, I draw on individual-level data from the Survey of Health, Ageing, and Retirement in Europe (SHARE).¹ SHARE is a longitudinal dataset of older adults in the European Union which began in 2004. Wave 1 sampled older adults in 11 nations, including Southern Europe (Spain, Italy, and Greece), Western Europe (Germany, France, Austria, Belgium, Netherlands, and Switzerland), and Northern Europe (Sweden, Denmark). Wave 2 (2006/2007) added Eastern Europe (Poland, Czech Republic) and Ireland. I analyze data from Wave 2, as this sample includes the most number of nations and thus also the greatest amount of cross-national variation.

SAN ties include activity-related ties and family network ties. I examine the extent to which respondents participate in social activities by drawing on an item in SHARE that asks

¹ This paper uses data from SHARELIFE release 1, as of November 24th 2010 or SHARE release 2.3.1, as of July 29th 2010. The SHARE data collection has been primarily funded by the European Commission through the 5th framework programme (project QLK6-CT-2001- 00360 in the thematic programme Quality of Life), through the 6th framework programme (projects SHARE-I3, RII-CT- 2006-062193, COMPARE, CIT5-CT-2005-028857, and SHARELIFE, CIT4-CT-2006-028812) and through the 7th framework programme (SHARE-PREP, 211909 and SHARE-LEAP, 227822). Additional funding from the U.S. National Institute on Aging (U01 AG09740-13S2, P01 AG005842, P01 AG08291, P30 AG12815, Y1-AG-4553-01 and OGHA 04-064, IAG BSR06-11, R21 AG025169) as well as from various national sources is gratefully acknowledged (see www.share-project.org/t3/share/index.php for a full list of funding institutions).

whether or not an individual participated in any of the following activities over the last month (1=yes; 0=no): 1) voluntary/charity work, 2) cared for a sick/disabled adult, 3) help to friends/neighbors, 4) education/training event, 5) sport/social/other club, 6) religious organization activities, 7) political/community organization. I also create a scale of activity-related ties by summing an individual's total number of activity types. To assess family network ties, I explore family network tie *availability*. Because a majority of respondents are married (76 percent) with children (91 percent), I focus on respondents with lower family network availability and thus potentially greater family need. Specifically, I examine respondents without children (biological, fostered, adopted, or step; 1=no children; 0=has children) or proximal children (i.e., children living within 5 kilometers, including coresident children; 1=no proximal children; 0=proximal children). I also examine the availability of a partner/spouse (i.e., married/partnered, divorced, widowed, and never married). Table 1 displays descriptive statistics by nation for respondents with full data on all measures (N=30,040). I include example measures of age, gender, education, nativity, location, and health to show the basic sample composition, but do not discuss these measures directly.

National Culture: World Values Survey (WVS) and European Values Study (EVS)

To empirically measure culture I draw primarily from the World Values Survey (WVS 1999-2001) and the European Values Study (EVS 1999-2001). Inglehart and Welzel (2005) utilize a range of items from these two datasets across 95 nations to create two axes of cultural values: 1) secular-rational versus traditional values and 2) self-expressive versus

survival values (for general information on these scales, see Inglehart 1997). Known as the Inglehart-Welzel scale, each subscale ranges from -2.5 to 2.5 and higher values indicate more secular, self-expressive values. These measures are validated in multiple studies of global development (Pryor 2008; Inglehart and Welzel 2005, 2010) and endorsed by the World Values Survey. In addition, I examine two specific measures of national values related to family and friends. Because items assessing the role of family care in the European Values Study and World Values Survey are not available for all 14 nations, I utilize an example from SHARE data aggregated to the nation-level.² Specifically, I draw on three questions from the SHARE take-home survey that ask respondents to rate the extent to which the family (versus the State) should bear responsibility for older persons': a) financial support, b) help with household chores, and c) personal care. I collapse response categories into three options: 0) "mainly state/totally state"; 1) "both equally"; and 2) "mainly family/totally family" and create a summation score of these items, yielding a scale of older adults' family-based preference ranging from 0 to 6. I also include a measure of value placed on friends from the World Values Survey (1981-1999), which asks respondents to rate how important friends are in life. I take the average proportion of individuals reporting friends are "very important" (most extreme response), and create aggregate measures for each nation.

² The World Values Survey provides a measure of family importance ("How important is family in life?"), but there is very little cross-national variation in this measure—approximately 90 percent of individuals in Europe describe family as "very important". Thus, it is unlikely that this item captures the observed regional differences in familism in Europe.

National Policy/Economics: World Bank (WB), Organisation for Economic Co-Operation and Development (OECD), and United Nations (UN)

To measure policy/economic characteristics, I examine welfare state generosity and economic development using data from the World Bank (WB), Organisation for Economic Co-Operation and Development (OECD), and United Nations (UN). I measure welfare state generosity as the percent of gross domestic product spent on public pensions (average from available years 1990-2005, OECD) and percent of GDP spent on public health (average from available years, 2003-2005 from the WB World Development Indicators). I assess economic development first through GDP, purchasing power parity (GDP, PPP, constant 2005; WB, averaged from available years 1990-2005). This measure is designed to account for the final value of all goods/services produced in a nation, adjusted for exchange rate, and is considered a reputable measure of standard of living. Second, I examine each nation's score on the inequality-adjusted Human Development Index (HDI), an internationally recognized measurement of economic development provided by the UN that takes into account factors commonly associated with development such as health (life expectancy at birth), education (mean years of schooling and expected years of schooling per nation), and living standards (gross national income per capita). Although there is little variation within Europe for the non-inequality-adjusted HDI measure, the inequality-adjusted version of this index has more variation. Therefore, I use the inequality-adjusted HDI measure for the only year it is publicly available (2010) as a proxy for the general development climate for the time SHARE data were collected (2006-2007).

RESULTS

SAN ties differ cross-nationally in Europe. Older adults in Eastern and Southern Europe participate in fewer activities than in Western and Northern Europe (Table 1). Across Eastern and Southern Europe, the percentage of individuals that participate in any given activity is between one and five percent, compared to Northern Europe where participation peaks at 30 or 40 percent for certain activities (e.g., helping friends/neighbors, sports/social/other clubs). There is less variation cross-nationally in family network tie availability, as a majority of respondents are married/partnered with children. The proportion of respondents without proximal children ranges from 13 to 19 percent in the East and South, to 16 to 36 percent in the West and North. These statistics echo the findings of other SHARE studies, which describe a North-South divide.

What accounts for cross-national differences in social activity networks? In Table 2, I explore empirical measures of national culture and policy/economics. Culture measures reveal a continuum from traditional, survival-oriented familistic values to more secular, self-expressive cultures that place a higher value on friends. Traditional values are most pronounced in Ireland and Poland, while secular values peak in Sweden and Germany. Older adults' preferences for family-based care follow a more consistent trend from East and South to West and North. The highest rates of preferences for family-based care are in Poland and Greece and the lowest in Denmark and Sweden. Self-expressive values, an indicator of individualism, are highest in Sweden and Denmark and lowest in Poland and the

Czech Republic. Finally, the proportion describing friends “very important” peaks in Sweden and the Netherlands and is lowest in Poland and the Czech Republic.

Table 3 displays correlations between aggregated SAN measures and national characteristics. Hypothesized relationships are indicated by a box and notable correlations (those ≥ 0.70) are indicated by shaded cells. Nations with more traditional values (lower secular values) and higher familism have moderately higher proportions of family network tie availability. For example, older adults’ family-based preferences are moderately correlated with the national proportion without proximal children ($r = -0.63$, $p < 0.001$). For an illustration, I refer to Figure 1A, which indicates that as familism increases the proportion of individuals without proximal children decreases. High familism is also strongly correlated with lower proportion of the population that provided help to a friend/neighbor ($r = -0.79$, $p < 0.001$) and fewer activities overall ($r = -0.77$, $p < 0.001$). Familistic nations display a moderate pattern of heightened family network tie availability, yet familism is also linked to fewer ties with friends/neighbors. Nations with less traditional, more self-expressive cultural values are highly correlated with activity ties. I illustrate examples of these relationships in Figure 1C and 1D. Nations reporting more activities also endorse self-expressive values, rather than authority-endorsing survival values ($r = 0.85$, $p < 0.001$; Figure 1C) and place a higher value on friends ($r = 0.87$, $p < 0.001$). This trend holds most notably for providing help to a friend/neighbor (Table 3). These correlations reveal potential explanations for cross-national SAN variation.

Next, I examine associations between policy/economics and SAN ties (Table 3; Figure 2). Public pension expenditures are moderately negatively correlated with the proportion of respondents who provided help to a sick/disabled adult ($r=-0.42$, $p<0.001$; Table 3; Figure 2A). Yet, the association is weak and further clouded by the fact that public health spending shows the opposite association. The strongest correlation, however, is between public health expenditures and the proportion of older adults without proximal children ($r=0.86$, $p<0.001$; Table 3; Figure 2B). As public health spending increases, so does the proportion of older adults without children nearby. Thus, higher welfare state generosity may be linked to lower family tie availability. However, considering the opposite associations of pensions and public health with caring for a sick/disabled adult, welfare state generosity may capture something broader, such as economic development. Economic development measured through GDP PPP has low correlations with all SAN ties. Figure 2C illustrates the weak association between GDP PPP and activities. Inequality-adjusted Human Development Index (HDI), however, is positively and strongly correlated with activities ($r=0.83$, $p<0.001$). The scatter plot reveals a tight association, despite low variation in HDI for the 14 nations in the sample. These correlations provide preliminary insight into macro-level patterns of national culture and development as they related to SAN ties.

Finally, I examine correlations between national variables. Examples are displayed in Figure 3. For example, self-expressive values are negatively correlated with preference for family-based care ($r=-0.85$, $p<0.001$; Figure 3A) and positive correlated with the proportion who report friends are very important ($r=0.89$, $p<0.001$; Figure 3B). Public pension and

health expenditures, however, are not highly correlated ($r=-0.13$; $p<0.001$; Figure 3C). The Human Development Index is highly positively correlated with self-expressive values ($r=0.78$, $p<0.001$; Figure 3D). I explore the meaning of these findings below.

DISCUSSION

Traditional Cultures and a Lack of Social Activity Network Ties

Traditional cultural values, such as support for family-based care, are only moderately associated with family network tie availability cross-nationally but are strongly associated with fewer activity-related ties. Specifically, traditional values and familism are moderately associated with a lower proportion of the older population without proximal children, yet are strongly correlated with a lower proportion of older adults who have provided help to a friend/neighbor or participated in a multiple activity types (Figure 1B, 1C). Therefore, the results offer only partial support for my first hypothesis. Traditional and familistic values are not strongly linked to higher family network availability but are more directly linked to a *lack* of activity-related ties. There are a number of possible explanations for this finding. First, the measures I chose to represent family network tie availability may not adequately capture older adults' interactions with their family networks. For example, traditional and familistic values have a slightly stronger association with the proportion of older adults who have cared for a sick/disabled adult ($r=0.62$, $r=0.65$, $p<0.001$; Table 3). Due to the ambiguous wording of the survey item, this "activity" may involve kin. Second, it may be that despite strong emphasis on traditional familism, older adults in familistic

nations do not possess equally strong family networks. Therefore, what are the challenges faced by older adults in familistic nations with a lack of social activity network ties?

The endurance of traditional cultural values highlights the importance of considering those left vulnerable by a national cultural emphasis on familism. What conditions are faced by older adults with strong family expectations yet low family network support (Figure 1A)? Despite familistic preferences in Southern and Eastern Europe, as well as Ireland, urbanization and intergenerational mobility are increasing in Europe while marriage and fertility rates are declining. Although Ireland emerged from delayed economic development at the end of the 20th century (Murphy 2000), Poland, Czech Republic, and Greece's economic isolation in the post-war era left these nations struggling to establish the types of formal supports found in Northern Europe. Therefore, older adults' lower likelihood of participating in activities in many familistic nations may be due not only to a lack of cultural proclivity towards activity-related ties but also because of a lack of *availability* of those ties. With empirical data on the prevalence of national traditional, familistic national cultural values and individuals' family network tie availability, scholars can explore ways to improve the conditions of older adults that take into account the joint role of cultural expectations and social activity network availability.

Individualistic Cultures and Prominent Activity-Related Ties

In contrast to the weaker association between traditional, familistic cultural values and family network ties, self-expressive (individualistic) values and an emphasis on the

importance of friends are both strongly associated with activity-related ties (e.g., help to a friend/neighbor or number of activity types; Table 3). These results support my second hypothesis and highlight the role of activity-related ties in non-traditional nations. For example, more traditional, familistic nations such as Poland, Czech Republic, and Italy have lower emphases on activity-related ties (Figure 1B) and lower endorsement of friends as “very important” (Figure 3B). In contrast, individualistic nations that value friends, such as Sweden and the Netherlands utilize more activity-related ties (Figure 1D). Thus, although aging scholars express concerns over declines in family support for older adults, activity theory may provide insight into a new dimension of support. Older adults in nations with low familism do not lack ties, but rather, may simply seek different *types* of social ties—activity-related ties, which are also more likely to be non-kin.

What do these empirical measures of culture tell us about cross-national variation and how are they connected to activity-related ties? The values examined here reflect a cultural continuum that may condition older adults’ interest in and access to activities. The strong correlation between an emphasis on friends and self-expressive cultural values (Figure 3B), suggests that these national characteristics may represent a broader set of “modernized” values (Inglehart and Baker 2000). Indeed, these “modernized” values appear to directly contrast traditional, familistic values as represented by the strong, negative correlation between familism and self-expressive values (Figure 3A). Thus, European nations vary along a continuum between traditional/family-oriented values and self-expressive/friend-oriented values. Both extremes are strongly linked to activity-related ties,

except in opposite directions. Therefore, the cultural continuum may reflect older adults' interest in activity-related ties. Whereas "activity" is emphasized as universally beneficial for older adults' health, activity-related ties that are broad and non-kin-based are not only uncommon in traditional, familistic nations but may also be less desired. Therefore, gerontologists' emphasis on general activity holds primarily in self-expressive, friend-oriented nations.

The (Seeming) Weak Role of Welfare State Generosity

To explore influences beyond culture, I turn to the role of policy and economics. Welfare state generosity, measured as public health expenditures, is strongly correlated with a lack of proximal children. Public health expenditures, however, are not strongly associated with a lower proportion of older adults who cared for a sick/disabled adult and public pension expenditures have no strong associations with any SAN ties. Therefore, the results offer only partial support for my second hypothesis and raise questions about the use of public expenditures as measures of welfare state generosity. For example, nations with the strongest public pension systems are not always the ones with the highest public health spending or other state provisions. In fact, these measures of welfare state generosity are only weakly correlated (Figure 3C). Therefore, although it is possible that older adults in nations with strong public health systems are less reliant upon adult children living nearby (Figure 2B), there may also be other important policy factors to consider. For example, emphasizing welfare state generosity does not account for Northern and Western

Europe's growing reliance on private pensions. Reliable data on private pension funding, however, are not currently available for all nations in the sample yet the seeming lack of effect of welfare state generosity may reflect not only opposite patterns of public pensions and public health cross-nationally in Europe but also the ever-increasing role of privately funded support for older adults. These factors should continue to be explored in cross-national research as more data become available.

Dominating "Development"

Finally, I hypothesized that economic development would be associated with more activity-related ties and lower family network tie availability. The results indicate that although GDP PPP is not associated with SAN ties (Figure 2C), nations' scores on the inequality-adjusted Human Development Index (HDI) are strongly associated with more activity-related ties (Figure 2D). In addition, HDI is moderately associated with a higher proportion of older adults without proximal children. Thus, the results offer partial support for my final hypothesis and also emphasize the role of economic development measured as HDI, rather than GDP PPP. Although GDP PPP and HDI are commonly used measures of development, the very concept of "development" acts as a panacea for cross-national research by explaining a variety of trends such as wealth, health, education, and infrastructure. But what is "development" and how does it contextualize SAN ties? In this analysis, for example, one measure of "development" is strongly correlated with SAN variation (Human Development Index; Figure 2D) while the other is not (GDP PPP; Figure

2C). Common measures of economic development can be problematic in cross-national research, as they tend to explain a large proportion of statistical variation without pinpointing which aspects of development are most important. Although HDI is a broad measure, it includes specific components: health, education, and wealth. One could argue that these components are primarily *outcomes* of “development” and not causes. Yet, these three components of HDI offer tangible traits of development that appear to be highly predictive of SAN tie variation in the expected directions (e.g., development is associated with more activity-related ties and fewer traditional family network ties such as proximal children; Table 3, Figure 2).

Therefore, the final piece of the puzzle linking all of the cross-national patterns observed may be the broad meaning of “development,” as the Human Development Index (HDI) a consideration of health, education, and wealth, and is strongly correlated with “modernized” values sets (self-expressive/friend-oriented cultural values; e.g., Figure 3D). With these specific measures, a clearer picture emerges. The social participation encouraged by activity theory is not only biased against familistic cultures but may also represent an economically privileged status. Older adults who are healthier, educated, wealthier, and with more self-expressive values likely have more opportunity and desire to participate in social groups unrelated to the family. In fact, many of the activity-related ties examined are intuitively linked to characteristics of economic development and individualism. For example, participation in sports events likely requires a minimum level of health, educational/training events may require previous experience or financial resources,

volunteer/charity events likely require financial or time-based resources, and help to a friend/neighbor reflects normative interest in cultivating non-family ties. In this way, individuals in developed nations are “selected” into activity-related ties due to their higher likelihood of being capable of and interested in participation. Individuals in more traditional, familistic nations that are less “developed” may not only be culturally predisposed to family network ties but also may simply lack opportunity for the types of activity-related ties captured by SHARE measures. Therefore, empirical national measures of culture and economics offer a more nuanced, contextualized view of variation in European older adults’ social activity networks cross-nationally by revealing the potential selection effect of “modernized” development.

CONCLUSION

In conclusion, older adults’ social lives are diverse and consist of activity-related ties and family network ties, both of which compose a social activity network (SAN). Cross-nationally, there is notable variation in SAN ties. Yet, few studies have attempted to explore this variation using empirical national measures. Therefore, I address this gap in the literature by constructing a dataset of aggregate SAN ties and national characteristics drawn from six publicly available sources. Using this uniquely created dataset, I find that cross-national variation in SAN ties is partially explained by variation in non-modern “survival”/family-oriented values, self-expressive/friend-oriented values, and economic development. Although an emphasis on national measures is limited in that there is certainly within-

nation variation in culture (e.g., ethnic and political divisions) and economic/policy characteristics (e.g., local housing and labor markets; Blome et al. 2009), an empirical examination of nation-level variables offers a preliminary step to extrapolating explanations for cross-national SAN variation. The results of this study reveal that individuals in traditional/family-oriented nations may be vulnerable to a lack of overall SAN ties, that the benefits of activity theory are biased in favor of self-expressive/friend-oriented nations, and that ability to participate in social activities may be a privilege of economic development. With these factors in mind, future studies should continue to examine empirical measures of national characteristics through multivariate and multilevel analyses in order to gain a clearer understanding of the explanations for and implications of SAN variation cross-nationally. In this chapter, bivariate correlational analyses, in combination with historical, cultural, political, and economic contexts, provide a broad foundation for more advanced studies of the role of social activity networks in the lives of European older adults.

REFERENCES

- Ahlquist, J. S. and C. Breunig. 2009. Country Clustering in Comparative Political Economy. *MPIfG Discussion Paper 09/5*. Max Planck Institute for the Study of Societies.
- Alber, J. and U. Köhler. 2004. *Quality of Life in Europe: Health and Care in an Enlarged Europe*. Social Science Research Center, European Foundation for the Improvement of Living and Working Conditions, Berlin.
- Albertini, M., M. Kohli, and C. Vogel. 2007. "Intergenerational Transfers of Time and Money in European Families: Common Patterns Difference Regimes?" *Journal of European Social Policy* 17(4):319-334.
- Anderson, K. M. 2004. "Pension Politics in Three Small States: Denmark, Sweden, and the Netherlands." *Canadian Journal of Sociology* 29: 289-312.
- Attias-Donfut, C., J. Ogg, and F.-C. Wolff. 2005. "European Patterns of Intergenerational Financial and Time Transfers." *European Journal of Ageing* 2:161-173.
- Bengtson, V., K.-D. Kim, G. C. Myers, and K.-S. Eun, eds. 2000. *Aging in East and West: Families, States, and the Elderly*. New York, NY: Springer Publishing Company.
- Bengtson, V. and A. Lowenstein, eds. 2003. *Global Aging and Challenges to Families*. New York, NY: Walter D. Gruyter, Inc.
- Beugelsdijk, S., T. Van Schaik, and W. Arts. 2006. "Toward a unified Europe? Explaining Regional Differences in Value Patterns by Economic Development, Cultural Heritage and Historical Shocks." *Regional Studies* 40:317-327.
- Blome, A., W. Keck, and J. Alber. 2009. *Family and the Welfare State in Europe: Intergenerational Relations in Ageing Societies*. UK: Edward Elgar Publishing.
- Bradshaw, Y.W. and M. Wallace. 1996. *Global Inequalities*. Thousand Oaks, CA: Pine Forge Press.
- Carstensen, L. 1995. "Evidence for a Life-Span Theory of Socioemotional Selectivity." *Current Directions in Psychological Science* 4(5):151-156.
- Chirot, D. 1977. *Social Change in the Twentieth Century*. New York, NY: Harcourt Brace Jovanovich, Inc.

- Elder, G. H. Jr. 1985. "Perspectives on the Life Course." Pp. 23-49 in *Life Course Dynamics*, edited by Glen H. Elder Jr. Ithaca, NY: Cornell University Press.
- Elder, G. H. Jr. 1995. "The Life Course Paradigm: Historical, Comparative, and Developmental Perspectives." in *Examining Lives in Context: Perspectives on the Ecology of Human Development*, edited by P. Moen, G. H. Elder, and K. Luscher. Washington, DC: American Psychological Association Press.
- Elder, G. H. Jr., M. K. Johnson, and R. Crosnoe. 2003. "The Emergence and Development of Life Course Theory." Pp. 3-22 in *Handbook of the Life Course*, edited by J. T. Mortimer and M. J. Shanahan. New York: Kluwer Academic/Plenum Publishers.
- Erlinghagen, M. and K. Hank. 2006. "The Participation of Older Europeans in Volunteer Work." *Ageing and Society* 26:567-584.
- Esping-Andersen, G. 1990. *Three Worlds of Welfare Capitalism*. Oxford: Polity Press.
- European Values Study (EVS). 1999-2001. GESIS Data Archive, Cologne, Germany. ZA4762 Data File Version 1.1.0.
- George, L. K. 2003. "Life Course Research: Achievements and Potential." Pp. 671-680 in *Handbook of the Life Course*, edited by J. T. Mortimer and M. J. Shanahan. New York, NY: Kluwer Academic/Plenum Publishers.
- Hank, K. 2007. "Proximity and Contacts between Older Parents and Their Children: A European Comparison." *Journal of Marriage and Family* 69:157-173.
- Hank, K. and S. Stuck. 2008. "Volunteer Work, Informal Help, and Care among the 50+ in Europe: Further Evidence for 'Linked' Productive Activities at Older Ages." *Social Science Research* 37:1280-1291.
- Hareven, T. K. 2001. "Historical Perspectives on Aging and Family Relations." Pp. 141-159 in *Handbook of Aging and the Social Sciences, 5th Edition*, edited by R.H. Binstock, L.K. George, and Associates. San Diego, CA: Academic Press.
- Havighurst, R. J. 1957. "The Leisure Activities of the Middle-Aged." *American Journal of Sociology* 63(3): 152-162.
- Inglehart, R. 1997. *Modernization and Postmodernization: Cultural, Economic, and Political Change in 43 Societies*. Princeton, NJ: Princeton University Press.

- Inglehart, R., and W. E. Baker. 2000. "Modernization, cultural change, and the persistence of traditional values." *American Sociological Review* 65:19-51.
- Inglehart, R. and C. Welzel. 2005. *Modernization, Cultural Change and Democracy: The Human Development Sequence*. Cambridge, MA: Cambridge University Press.
- Inglehart, R. and C. Welzel. 2010. "Changing Mass Priorities: The Link between Modernization and Democracy." *Perspectives on Politics* 8(2):551-567.
- Kahn, R. L. and T. Antonucci. 1980. "Convoys of Social Support: A Life Course Approach." Pp. 383-405 in *Aging: Social Change*, edited by S. B. Kiesler, J. N. Morgan, and V. K. Oppenheimer. New York, NC: Academic Press.
- Kalmijn, M. and C. Saraceno. 2008. "A comparative perspective on intergenerational support - Responsiveness to parental needs in individualistic and familialistic countries." *European Societies* 10:479-508.
- Katz, R. et al. 2003. "Family Norms and Preferences in Intergenerational Relations: A Comparative Perspective." Pp. 305-326 in *Global Aging and Challenges to Families*, edited by V. L. Bengtson and A. Lowenstein. New York, NY: Walter D. Gruyter, Inc.
- Leira, A. (Ed.) 1999. *Family Change: Practices, Policies, and Values*. Stamford, CT: JAI Press.
- Lemon, B. W., V. L. Bengtson, and J. A. Peterson. 1972. "An Exploration of the Activity Theory of Aging: Activity Types among In-Movers to a Retirement Community." *Journals of Gerontology* 27:511-523.
- Litwin, H. 2001. "Social Network Type and Morale in Old Age." *The Gerontologist* 41(4):516-524.
- Litwin, H. 2007. "What Really Matters in the Social Network Mortality—Association? A Multivariate Examination among Older Jewish-Israelis." *European Journal of Ageing* 4(2):71-82.
- Litwin, H. 2010. "Social Networks and Well-Being: A Comparison of Older People in Mediterranean and Non-Mediterranean Countries." *Journal of Gerontology: Social Sciences* 65B(5):599-608.
- Litwin, H. and S. Shiovitz-Ezra. 2006. "Network type and mortality risk in later life." *Gerontologist* 46:735-743.

- Longino, C. F. and C. S. Kart. 1982. "Explicating activity theory: A formal replication." *Journals of Gerontology* 37:713-722.
- Lowenstein, A., and S. O. Daatland. 2006. "Filial norms and family support in a comparative cross-national context: evidence from the OASIS study." *Ageing & Society* 26:203-223.
- Maddox, G. L. 1963. "Activity and Morale: A Longitudinal Study of Selected Elderly Subjects." *Social Forces* 42(2):195-204.
- Murphy, A. E. 2000. "The 'Celtic Tiger'—An Analysis of Ireland's Economic Growth Performance." Working Paper No 2001/16. Department of Economics, Trinity College, Dublin, Ireland. Robert Schuman Centre for Advanced Studies. European University Institute.
- Organisation for Economic Co-Operation and Development (OECD). 1990-2005. Social Expenditure Database, ESDS International, University of Manchester
- Ploubidis, G. B. and E. Grundy. 2009. "Late-Life Mental Health in Europe: A Country-Level Comparison." *Journal of Gerontology: Social Sciences* 64B(5): 666-676.
- Pryor, F. L. 2008. "Culture rules: A note on economic systems and values." *Journal of Comparative Economics* 36:510-515.
- Survey of Health, Ageing, and Retirement in Europe (SHARE). 2006/2007. Release 2.3.1, Mannheim Research Institute for the Economics of Aging (MEA), Mannheim, Germany. <http://www.share-project.org/>
- Uhlenberg, P. and M. Mueller. 2003. "Family Context and Individual Well-Being: Patterns and Mechanisms in Life Course Perspective." Pp. 123-148 in *Handbook of the Life Course, Handbooks of Sociology and Social Research*, edited by J. T. Mortimer and M. J. Shanahan. New York: Kluwer Academic/Plenum Publishers.
- United Nations (UN). 2010. *Human Development Report: The Real Wealth of Nations: Pathways to Human Development*. <http://hdr.undp.org/en/statistics/hdi/>
- Wellman, B. 1981. "Applying Network Analysis to the Study of Support." Pp. 171-200 in *Social Networks and Social Support*, edited by B. H. Gottlieb. Sage Publications.

World Bank (WB), World Development Indicators. 2003-2005. International Bank for Reconstruction and Development/ the World Bank. Washington D.C., 2006.
<http://data.worldbank.org/indicator/NY.GDP.PCAP.PP.KD>

World Values Survey (WVS). 1981-2008. Official Aggregate v.20090901, 2009. World Values Survey Association. Aggregate File Producer: ASEP/JDS, Madrid.
www.worldvaluessurvey.org

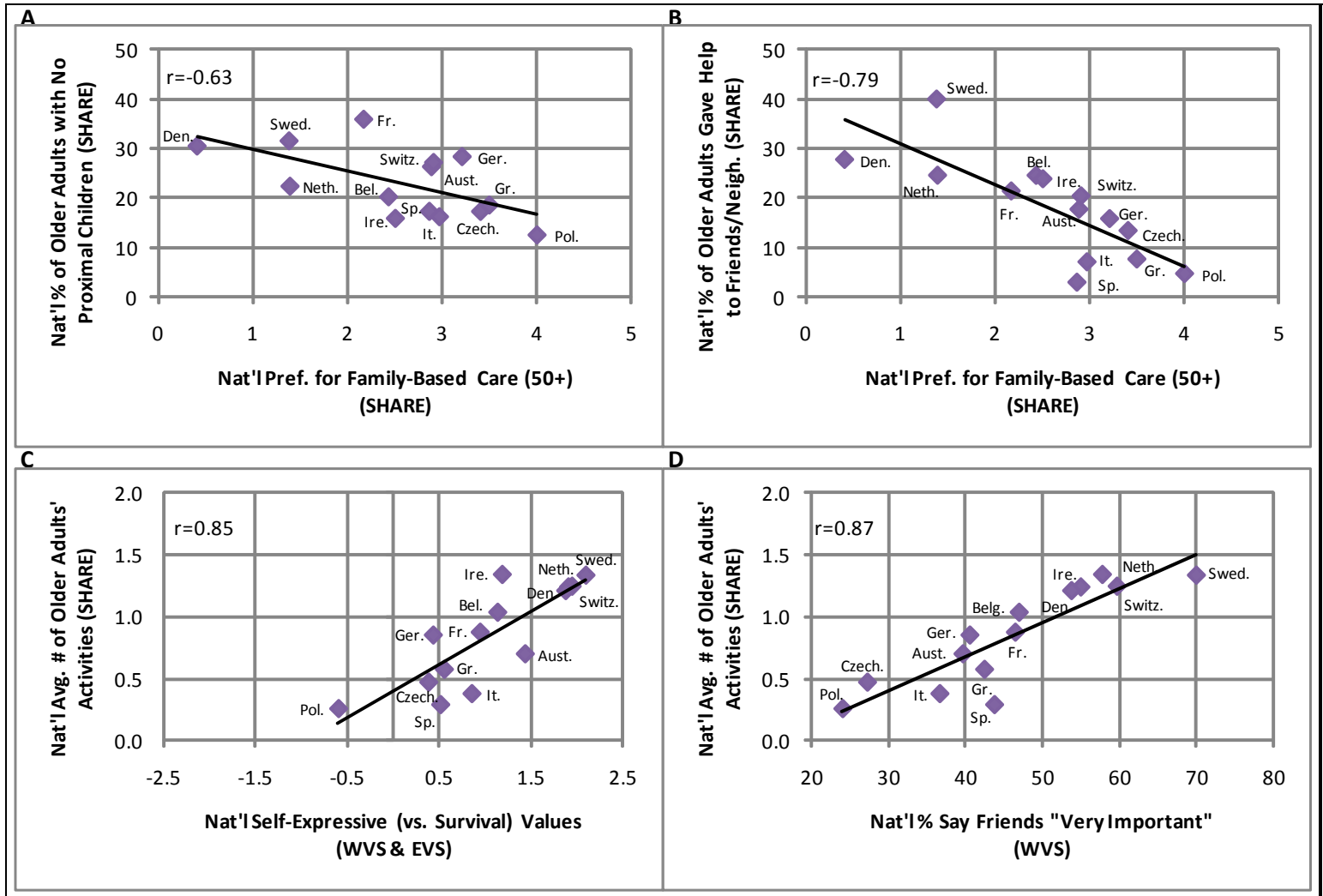


Figure 1. Social Activity Network Examples by National Cultural Values

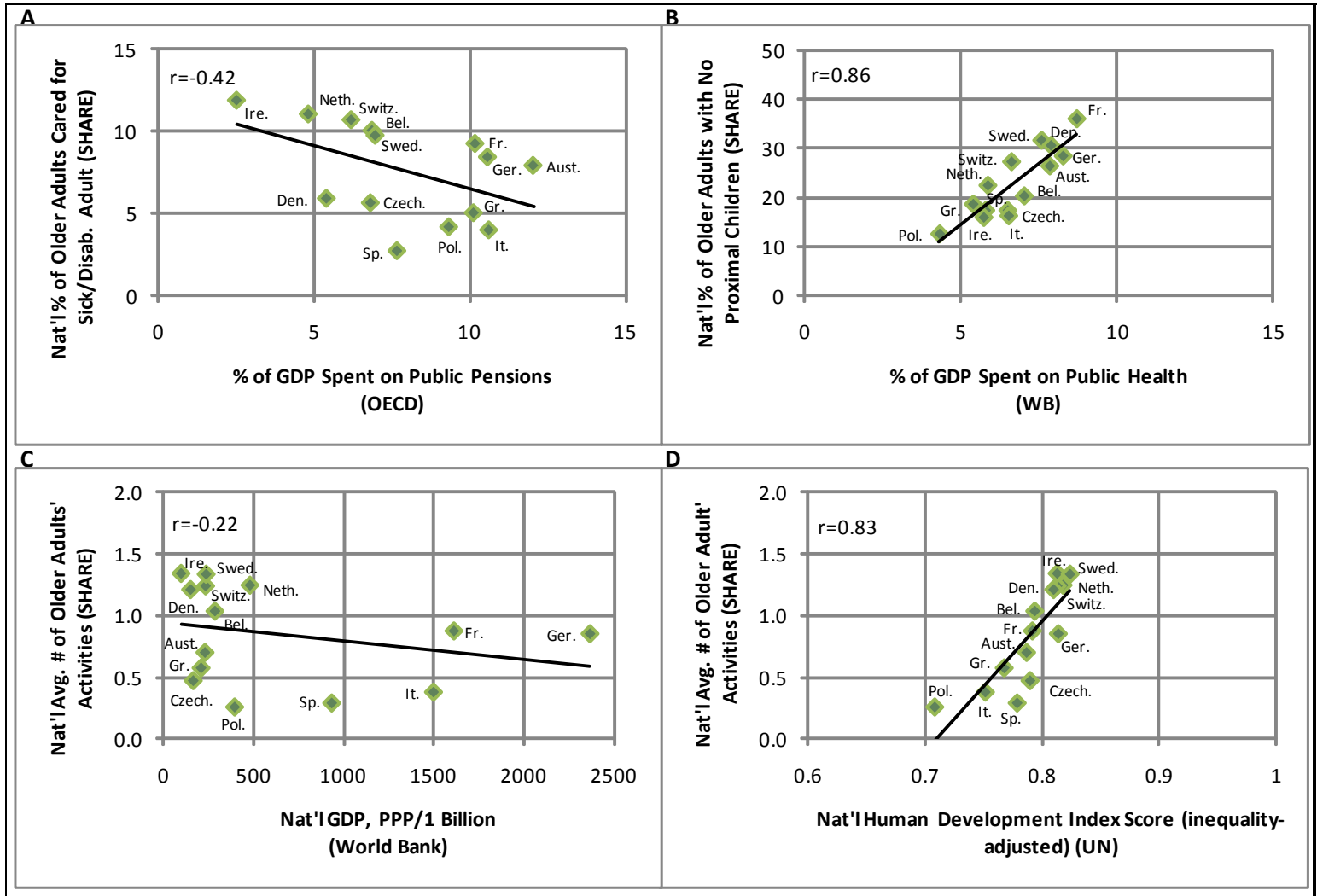


Figure 2. Social Activity Network Examples by National Policy/Economics

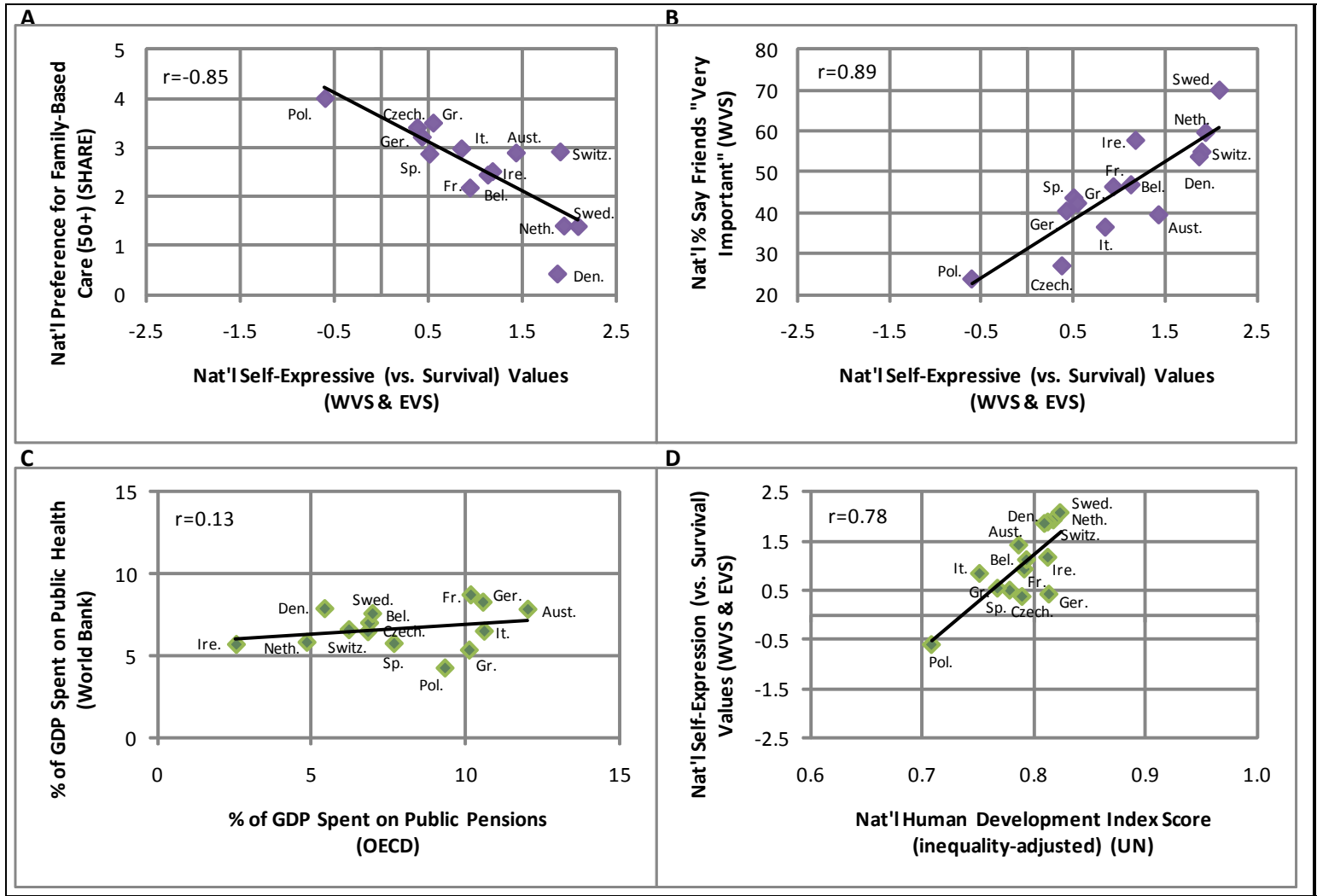


Figure 3. Correlations between Key National Measures

Table 1. Social Activity Network Measures and Sample Characteristics by Nation

	East (16%)		South (24%)			West (41%)						North (19%)		
	Poland	Czech Re	Spain	Italy	Greece	Germany	France	Austria	Belgium	Neth.	Switz.	Ireland	Sweden	Denmark
	N=2274	N=2550	N=1876	N=2724	N=2702	N=2281	N=2454	N=1169	N=2805	N=2357	N=1283	N=812	N=2409	N=2344
Individual-Level Measures														
Social Activity Networks														
<i>Activity-Related Ties/Last Month</i>														
Total # of Activities/Last Month	0.26	0.47	0.29	0.38	0.58	0.85	0.87	0.70	1.03	1.24	1.24	1.34	1.33	1.21
1. Voluntary/Charity Work	0.02	0.03	0.03	0.08	0.02	0.15	0.16	0.09	0.17	0.27	0.18	0.16	0.21	0.22
2. Cared for Sick/Disabled Adult	0.04	0.06	0.03	0.04	0.05	0.08	0.09	0.08	0.10	0.11	0.11	0.12	0.10	0.06
3. Help to Friends/Neighbors	0.04	0.13	0.03	0.07	0.08	0.16	0.21	0.18	0.24	0.24	0.20	0.24	0.40	0.28
4. Education/Training Event	0.01	0.04	0.03	0.02	0.03	0.06	0.05	0.04	0.11	0.11	0.17	0.11	0.18	0.11
5. Sport/Social/Other Club	0.02	0.13	0.07	0.08	0.07	0.26	0.23	0.18	0.23	0.33	0.35	0.29	0.28	0.41
6. Religious Org. Activities	0.10	0.05	0.09	0.07	0.28	0.10	0.08	0.09	0.09	0.14	0.15	0.35	0.12	0.08
7. Political/Community Org.	0.02	0.03	0.01	0.02	0.04	0.04	0.05	0.05	0.08	0.04	0.09	0.06	0.05	0.05
<i>Family Network Tie Availability</i>														
No Children	0.06	0.06	0.11	0.10	0.11	0.11	0.11	0.12	0.11	0.10	0.15	0.00	0.07	0.08
No Proximal Children	0.13	0.17	0.17	0.16	0.19	0.28	0.36	0.26	0.20	0.22	0.27	0.16	0.32	0.31
Married/Partnered	0.76	0.71	0.79	0.82	0.73	0.82	0.71	0.63	0.75	0.81	0.72	0.79	0.79	0.75
Divorced	0.03	0.09	0.02	0.02	0.04	0.05	0.07	0.08	0.06	0.06	0.09	0.02	0.08	0.08
Widowed	0.17	0.18	0.13	0.12	0.19	0.10	0.17	0.22	0.15	0.10	0.13	0.18	0.09	0.13
Never Married	0.03	0.02	0.07	0.04	0.05	0.03	0.06	0.07	0.04	0.03	0.06	0.01	0.04	0.04
Basic Sample Characteristics														
Age (years)	63.51	63.78	65.93	65.08	64.32	64.46	64.92	66.47	64.71	63.35	64.63	63.67	65.76	63.73
Female	0.56	0.58	0.54	0.54	0.54	0.53	0.57	0.59	0.54	0.54	0.55	0.54	0.53	0.54
High Education (ISCED-97 ? 4)	0.13	0.12	0.09	0.09	0.18	0.30	0.21	0.22	0.25	0.24	0.30	0.51	0.31	0.37
Foreign-Born	0.03	0.04	0.02	0.01	0.02	0.16	0.14	0.08	0.07	0.05	0.15	0.08	0.09	0.03
Lives in Rural Area	0.20	0.29	0.33	0.17	0.49	0.34	0.31	0.28	0.21	0.44	0.17	0.30	0.30	0.28
Describes Health as "Poor"	0.29	0.30	0.32	0.32	0.20	0.28	0.26	0.25	0.23	0.24	0.14	0.15	0.22	0.17

*Descriptive statistics display unweighted results.

Note: Highlighted cells denote the highest and lowest proportions for each measure cross-nationally.

Table 2. National Cultural Values and Policy/Economic Characteristics by Nation

	East (16%)		South (24%)			West (41%)						North (19%)		
	Poland	Czech Re	Spain	Italy	Greece	Germany	France	Austria	Belgium	Neth.	Switz.	Ireland	Sweden	Denmark
	N=2274	N=2550	N=1876	N=2724	N=2702	N=2281	N=2454	N=1169	N=2805	N=2357	N=1283	N=812	N=2409	N=2344
<i>Nation-Level Measures</i>														
Cultural Values														
Nat'l Secular (vs. Trad.) Values	-0.43	1.23	0.12	0.19	0.77	1.31	0.52	0.25	0.50	0.84	0.74	-0.91	1.67	1.16
Pref. for Fam.-Based Care (50+)	4.00	3.40	2.86	2.97	3.49	3.20	2.17	2.88	2.43	1.39	2.90	2.50	1.38	0.41
Nat'l Self-Exp. (vs. Surv.) Values	-0.60	0.38	0.51	0.85	0.55	0.43	0.94	1.43	1.13	1.94	1.90	1.18	2.09	1.87
Nat'l % Say Friends "Very Import."	24.00	27.20	43.70	36.60	42.40	40.50	46.40	39.60	46.90	59.60	54.90	57.70	69.90	53.70
Policy/Economic Characteristics														
% of GDP Spent on Pub. Pensions	9.34	6.83	7.68	10.62	10.13	10.58	10.18	12.04	6.88	4.84	6.21	2.54	6.98	5.42
% of GDP Spent on Pub. Health	4.31	6.50	5.79	6.53	5.39	8.28	8.72	7.85	7.03	5.86	6.62	5.73	7.59	7.89
Nat'l GDP, PPP/1 Billion	398.76	170.02	935.10	1497.09	213.25	2361.77	1610.00	235.07	290.01	483.67	238.19	102.67	241.31	155.58
Nat'l HDI Score (Inequality-Adj.)	0.71	0.79	0.78	0.75	0.77	0.81	0.79	0.79	0.79	0.82	0.81	0.81	0.82	0.81

Note: Highlighted cells denote the highest and lowest proportions for each measure cross-nationally.

Table 3. Correlation between Aggregated SAN Measures and National Characteristics

<i>Aggregated Sample Measures of Social Activity Networks</i>	Total # of Activities	Help to Friends/Neighb.	Cared for Sick/Disab. Adult	No Proximal Children	Not Married/Part.
<i>Nation-Level Measures</i>					
Cultural Values					
Nat'l Secular (vs. Trad.) Values	0.46 ***	0.56 ***	0.26 ***	0.57 ***	0.00
Pref. for Fam.-Based Care (50+)	-0.77 ***	-0.79 ***	-0.42 ***	-0.63 ***	0.16 ***
Nat'l Self-Expressive (vs. Surv.) Values	0.85 ***	0.81 ***	0.62 ***	0.59 ***	-0.06 ***
Nat'l % Say Friends "Very Import."	0.87 ***	0.82 ***	0.65 ***	0.60 ***	-0.25 ***
Policy/Economic Characteristics					
% of GDP Spent on Public Pensions	-0.61 ***	-0.51 ***	-0.42 ***	0.00	0.18 ***
% of GDP Spent on Public Health	0.47 ***	0.57 ***	0.41 ***	0.86 ***	0.16 ***
Nat'l GDP, PPP/1 Billion	-0.22 ***	-0.25 ***	-0.07	0.25 ***	-0.40 ***
Nat'l HDI Score (Inequality-Adj.)	0.83 ***	0.78 ***	0.70 ***	0.67 ***	-0.06 ***

Note: Boxed cells indicate hypothesized relationships. Highlighted cells emphasize measures with "high" correlations (≥ 0.70)

* $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$

CHAPTER 3

PAPER 2

THE HEALTH IMPLICATIONS OF SOCIAL ACTIVITY NETWORKS, FAMILISM, AND PUBLIC PENSIONS FOR EUROPEAN OLDER ADULTS

Sociological and gerontological literature highlights the potential health benefits of remaining actively socially engaged within networks of linked lives across the life course. Type and quality of ties, however, vary greatly. Although most studies tend to focus on only one type of tie (e.g., family ties), social ties are diverse and also include ties formed from participation in activities such as voluntary organizations, social events with friends, etc. (Litwin and Landau 2000). To explore these diverse types of ties, I utilize the broad concept of a “social activity network” (SAN), which incorporates activity-related ties as well as family network ties. SANs can provide important social resources (practical, financial, emotional, etc.) which, in turn, are linked to better health. Yet, few studies examine the association between diverse SAN ties and health. In addition, although SAN ties are likely an important resource for older adults within a variety of nations, the effect of a SAN may vary by national cultural or economic context. For example, national cultural expectations about activity-related or family network ties or the financial capacity of the state to support older adults may contextualize the relationship between SAN ties and health. Cross-national studies of SANs and health often note national and regional differences in this relationship but stop short of empirically measuring the potential contextualizing effect of national

characteristics. Because of this gap in the literature, we know little about how and why the relationship between social ties and health varies in Europe and therefore, scholars' ability to design health promotion programs that consider national cultural and economic differences as well as long-term inequality cross-nationally is limited. In this paper, I draw upon meso-level theories of social ties and macro-level perspectives of cultural and political/economic influence to explore these gaps in the literature. By understanding the potential effects of variation in SANs and national characteristics on older adults' well-being cross-nationally, sociologists may be better able to promote health in a variety of contexts.

BACKGROUND

Meso-Level Context: Linked Lives and the Social Activity Network (SAN)

In order to explore the health implications of social ties for older adults cross-nationally, I first draw from the life course perspective's emphasis on linked lives (Elder 1985). Linked lives are the social relationships that individuals form across a lifespan and can be strong ties or weak ties. The family network, for example, is a meso-level social institution composed primarily of strong ties with kin. In addition to the family-specific networks, individuals are also embedded within loosely-linked networks of weaker ties, such as those ties formed through participation in activities like volunteer organizations, educational training, etc. The life course perspective's emphasis on linked lives has become an important aspect of aging studies. Life course theorists hypothesize the transformation of linked lives across the life course ("the convoy model"; Kahn and Antonucci 1980), and

suggest that older adults become increasingly selective about their social ties to fit changing needs (“socioemotional selectivity theory”; Carstensen 1992).

In addition to the life course perspective’s emphasis on linked lives, diverse social ties are a driving feature of social network theory and are also incorporated into social gerontological literature. Wellman (1981) urges sociologists to use network analysis to address many of the shortcomings of theories of social support. He argues that not all linked lives are inherently supportive and thus conceptualizing interpersonal ties as a network rather than an implicit system of support more accurately accounts for the complexity of social ties. As a social worker specializing in older adults, Litwin and colleagues (Litwin 2001; Litwin and Landau 2000; Litwin and Shiovitz-Ezra 2006, In Press) pay significant attention to social tie diversity. Similar to Wellman (1981), these authors conceptualize social networks broadly and develop network typologies based upon tie composition. Diverse ties are also an important aspect of social gerontology. Partially in response to disengagement theory, which argues that older adults should retreat from social engagement with age, activity theory posits that social activities and involvement in social roles are beneficial for older populations (Havighurst 1957; Maddox 1963). Although subsequent empirical examinations of activity theory add speculation to the broad-sweeping assertion that all activities are beneficial, informal activity participation with friendship ties of high quality appear to maximize the opportunity for health benefits (Lemon, Bengtson, and Peterson 1972; Litwin and Shiovitz-Ezra 2006; Longino and Kart

1982). Overall, these interdisciplinary streams of literature provide the foundation for a broad conceptualization of the role of diverse social ties in the lives of older adults.

In order to incorporate the life course perspective's principle of linked lives, social network theory, and activity theory, I draw from each of these perspectives to suggest the broad concept of a "social activity network." The basic unit of a social activity network (SAN) is a social tie, or the linked lives individuals form through formal and informal social interactions with one another across the life course. By considering a broad array of tie types, SANs are similar to a general social network. Yet, the concept of a SAN differs from a general social network because it does include work-related ties and rather, incorporates an explicit consideration of informal and formal activity engagement for older adults.

Therefore, SAN ties include: 1) activity-related ties, which are ties formed through a range of social activity types (i.e., from informal help to friends/neighbors to participation in formal organizations) and 2) family network ties, which are ties formed through kin-based relationships (i.e., the extent to which family ties are available). My conceptualization does not assume that SANs inherently convey social resources but rather that they have the *potential* to convey such resources. In other words, I view social activity networks as loosely linked, informal meso-level social institutions with the potential for engagement and support, similar to the meso-level social institution of the family (George 2006; Kohli 1988; Marshall 1995; Wenger 1997; for a discussion the micro-level implications of social ties, see Cornwell and Waite 2009; Kohli, Hank, and Künemund 2009).

Social Activity Networks and Health

In addition to bridging theoretical literatures, the concept of a social activity network is a unifying empirical tool for the study of health. Theoretical and empirical research suggests that SAN-like ties are linked to better mental and physical health across the life course. In particular, these ties are hypothesized to have a positive effect on health by buffering negative influences through social resources (Berkman et al. 2000). Overall, empirical evidence supports these theorizations (Cobb 1976; Ferlander 2007; Lemon et al. 1972; Moen, Dempster-McClain, and Williams 1992; Sirven and DeBrand 2008; Veenstra 2000). Sociological and social gerontological literatures both assess the importance of social resources for health, yet do so by emphasizing different characteristics. For example, social network theorists conceptualize the social resources gained through a social network as “social capital” (Lin 1999; McDonald, Lin, and Ao 2009). Social capital is diverse and may take the form of practical, financial, professional, and/or emotional resources, which are all linked to better well-being (financial, physical, and mental; O’Rand 2006). Similar to social capital, social gerontologists find that social integration across the life course is a key resource to promote healthy aging (Havighurst 1957; Lemon et al. 1972).

Linking sociological and social gerontological literature, Litwin (2000) compares the influence of social networks and activity participation on the subjective well-being of older adults. He finds evidence that social networks are better predictors of subjective well-being and concludes: “It is the social network aspect of activity, it seems, that makes a difference in older persons’ well-being and, particularly, the degree of supportiveness in their

networks” (Litwin 2000:359). Similarly, other studies note that higher *quality* ties (such as those found in a family network) may be the most important predictors of health overall (Litwin and Shiovitz-Ezra 2006; Pinqart and Sörensen 2000). However, there are exceptions. Those same close social ties may also be associated with negative effects on mental well-being, particularly if the relationship is strained (Antonucci, Akiyama, and Lansford 1998). Despite this variation, generalized social engagement is considered a key component of “successful aging” (Rowe and Kahn 1998). Yet, few studies have been able to directly compare the influence of diverse types of linked lives. Thus, the social activity network’s inclusion of both activity-related ties and family network ties may reveal new insight into older adults’ health.

Macro-Level Context: Historical Time/Place and Political Economy of Aging

Although the life course perspective’s meso-level emphasis on linked lives complements social network theory and provides a foundation for social gerontological research on health promotion through activity and the family, these theoretical considerations do not adequately theorize macro-level characteristics, such as cross-national differences. As Marshall notes, “The aging individual is properly placed in a family context but there are broader contexts related to globalization that influence family life.” (Marshall In Press). Thus, I turn to the intertwined implications of the life course perspective’s consideration of cultural context within historical time and place, the

ecological framework's theorization of nested environments, and the political economy of aging's emphasis on policy and economics.

Bengtson, Burgess, and Parrott (1997) describe the life course perspective as a theoretical orientation that connects multiple levels of social considerations. According to a life course perspective, individuals are embedded in socio-historical contexts (Elder 1985, 1995). That is, location and the time period create unique circumstances that shape social characteristics. For example, an individual in a nation with a strong cultural emphasis on the family may be more likely to invest in and rely on his/her family network. By taking these types of macro-level considerations into account, scholars can theorize a more complete account of human experiences. In this manner, the life course perspective's multi-level conceptualization is similar to the ecological framework. Developed in family sociology, this perspective emphasizes human development in an embedded context and argues that human behavior can be understood on multiple, nested levels (Bronfenbrenner 1998; Bubolz and Sontag 1993). An individual, for example, is embedded within a social activity network of diverse linked lives which is, in turn, nested within a nation. These nested social environments are often intertwined within the norms and policies of an individuals' social environment, or society (Trzcinski 1995; similar to dual embeddedness, McDonald, Benton, and Warner, unpublished manuscript).

Elaborating upon the life course perspective's macro-level emphasis on historical time and place and complementing the ecological framework's nested lens, the political economy of aging perspective examines the role of economics, political ideology, and public

policy in shaping resource and well-being disparities in aging populations (Aboderin 2004, 2006; Estes 2001; Guillemard 2000; Marshall In Press; Walker 2005). Contributing to the political economy of aging perspective, Carroll Estes wrote in 1979, “The inadequacy of much of the research on old age comes from its focus on what old people do rather than on the social conditions and policies that cause them to act as they do” (Estes 1979:11). Thus, this perspective examines the role of the state with regard to the well-being of aging populations such as state capacity to support older adults (i.e., the welfare state) and the potential damaging effect of neoliberal ideology on policy (i.e., privatized pensions). By combining meso-level considerations of social activity networks with macro-level perspectives that take into account embedded contexts such as nation, culture, and policy, I develop a multilevel conceptualization that allows me to theoretically and empirically explore the relationship between SAN and health for older adults cross-nationally.

Cross-National Variation in Social Activity Networks and Health

Although cross-national examinations of the relationship between SAN ties and health reveal a generally positive association (Chan and Lee 2006; Fernandez-Ballesteros 2002; Golden et al. 2009; Hank and Stuck 2008), there is variation across nations and regions. For example, Iecovich et al. (2004) examine the social networks of elderly Jews in Russia and the Ukraine. The authors find that although social networks were linked to less loneliness overall, Ukrainians were lonelier than Russians. In addition, Ukrainians were more likely to be childless and to live alone, although they reported better quality

relationships with neighbors. Theoretically exploring the role of national culture and economics, the authors suggest that Ukrainian citizens are more likely to have internalized the Communist ideological norm of community and interaction. Thus, they may have higher expectations for support and may be more disappointed if that support is not present. In addition, the Ukraine is a poorer nation with less state-based financial support for older adults. Although the authors did not test whether social networks had a stronger association with loneliness in the Ukraine versus Russia or empirically assess the role of nation-level factors, their discussion of cultural and economic contextual influences offers insight into the role of macro-level influences on the relationship between SAN and health.

Outside of Eastern Europe, Alber and Kohler (2004) explore attitudinal data from Southern and Northern Europe and document a cultural preference for family ties and intergenerational social support among individuals in Southern Europe compared to those in Northern Europe. Based upon these data, Tomassini and Lamura (2009) review Alber and Kohler's (2004) findings and suggest that such attitudinal preferences for family ties in Southern Europe likely help to explain the family-based care regime structure in Italy. Lowenstein and Daatland (2006) examine the link between familistic culture and intergenerational exchanges of support in a cross-national sample from five European nations (the OASIS study, which includes Norway, England, Germany, Spain, and Israel). The authors find a moderate association between filial norms and intergenerational support. Specifically, filial norms are associated with adult children's assistance to older adults. In addition, this association varies by nation and is most prevalent in Southern European

nations. Siegrist and Wahrendorf (2009) use productive activities (i.e., activity-related ties) to predict quality of life in 14 European nations (using Wave 2 of SHARE data). The authors find that “productive activities” are associated with higher quality of life. Although they mention that sensitivity tests that include macro-level economic variables in the model help to explain between-nation variation, they do not include these measures in their final analysis, as this is not the focus of their paper. Most recently, Litwin (2010) finds that social network composition and the relationship between social networks and depression differs between Mediterranean and non-Mediterranean regions. He suggests that these differences may stem from cultural variation between Northern and Southern Europe. In particular, he notes that the Southern, Mediterranean nations place a higher value on filial obligation, or familism, than the Northern, non-Mediterranean nations. In addition, Litwin suggests that the policy/economic structure of a nation may reveal important differences in social networks and health cross-nationally. For example, having a stronger public pension may alleviate economic burden and lead to less stressful interactions with family members.

These comparative studies contribute to our knowledge of social activity networks and health by noting the existence of national and regional variation. To explain this variation, these studies offer descriptive cultural and policy/economic explanations. Yet, the authors stop short of empirically measuring the effects of nation-level influences. Indeed, nation-level culture and policy/economics are characteristics that can be empirically assessed. A few recent studies have made use of publicly available nation-level data to empirically examine macro-level influences on health. Haller and Hadler (2006) explore the

role of nation-level factors (wealth, income equality, political-economic freedom, and welfare state politics) and individual characteristics to predict happiness in 42 nations. The authors find that nation-level wealth, equality, political freedom, and welfare state provisions are important predictors of individual-level happiness. In addition, Haller and Hadler (2006) find that family network ties, such as being married and having children, are related to better life satisfaction. Yet, activity-related ties, such as membership in a voluntary organization, are not linked to happiness. Although the authors examine the direct effects of national policy/economics, they do not examine if these factors moderate the effect of social ties. Because national welfare state policies and family network ties both are directly associated with happiness, strong welfare state policies (e.g., public pensions) may strengthen the already positive effect of family network ties on well-being.

Kalmijn and Saraceno (2008) provide a rare example of nation-level contextualizing effects by examining the relationship between older parents' "need" for support (e.g., poor health status, unmarried, lower education) and the receipt of instrumental support from children (i.e., one aspect of the family network) across ten European nations (using the first wave of data from SHARE). The authors test if the relationship between need and receipt of support is stronger in nations with higher cultural emphasis on familism. They find significant cross-level interaction effects, suggesting that the link between a family member's need and the support that family member receives from adult children is stronger in nations that culturally emphasize the family. Kalmijn and Saraceno (2008) are some of the few scholars to empirically assess the moderating effect of national

characteristics (e.g., culture of familism). Their study offers exciting new evidence about the importance of macro-level influences on meso-level and micro-level family processes.

Although Kalmijn and Saraceno's (2008) work is extremely informative in terms of exploring the family and familism-based aspects of intergenerational ties, the study's focus is family ties only and does not aim to assess the health implications of this process (only the health causes of support). In addition, they do not assess national policy/economic influences, such as the direct and moderating effects of public pension provisions.

Therefore, few known studies explore the *moderating* effect of national characteristics and to my knowledge, no study to date has explored if national culture and national policy/economics moderate the relationship between a diverse set of social activity network ties and health. In other words, the potential moderating effect of national culture and policy/economics on the relationship between SAN and health is the proverbial "black box" of cross-national research on social ties and health. In this paper, I address this important gap in the literature. First, I explore the relationship between a diverse set of social activity network ties (including family networks as well as social activity ties) and health. Next, I examine whether macro-level characteristics (such as a familistic culture and public pension expenditures) contextualize this relationship.

RESEARCH QUESTIONS AND HYPOTHESES

Combining previous theoretical and empirical literature with the above multilevel conceptualization of social context and older adults' health, this paper explores the

following research questions: Are social activity networks (SAN) positively associated with health in a sample of older Europeans? If so, which components of SAN (activity-related ties, family network ties) are associated with health? To what extent is the association between SAN and health conditioned by macro-level social context? What are the implications of these findings for families, communities, policy-makers, and nation-states seeking to promote older adults' health?

Based upon my theoretical and empirical review of sociological and social gerontological literatures, which generally conclude that social networks and activities are beneficial for health, my first hypothesis is that social activity networks (activity-related ties and family network ties) are associated with health for European older adults. Yet, macro-level theoretical perspectives and empirical cross-national comparisons of the relationship between SAN-related ties and health suggest variation by national culture and policy/economics. Thus, my second hypothesis is that national characteristics moderate the relationship between SAN and health. Specifically, I predict that individuals in nations with low familistic culture have a stronger association between social activities and health. In addition, I predict that individuals in nations with high familistic culture have a stronger association between family networks and health. Finally, I predict that high national public pension expenditures may alleviate financial strain for individuals and thus individuals in nations with high public spending have a stronger association between SAN and health.

DATA

To address these research questions, I create a multilevel dataset drawn from a variety of sources. At the individual-level, data come from the Survey of Health, Ageing, and Retirement in Europe (SHARE)³. The SHARE is a cross-national European panel dataset of individuals aged 50 and older. The first wave of SHARE was collected in 2004 and included 11 European nation-states (Denmark, Sweden, Austria, France, Germany, Switzerland, Belgium, Netherlands, Spain, Italy, and Greece). The second wave of SHARE (2006-2007) includes the original 11 nations with the addition of Czech Republic, Poland, and Ireland. For this project, I will focus on Wave 2 (2006/2007) as it contains the largest number of nations and is the most recent wave available.

Designed to be harmonized with the United States' Health and Retirement Study (HRS), the cross-national scope of SHARE is an exciting and new contribution to aging research and yields great potential for exploring aging and health in a national context. This dataset is ideal for exploring the relationship between SAN and health because it provides in-depth detail regarding physical health and family/friend ties. Because SHARE is at the individual-level, nation-level measures must be added to create a multilevel dataset. Thus, I combine individual-level SHARE data with nation-level variables for each of the 14 nations in

³ This paper uses data from SHARELIFE release 1, as of November 24th 2010 or SHARE release 2.3.1, as of July 29th 2010. The SHARE data collection has been primarily funded by the European Commission through the 5th framework programme (project QLK6-CT-2001- 00360 in the thematic programme Quality of Life), through the 6th framework programme (projects SHARE-I3, RII-CT- 2006-062193, COMPARE, CIT5-CT-2005-028857, and SHARELIFE, CIT4-CT-2006-028812) and through the 7th framework programme (SHARE-PREP, 211909 and SHARE-LEAP, 227822). Additional funding from the U.S. National Institute on Aging (U01 AG09740-13S2, P01 AG005842, P01 AG08291, P30 AG12815, Y1-AG-4553-01 and OGHA 04-064, IAG BSR06-11, R21 AG025169) as well as from various national sources is gratefully acknowledged (see www.share-project.org/t3/share/index.php for a full list of funding institutions).

the sample. Specifically, I add measures of national culture and policy/economics from two sources, including an aggregate measure of national familism from a subsample of the SHARE and a measure of public pension expenditure from the Organisation for Economic Co-Operation and Development (OECD 1990-2005). This yields a multilevel analytic sample of 29, 856 individuals (aged 50+) in 14 nations.

METHOD

Measurement

Dependent Variable: Health

In order to broadly assess the association between social activity networks, national characteristics, I examine three different health outcomes: self-rated health, depression, and chronic conditions. In order to make all three outcome variables easily comparable across the models, I reverse code self-rated health so that higher scores indicate poorer self-rated health. With self-rated health reverse coded, higher values indicate poorer health for all of the dependent variables. Taken together, these outcomes address a range of health concerns, including subjective overall health (self-rated health), mental health (depression), and objective physical health (chronic conditions).

First, self-rated health (SRH) ranges from 0 to 4 (0=excellent, 1=very good, 2=good, 3=fair, 4=poor). Studies demonstrate that self-rated health is a comprehensive and reliable measure of health for diverse populations (Idler and Benyamini 1997). Second, I measure depression using the EURO-D scale. The EURO-D is a summation scale that counts the

number of depressive symptoms experienced by an individual over the last month. Ranging from zero to 12, the EURO-D scale documents whether or not (1=yes, 0=no) respondents have experienced feelings of depression, pessimism, suicidal wishes, guilt, trouble sleeping, loss of interest, irritability, loss of appetite, fatigue, loss of concentration, loss of enjoyment, and tearfulness. The EURO-D scale is a reliable and valid measure of depressive symptomatology (e.g., Cronbach's $\alpha=0.72$; Ladin 2008) and is commonly used by researchers investigating mental health in Europe (Castro-Costa et al. 2008; Prince et al. 1999). Third, I measure chronic conditions with a summation scale that counts respondents' doctor-diagnosed chronic diseases. Respondents are asked whether or not (1=yes, 0=no) a doctor has told them over the last two years that they have had or have experienced a heart attack, high blood pressure/hypertension, high blood cholesterol, stroke, diabetes/high blood sugar, chronic lung disease, asthma, arthritis, osteoporosis, cancer, stomach ulcer, Parkinson disease, cataracts, hip/femoral fracture, other fractures, or Alzheimer's disease/dementia/senility. The scale has the potential to range from zero to 16.

Independent Variables: Social Activity Networks, National Culture, and Policy/Economics

I explore the effect of social activity networks (SAN) on health. To compare a variety of ties, I conceptualize SAN as two separate components: activity-related ties and the family network. Although some studies use summation scales of activity participation or family network ties, such an approach eliminates the opportunity to identify which specific types of SAN ties are the most beneficial. Thus, I opt to examine ties individually in order to

explore the concept of a social activity network in depth. I operationalized SAN using SHARE variables. Activity-related ties include dichotomous measures for whether or not an individual has participated in the following seven activities over the last month (1=yes, 0=no): 1) voluntary/charity work; 2) cared for sick/disabled Adult (non-family or family); 3) help to friend/neighbor; 4) education/training event; 5) sport/social/other club; 6) religious organization activities; 7) political/community organization. The family network is measured with the following variables (1=yes, 0=no): 1) Married/partnered; 2) Has monthly contact with parent (those with no living parent have zero monthly contact with the parent); 3) Has children (biological, fostered, adopted, and/or stepchildren); 4) Has coresident children (childless respondents are coded as having no coresident children).

Macro-level national characteristics are drawn from SHARE and OECD nation-level data. National level characteristics include 1) national value of familism (aggregated from an individual-level drop-off survey variable to create a national percent of older adults who believe the family should be “totally responsible” for the personal care of older adults; SHARE 2006/07)⁴; and 2) national public pension expenditure (each nation’s average expenditure on public pension as a proportion of GDP; OECD 1990-2005).

⁴ Drop off survey data is still not publicly available for Greece in Wave 2 but is available in Wave 1. Because aggregated national percent who believe the family should be “totally responsible” for older adults’ personal care in other nations remained very stable over the two year window between the waves, I included Greece’s data from Wave 1 (2004) as a proxy for 2006/2007 rather than dropping this nation from the sample.

Covariates

I also include key covariates at the individual-level from SHARE data to control for sociodemographics, socioeconomic status, and health behaviors: 1) age of respondent (and age squared, to account for the potential curvilinear relationship between age and health; 2) female (1=female, 0=male); 3) lives in a rural area (1=yes, 0=no); 4) nativity (1=foreign-born, 0=native-born); 5) education (ISCED-97); 6) household net income (natural log); 7) employment (1=employed, 0=unemployed); 8) Pays for visits to the doctor (pays entirely or mostly for visits to a general practitioner, surgery, or inpatient/ outpatient rehabilitation; 1=yes, 0=no); 9) drinks alcohol daily (1=yes, 0=no).

Analysis

To investigate the relationship between SAN and health, as well as the potential moderating influence of national characteristics, I employ multilevel modeling. Because my theoretical approach is nested (i.e., takes into account historical time/place as well as the role of the state) and the empirical structure of these data is also nested (i.e., individuals within nations), individuals within any given nation are not truly independent of one another. In other words, the structure of these data violates typical regression assumptions of non-independence and it is methodologically inaccurate to use OLS regression methods. Thus, multilevel modeling is a more theoretically and empirically accurate analytical approach. Multilevel modeling models the residual at both the individual-level and the nation-level, allowing for variation between individuals but also between nations

(Raudenbush and Bryk 2002). This approach more properly takes into account the nested structure of the dataset and allows a more accurate estimation of standard errors and coefficients. Finally, multilevel modeling allows one to test cross-level interaction effects, such as the moderating effect of nation-level variables on individual-level processes.

Level 1 represents the individual-level and Level 2 represents the nation-level. Below, I provide simplified versions of the equations by individual-level, nation-level, and then the combined, reduced model of both Level 1 and Level 2 effects. All continuous independent variables (Level 1 and Level 2) and covariates in the analysis are grand-mean centered for ease of interpretation. First, I examine the direct effect of social activity networks (Level 1) on health (Level 1), as represented by the individual-level equation. In the individual-level equation, r_{ij} is the residual error term and allows for variation among individuals across nations. Turning to the combined model for interpretation, γ_{00} represents the intercept (mean) for individuals across all nations. Similarly, $\gamma_{10}(\text{SAN})_{ij}$ represents the average effect of SAN on health for the i^{th} person in nation j .

Second, I add the effects of national characteristics (Level 2) on health (Level 1), as shown in the nation-level equation. Because the sample is 14 nations and thus the degrees of freedom are limited, the model allows only one nation-level variable at a time. Thus, in the combined model, $\gamma_{01}(\text{National Characteristics})_j$ represents the average effect of any given national characteristic (either a culture of familism or public expenditures on pensions) on the intercept (mean) of health. Third, I explore the moderating effect of national characteristics (Level 2) on the association between SAN (Level 1) and health (Level

1) by including cross-level interaction effects. In the nation-level equation, β_{1j} allows me to test if nation-level characteristics (culture of familism or public expenditures on pensions) affect the slope of individual-level social activity network ties. In the combined model the cross-level interaction effects are represented by $\gamma_{11}(\text{SAN})_{ij} * (\text{National Characteristics})_j$, which can be interpreted as the effect of national characteristics in nation j on the slope of SAN, or the relationship between SAN and health, for the i^{th} person in nation j .

Individual-Level (Level 1):

$$Y_{ij} = \beta_{0j} + \beta_{1j} (\text{SAN})_{ij} + \beta_{2j} (\text{Covariates})_{ij} + r_{ij}$$

Nation-Level (Level 2):

$$\beta_{0j} = \gamma_{00} + \gamma_{01}(\text{National Characteristics})_j + u_{0j}$$

$$\beta_{1j} = \gamma_{10} + \gamma_{11}(\text{National Characteristics})_j + u_{1j}$$

$$\beta_{2j} = \gamma_{20}$$

Combined Model (Level 1 and Level 2):

$$Y_{ij} = [\gamma_{00} + \gamma_{10}(\text{SAN})_{ij} + \gamma_{01}(\text{National Characteristics})_j + \gamma_{11}(\text{SAN})_{ij} * (\text{National Characteristics})_j + \gamma_{20}(\text{Covariates})_{ij}] + [r_{ij} + (\text{SAN})_{ij} u_{1j} + u_{0j}]$$

RESULTS

Descriptive

Descriptive statistics of all the variables in the analysis are presented in Table 1. The older adults in this sample are generally in good health (see scores on dependent variables, Table 1). In terms of social activity networks, participation in activities over the last month ranges from 4 percent to 20, depending on the activity. The most common activities that respondents participated in over the last month include sport/social/other events (20 percent) and help to friends or neighbors (18 percent). The least common activity was participation in a political or community organization (4 percent). A majority of respondents are also married or partnered (75 percent) with children (90 percent). Overall, 22 percent of the sample has monthly contact with a parent and 26 percent have a child (or children) residing in their household. At the nation-level, the average nation has 25 percent of older adults in support of family-based personal care for older adults and spends 8 percent of its GDP on public pensions.

Beyond the pooled sample characteristics, there is variation across nations (see Table 2). Polish older adults have the poorest health, with the highest average poor SRH score (2.86), depressive symptoms (3.74), and number of chronic conditions (2.14) in the sample. Older adults in Switzerland, Denmark, and Greece are some of the healthiest in the sample, with low marks across all measures of health. Poor SRH follows a general gradient across regions from Eastern, Southern, Western, and Northern Europe (highest to lowest), although there is also variation within region and by nation. Depression and chronic

conditions, however, appear to have less consistent patterns across nations. Respondents in nearly all regions except Northern Europe report higher-than-average depression (e.g., Poland, Spain, Italy, France, and Belgium). Older adults in Greece, Switzerland, and Denmark report the lowest depression on average. Chronic conditions are highest among individuals of Eastern (e.g., Poland, Czech Republic), Southern (e.g., Spain, Italy), and Northern Europe (e.g., Ireland, Denmark). Older adults in Western Europe report the fewest number of chronic conditions, with all of Western Europe reporting below average chronic conditions.

Older adults in Western Europe and Northern Europe participate in more activities (over the preceding month) than individuals in Southern and Eastern Europe. Older adults in the Netherlands, Ireland, Sweden, Denmark, and Switzerland participate in the highest number of activities. For example, older adults in Western and Northern Europe participate in more voluntary/charity work than older adults in Eastern and Southern Europe. In addition, with the exception of Denmark all of Western and Northern Europe exhibit above-average participation in caring for a sick or disabled adult. Marriage/partnership varies moderately across nations, with Austria exhibiting the lowest rate (63 percent) and Germany and Italy exhibiting the highest (81 percent). The proportion of respondents who has monthly contact with a living parent also varies moderately by nation (14 percent in Austria compared to 27 percent in Switzerland and France). Of the family network variables, the percent of individuals with coresident children yields the most cross-national variation. The highest rates of coresidence are in Poland, all of Southern Europe (e.g., Spain, Italy, Greece), and Ireland (ranging from 41-48 percent). The lowest rates of coresidence with

children are in Sweden (11 percent), Denmark (12 percent), and all of Western Europe (15-21 percent).

At the macro-level, Greek older adults have the highest rate of preference for family-based personal care for the aged (66 percent), followed by Poland (47 percent). All of Eastern and Southern Europe as well as Germany display higher-than average familism. Older adults in Denmark and the Netherlands have the lowest endorsement of familism, with less than two percent and 6 percent of individuals, respectively, preferring family-based personal care for the aged. Austria, Germany, and Italy have the highest proportion of public pension expenditure (11-12 percent of GDP) while Ireland, Netherlands, and Denmark spend the least (3-5 percent of GDP).

Multilevel

Individual-Level

Because there are three dependent variables and numerous models, I employ a straightforward classification system throughout the multilevel results in Tables 3 and 4. All model numbers that include the digit "1" (i.e., Model 1, Models 1A-1E; Tables 3 and 4) predict poor self-rated health as an outcome. Similarly, in all models with the digit "2" (i.e., Model 2 and Models 2A-2E; Tables 3 and 4) predict depressive symptoms and all models with the digit "3" (i.e., Model 3 and Models 3A-3E; Tables 3 and 4) predict chronic conditions. At the individual-level, I first assess the relationship between SAN and health with nested models (Table 3). Models 1, 2, and 3 examine the relationship between SAN

and health (poor self-rated health, depressive symptoms, and chronic conditions, respectively) without covariates. In Models 1A, 2A, and 3A, I add all covariates to the models to assess whether the effects of SAN hold after controlling for sociodemographic, socioeconomic, and behavioral characteristics. In all cases, adding covariates to the models enhances the predictive power of the models, as indicated by improved model fit statistics (reduced AIC and BIC).

Overall, social activity networks are associated with better health (Table 3). Beginning with activity-related ties, participating in volunteer/charity work and sport/social/other clubs are associated with better health for every outcome examined (Models 1, 2, 3). Further, these effects hold after all covariates are added to the models although the affect is reduced (Models 1A, 2A, 3A). In addition, participation in a religious organization is associated with better self-rated health and fewer depressive symptoms net of all covariates (Models 1A, 2A). Providing help to a friend/neighbor, participation in a community organization, and attending an educational/training event are all initially associated with one or more measures of better health. Most of these effects for depressive symptoms and chronic conditions, however, are explained away by the addition of sociodemographic, socioeconomic, and behavioral controls. For self-rated health, helping a friend/neighbor and attending an educational/training event continue to be associated with better self-rated health, net of all covariates (Model 1A). Finally, not all activity-related ties are associated with better health. Caring for a sick or disabled adult is the only activity-

related tie that is significantly associated with more depressive symptoms and chronic conditions, even after all controls are added to the models (Models 2, 2A, 3, 3A).

Also at the individual-level, the association between family network ties and health is mixed (Table 3). Relationships with spouses/partners and parents are generally linked to positive health outcomes while relationships with children generally are not. Not surprisingly, being married or partnered is associated with better health for all of the outcomes examined (Models 1, 2, 3), net of all controls (Models 1A, 2A, 3A). Having monthly contact with a parent is also statistically significantly linked to better health for all outcome measures (Models 1, 2, 3), but this effect is greatly reduced by the addition of covariates. After controlling for sociodemographics, socioeconomics, and health behaviors, monthly contact with a parent is no longer associated with fewer depressive symptoms (Model 2A), but continues to be associated with better self-rated health and fewer chronic conditions (Models 1A, 3A). Family network ties to children are not statistically significantly associated with self-rated health or chronic conditions after covariates are added (Models 1A, 3A). Yet, having coresident children is statistically associated with more depressive symptoms, net of controls (Model 2A).

Nation-Level and Cross-Level Effects

In order to examine the influence of national culture and policy/economics on the relationship between SAN and health, I also explore nation-level predictors and cross-level interaction effects. To do so, I create more nested models. Whereas Table 3 included

individual-level predictors (SAN, then SAN and covariates), the first set of models in Table 4 include all individual-level predictors as well as national-level predictors (Models 1B, 2B, 3B and Models 1D, 2D, 3D). The second set of Models in Table 4 include individual-level predictors, nation-level predictors, and also cross-level interaction effects (Models 1C, 2C, 3C and Models 1E, 2E, 3E). This nested structure allows me to compare the contribution of nation-level and cross-level interaction effects to the explanatory power of the models. In order to simplify Table 4, the covariate individual-level effects are not displayed in the table. Table 4 models labeled with “B” and “C” assess the role of culture and models labeled with “D” and “E” assess the role of policy/economics.

Focusing on the nation-level and cross-level effects in Table 4, national culture of familism and national public pension expenditures are not directly statistically significantly associated with health in this analysis (Models 1B, 2B, 3B and Models 1D, 2D, 3D). In addition, including national characteristics in the model does not alter the associations between SAN and health, nor does this addition improve the overall fit of the model (as indicated by a lack of reduction in AIC and BIC model fit statistics). In all models, intraclass correlation coefficient (ICC) estimates of the residual variance are above 93 percent (ICCs range from 95 to 99 percent for culture Models 1A, 1B, 2A, 2B, 3A, 3B and from 93 and 97 percent for policy/economic Models 1C, 1D, 2C, 2D, 3C, 3D). In other words, not surprisingly, within-country differences (SAN, covariates) explain a majority of the variance in individuals’ health compared to between-country differences (culture, policy/economics).

Also in Table 4, Models including the letters “C” and “E” (Models 1C, 2C, 3C and Models 1E, 2E, 3E) include cross-level interaction effects between culture**SAN* and policy/economics**SAN*, respectively, Only statistically significant cross-level interaction effects are shown in Table 4. Across health outcomes, there are a number of interactions between culture and activity-related ties (e.g., familism and participation in volunteer/charity activities, religious organizations, and care for sick/disabled adult), between culture and family network ties (e.g., contact with parent and coresidence with children), and between policy/economics and family network ties (e.g., contact with parent and coresidence with children). To explore these effects in more depth, I examine graphical representations of the interactions (Figures 1-5).

I begin by exploring the interaction between culture and activity-related ties. As Figure 1 (A-C) illustrates, nations with a stronger emphasis on familism have poorer health according to all three measures. However, I focus on the slopes of these effects to examine the potential moderating influence of familism and highlight the more pronounced interaction effects. For example, individuals in nations with a low level of familism have a stronger association between volunteer/charity work and self-rated health than do individuals in nations with high familism (Figure 1A). Overall, however, the association between activity-related ties and better health is not uniformly stronger for individuals in nations with lower familism. Although participating in a religious organization has little to no association with depression in most nations, religious participation is associated with lower depression for older adults living in nations with high familism (Figure 1B). The

potential negative effects of activity-related ties may also be emphasized in nations with high familism. For example, providing care to a sick or disabled adult is associated with chronic conditions for a majority of the sample, yet this association is markedly stronger for individuals in nations with high familism (Figure 1C).

Familism also moderates the association between family network ties and health (Figures 2 and 3). Monthly contact with a parent is associated with better health (better SRH and fewer chronic conditions) for the sample as a whole. When viewing the sample according to levels of familism (Figure 2, A-C), however, individuals in nations with high familism exhibit the strongest associations between parent contact and health. This moderating effect of familism holds for all measures of health. In addition, although having coresident children has a weak association with poorer health (higher depression), individuals in nations with low familism display an association between coresident children and poorer health across all measures (Figure 3, A-C).

Turning to a consideration of policy/economics, public pension spending does not moderate the effect of activity ties but does moderate the relationship between family network ties and health (Figures 4 and 5). Contact with a parent is associated with better health for the full sample (higher SRH and fewer chronic conditions), but the association between parent contact and health is particularly pronounced for individuals living in nations with higher spending on public pensions, as indicated by the steeper slopes (Figure 4, A and B). In fact, parent contact has a weak or nonexistent relationship to depression for individuals in nations with low or moderate spending on public pensions (Figure 4B). Yet, for

individuals in nations with high public pension spending, parent contact is associated with lower depression. Public pension spending also moderates the association between coresident children and health. Across health measures, the only case in which having coresident children is associated with worse health is for individuals in nations with low spending on public pensions (Figure 5, A-C). For chronic conditions (Figure 5C), individuals in nations with high public pension spending actually have an association between coresident children and *better* health. I consider these findings in more depth below.

To briefly summarize the results, SANs (activity-related ties and family network ties) are generally associated with better health. Two aspects of SAN (caring for a sick or disabled adult and having coresident children), however, are associated with poorer health outcomes. In addition, the relationship between SAN and all measures of health appears to be moderated by culture and policy/economics. Specifically, individuals in nations with a lower emphasis on familism have a stronger association between activity-related ties and health, while individuals in nations with a higher emphasis on familism have a stronger association between family network ties and health. Finally, for individuals in nations with lower public pension spending, family network ties are associated with poorer health.

DISCUSSION AND CONCLUSION

Social Activity Networks: Benefits, Risks, and Diverse Ties

In this analysis, social activity networks are associated with potential health benefits as well as risks. Both aspects of SAN, activity-related ties and family network ties, exhibit

potential health benefits. Before discussing this association, I first highlight an important caveat to the findings. Because the dataset is cross-sectional in nature, I do not discuss these associations as causal evidence. In fact, reverse causality is a possibility (i.e., healthier people are more active or live closer to family). In an attempt to address this concern, I conduct sensitivity analysis by including functional limitations (IADL and ADL) as a covariate. Because this strategy introduces multicollinearity into the model, I do not present these results but use them as a straightforward way to assess the robustness of the SAN effects. As may be expected, the inclusion of this covariate eliminates the association between sport participation and chronic conditions, but the effect remains when examining poor SRH and depression outcomes. Further, the significant effects of other SAN measures remain. I also apply this sensitivity analysis approach to the cross-level interaction models. The two weakest interactions (familism*education/training event for poor SRH, not shown in figures; and familism*coresident children for chronic conditions, Figure 3C) become marginal. All other interactions between SAN and national characteristics hold, despite this additional health control. Thus, there is reason to believe that the effects of SAN found in this analysis reflect more than simply unexamined health characteristics. Indeed, longitudinal studies of social ties and health suggest that the benefits of social activity networks persist over time (James et al. In Press). As longitudinal data become available for all 14 nations, I will assess this issue in more depth.

Despite the overall positive associations between SAN and health in this study, however, not all ties are linked to better health. Providing care to a sick or disabled adult

(activity-related tie), having children, and having coresident children (family network ties) are linked to poorer health for certain outcomes. These tie types are distinct in that they may capture involuntarily linked life ties. This finding is consistent with previous research, which notes the potential negative effects of close and possibly strained relationships (Antonucci et al., 1998). For example, an individual may not be able to choose if he/she must care for an ailing person or allow an adult child stay in his/her home. Therefore, these SAN ties may be more likely to be driven by necessity. The involuntary nature of these ties may mean a higher likelihood of experiencing a tense or stressful interaction. Contrary to the implications of activity theory and theories of social networks and social support, not all social activity network ties are act as a panacea for health promotion. In fact, some SAN ties may actually be associated with increases in poor health.

In addition to the highlighting the potential negative effect of social activity network ties, these results underscore the importance of examining a wide range of social ties when exploring health. A majority of studies on SAN ties and health either group all ties together in a scale of social integration, or concentrate on only one type of tie (activity ties, family ties, friend ties, etc.). Yet, realistically, individuals utilize an extensive range of social interactions and form a diverse cocktail of linked lives across the life course. Further, as societies become more geographically mobile, family network ties may be less accessible to older adults and they may utilize non-kin linked lives more extensively. Thus, a more nuanced perspective of diverse social ties (e.g., SAN) enables researchers to document the

potential health risks of social activity network ties as well as the possible limitations of activity-related health promotion in changing societies.

Moderating Macro-Level Social Context

In addition to highlighting the benefits and risks of a diverse set of social activity network ties, this study reveals the contextualizing influence of macro-level national familism and public pension spending. Comparative research points to differences by nations, and a number of other studies use the term “region” to explain the ‘black box’ of cross-national variation.⁵ At the macro-level, the life course perspective suggests that socio-historical characteristics may have a noteworthy influence on the linked lives of individuals. Indeed, the multilevel empirical results of this analysis offer support to this thesis, particularly for family network ties. National familism moderates the effect of certain activity-related ties and national familism and public pension expenditures both moderate the effect of family network ties with parents and children. Below, I discuss these contextualized effects on activity-related ties and family network ties in more depth.

Nation-level familism contextualizes the role of activity-related ties on health. In order to fully explore familism’s moderating effects on activity-related ties (Figure 1), we must consider the broader contexts of the nations included. The stronger effects volunteer/charity work in non-familistic nations (Figure 1A) and religious participation in

⁵ I conducted sensitivity analysis of the effect of “region” using regional classifications from United Nations. These tests reveal that compared to national culture and policy/economics, “region” is not a significant contextualizing force when examining SAN ties and health in these European nations.

familistic nations (Figure 2A) may tell us more about the wider cultural norms and volunteer opportunities in those nations. For example, familistic nations (e.g., those of Southern Europe) may be less wealthy than nations with lower familism (e.g., Northern and Western Europe) and also less likely to have a formal, structuralized volunteer/charity groups. Yet, the effect of activity-related ties on health is likely due to more than just variation in national wealth. For example, sensitivity tests reveal that gross domestic product (GDP PPP, constant 2005 dollars; World Bank, averaged from available years 1990-2005) does not moderate the effect of activity-related ties on health. , (results not displayed but are available upon request). Rather, variation may result from a combination of activity availability, normative behaviors regarding activity-related behavior, and cultural willingness to participate. Individuals in nations with lower familism may not only have more opportunity to participate in volunteer/charity work but also a stronger cultural interest in non-family supports. Likewise, individuals in Southern Europe may not only have fewer resources for formal volunteer/charity groups but also may have a cultural preference to perform such duties through religious organizations, for example.

National differences in the relationship between activity-related ties and health do not necessarily indicate that nations with low familism or low public pension spending are less involved with family network ties. For the measures available in SHARE data, activity-related ties have the potential to overlap with the family. For example, the act of “caring for a sick/disabled adult” may include a neighbor, friend, *or* family member. Similarly, individuals may participate in religious activities or volunteer/charity organizations with

family network ties (e.g., a spouse or a child) as well as non-kin ties. Therefore, these cross-level effects raise interesting questions about the types of ties that are contextualized by national characteristics. In this way, nations with high familism, for example, may be enacting family network ties in a variety of activity-related arenas. Yet, regardless of whether activity-related ties include family network ties, the broader context of the nation shapes opportunities for activity-related interaction.

Cross-national differences in the relationship between strictly kin-based ties (i.e., family network ties) and health, however, are more straightforward. Here, a clearer pattern emerges. Specifically, there is a stronger association between family network ties and health for older adults in familistic nations. In addition, older adults in nations with low familism have stronger negative associations with certain family network ties (e.g., coresident children and monthly contact with a parent). As hypothesized, older adults in familistic nations likely expect and welcome more intense family network contact, such as frequent visits with parents and coresidential children. In these nations, such behaviors are normative. In non-familistic nations, however, that is not the case. Older adults in these countries may be less likely to expect intense family contact, such as coresident children or frequent visits with parents, and thus may be strained by these non-normative circumstances. Further, in non-familistic nations intergenerational coresidence may be the result of external factors, such as children's unemployment. In these cases, coresidence is not necessarily voluntary and thus may strain both parents and adult children.

National public pension spending also contextualizes family relationships. In a few cases, older adults in nations that spend a lower proportion on public pensions have a negative association between family ties and health (e.g., coresident children and depression; Figure 5B). In other words, older adults in nations with fewer public-based options for support (either for the respondent or the respondent's aging parents) may find themselves emotionally or economically strained by this lack of state-based financial support. Therefore, interactions with the family may be more stressful and produce negative health outcomes in these contexts. In most of the cases examined, however, *high* public pension spending has a prominent contextualizing influence by enhancing the *positive* relationship between contact with a parent and health outcomes. In this manner, having strong state-based support systems may allow older adults to carry less of the financial responsibility for their aging parents, leading to a more positive interaction between aging parent and older adult child. Further, if there is strong state-based support, older adults visiting with aging parents may have fewer concerns about their own aging.

Therefore, although the results of this analysis allow potential overlap between activity-related ties and family network ties, they demonstrate the importance of conceptualizing diverse social activity networks as nested within broader contexts. As Elder (1985, 1995) argues, these types of contextual influences are important factors to consider, as they shape individuals' experiences with their linked lives across the life course. The findings of this study also support the embedded/nested conceptualization of the ecological perspective. Individuals are embedded within networks, which are also embedded within

larger structures of society. This multilevel finding brings new meaning to Litwin's (2001) suggestion that it is the degree of supportiveness in a social activity network that drives the association between activity and health, rather than the activity itself. Considering the results of this study, "support" may be a characteristic inherent not only in individuals' social activity network relations, but in the broader economic and cultural context of one's environment. Broad culturally normative expectations about activities and families, as well as older adults' financial abilities to participate in such interactions with fewer constraints (e.g., the financial opportunity to participate in leisure activities or to have less stressful interactions with family), likely shape the quality of social activity network interactions. Although many theoretical approaches suggest that linked lives are deeply nested within broader cultural and economic settings, this study provides specific, empirical examples of how this nested relationship with familism and public pensions plays out in social relationships formed through activities and the family network.

Designing Programs with a Consideration of Global Inequality

With these theoretical implications in mind, I turn to a more practical consideration of the contextual findings of this study and ask: What are the implications for families, communities, policy-makers, and nation-states seeking to promote older adults' health? I suggest two potential approaches (short-term and long-term). In the short-term, if we are to think directly about programs and health promotion, one implication of this research is to design programs in a manner that will have the greatest payoff for older adults. In

familistic nations, for example, promoting and facilitating family network interactions should be prioritized. Yet, in non-familistic nations, intensively cultivating these family relationships may be less effective or may even have a negative effect. Therefore, programs should promote organization-based activities (e.g., voluntary/charity organizations) in non-familistic nations. For nations with lower public pension expenditures, the family network may be more likely to yield negative consequences for health. Aiming programs at alleviating that financial and emotional strain for families may facilitate less stressful interactions for both the care recipient and the caregiver. If both caregivers and care receivers are under less financial and emotional strain, then these interactions are more likely to lead to positive health outcomes for older adults.

Short-term solutions, however, cannot address long-term concerns about cross-national inequality and public policies that may actually *sustain* within-nation inequality. For example, the political economy of aging perspective highlights cross-national inequality regarding older adults' well-being. In Europe, older adults living in nations with the highest degree of familism are also less healthy according to all three of the indicators examined. Therefore, just because older adults in familistic nations desire family-based support, have high access to family network ties, and receive stronger health benefit from family network ties compared older adults in non-familistic nations, does not mean that older adults in familistic nations are advantaged. Short-term solutions, such as designing programs to address the family preferences of older adults, ignore larger issues of cross-national inequality in health. Political economy of aging scholars also warn of the potential negative

effects of public pensions. Although public pensions provide extremely important financial support for older adults, these policies may also act as a buffer to mask larger social problems. They argue that the global capitalist system inherently creates inequality. Therefore, nation-states must fund public support programs to sustain the same people impoverished by the global system. It is important to consider the long-term implications of this type of system for health promotion. Are there structural changes that can be made to address this issue? Do modern economic processes jeopardize the health of older adults?

Finally, these results also raise critical considerations about gendered norms about caregiving. When exploring culturally normative beliefs about elder care, it is sociologically-relevant to consider *who* enacts caregiving expectations. In most nations, it is the women of the family that unequally shoulder the burden of this role (Bettio and Plantenga 2004). Thus, although this study does not focus on gender, the issue of gendered family inequality cannot be ignored in the story of cross-national aging. It is important for policies and programs to consider the needs of caregivers in the long-term aging process. In familistic nations it is female caregivers, in particular, who may require additional support.

In conclusion, by conceptualizing the social lives of older adults broadly with an approach that incorporates linked lives, social network theory, and activity theory, this paper provides important theoretical and empirical contributions. First, I provide an empirical examination of the concept of a “social activity network” using three health outcomes and find that although SAN ties are generally associated with better health, certain activity-related and family network ties may be linked to poorer health. The social

activity networks of older adults are diverse and future studies should continue to account for this variation by incorporating a wide range of ties. Second, by evaluating the relationship between SAN ties and health within the context of national culture and policy/economics, this paper provides support for multilevel frameworks that suggest an individual's health is a product not only of his/her meso-level circumstances (e.g., SAN) but also of his/her macro-level environment. I find that cultural expectations about the family and economic provisions for family support are not directly related to health, yet these factors condition the relationship between SAN ties and health in an empirically meaningful and theoretically relevant manner. Finally, although these results provide a contextualized view of short-term solutions to older adults' health promotion (such as designing care programs to consider older adults' culturally-defined social preferences) this macro-level consideration of national culture, public policy, and health highlights important long-term issues such as global inequality, the role of public policy in sustaining inequality, and the intense caregiving expectations of women in familistic nations. Thus, by providing a more thorough understanding of older adults' diverse SAN ties within cross-national cultural and policy/economic contexts, this study offers an important step towards considering the complex relationship between linked lives and health promotion cross-nationally.

REFERENCES

- Aboderin, I. 2004. "Decline in Material Family Support for Older People in Urban Ghana, Africa: Understanding Processes and Causes of Change." *Journals of Gerontology Series B-Psychological Sciences and Social Sciences* 59:S128-S137.
- Aboderin, I. 2006. *Intergenerational Support and Old Age in Africa*. New Brunswick, NJ: Transaction Publishers.
- Alber, J. and U. Kohler. 2004. "Health and Health Care in an Enlarged Europe." European Foundation for the Improvement of Living and Working Conditions, Luxembourg: Office for Official Publications of the European Communities.
- Antonucci, T. C., H. Akiyama, and J. E. Lansford. 1998. "Negative effects of close social relations." *Family Relations* 47:379-384.
- Bengtson, V. L., E. O. Burgess, and T. M. Parrott. 1997. "Theory, explanation, and a third generation of theoretical development in social gerontology." *Journals of Gerontology Series B-Psychological Sciences and Social Sciences* 52:S72-S88.
- Berkman, L. F., T. Glass, I. Brissette, and T. E. Seeman. 2000. "From social integration to health: Durkheim in the new millennium." *Social Science & Medicine* 51:843-857.
- Bettio, F. and J. Plantenga. 2004. "Comparing Care Regimes in Europe." *Feminist Economics* 10(1):85-113.
- Bronfenbrenner, U. 1998. "Strengthening Family Systems." Pp. 143-160 in *The Parental Leave Crisis: Towards a National Policy*, edited by E. Zigler and M. Frank. Yale University Press.
- Bubolz, M. M. and M. S. Sontag. 1993. "Human Ecology Theory." Pp. 419-447 in *Sourcebook of Family Theories and Methods: A Contextual Approach*, edited by P. G. Boss, W. J. Doherty, R. LaRossa, W. R. Schumm, and S. K. Steinmetz. Plenum Press.
- Carstensen, L. L. 1992. "Social and Emotional Patterns in Adulthood - Support for Socioemotional Selectivity Theory." *Psychology and Aging* 7:331-338.
- Castro-Costa, E., M. Dewey, R. Stewart, S. Banerjee, F. Huppert, C. Mendonca-Lima, C. Bula, F. Reisches, J. Wancata, K. Ritchie, M. Tsolaki, R. Mateos, and M. Prince. 2008. "Ascertaining Late-Life Depressive Symptoms in Europe: An Evaluation of the Survey

- Version of the EURO-D Scale in 10 Nations. The SHARE Project. *International Journal of Methods in Psychiatric Research* 17(1):12-29.
- Chan, Y. K. and R. P. L. Lee. 2006. "Network Size, Social Support and Happiness in Later Life: A Comparative Study of Beijing and Hong Kong." *Journal of Happiness Studies* 7:87-112.
- Cobb, S. 1976. "Social Support as a Moderator of Life Stress." *Psychosomatic Medicine* 38:300-314.
- Cornwell, E. Y. and L. J. Waite. 2009. "Social Disconnectedness, Perceived Isolation, and Health among Older Adults." *Journal of Health and Social Behavior* 50:31-48.
- Elder, G. H. Jr. 1985. "Perspectives on the Life Course." in *Life Course Dynamics*, edited by G. H. J. Elder. Ithaca, NY: Cornell University Press.
- Elder, G. H. Jr. 1995. "The Life Course Paradigm: Historical, Comparative, and Developmental Perspectives." in *Examining Lives in Context: Perspectives on the Ecology of Human Development*, edited by P. Moen, G. H. Elder, and K. Luscher. Washington, DC: American Psychological Association Press.
- Estes, C. 1979. *The Aging Enterprise*. San Francisco, CA: Jossey Bass.
- Estes, C. 2001. *Social Policy and Aging*. Thousand Oaks, CA: Sage Publications, Inc.
- Ferlander, S. 2007. "The importance of different forms of social capital for health." *Acta Sociologica* 50:115-128.
- Fernandez-Ballesteros, R. 2002. "Social support and quality of life among older people in Spain." *Journal of Social Issues* 58:645-659.
- George, L. K. 2006. "Perceived Quality of Life." Pp. 320-336 in *Handbook of Aging and the Social Sciences*, edited by R. H. Binstock and L. K. George. San Diego, CA: Elsevier.
- Golden, J., R. M. Conroy, I. Bruce, A. Denihan, E. Greene, M. Kirby, and B. A. Lawlor. 2009. "Loneliness, social support networks, mood and wellbeing in community-dwelling elderly." *International Journal of Geriatric Psychiatry* 24:694-700.
- Guillemard, A.-M. 2000. *Aging and the Welfare-State Crisis*. Newark, NJ: University of Delaware Press.

- Haller, M. and M. Hadler. 2006. "How Social Relations and Structures Can Produce Happiness and Unhappiness: An International Comparative Analysis." *Social Indicators Research* 75:169-216.
- Hank, K. and S. Stuck. 2008. "Volunteer work, informal help, and care among the 50+ in Europe: Further evidence for 'linked' productive activities at older ages." *Social Science Research* 37:1280-1291.
- Havighurst, R. J. 1957. "The Leisure Activities of the Middle-Aged." *The American Journal of Sociology* 63:152-162.
- Idler, E.L. and Y. Benyamini. 1997. "Self-rated Health and Mortality: A Review of Twenty-Seven Community Studies." *Journal of Health and Social Behavior* 38:21-37.
- Iecovich, E., M. Barasch, J. Mirsky, R. Kaufman, A. Avgar, and A. Kol-Fogelson. 2004. "Social support networks and loneliness among elderly Jews in Russia and Ukraine." *Journal of Marriage and the Family* 66:306-317.
- James, B. D., Boyle, P. A., Buchman, A. S., and Bennett, D. A. In Press. "Relation of Late-Life Social Activity with Incident Disability Among Community-Dwelling Older Adults." *Journal of Gerontology – Biological Sciences*.
- Kahn, R. L. and T. Antonucci. 1980. "Convoys of Social Support: A Life Course Approach." Pp. 383-405 in *Aging: Social Change*, edited by S. B. Kiesler, J. N. Morgan, and V. K. Oppenheimer. New York, NC: Academic Press.
- Kalmijn, M. and C. Saraceno. 2008. "A comparative perspective on intergenerational support - Responsiveness to parental needs in individualistic and familialistic countries." *European Societies* 10:479-508.
- Kohli, M. 1988. "Aging as a Challenge for Sociological Theory." *Ageing & Society* 8:367-394.
- Kohli, M., K. Hank, and H. Künemund. 2009. "The social connectedness of older Europeans: patterns, dynamics and contexts." *Journal of European Social Policy* 19:327-340.
- Ladin, K. 2008. "Risk of Late-Life Depression Across 10 European Union Countries: Deconstructing the Education Effect." *Journal of Aging Health* 20(6):653-670.
- Lemon, B. W., V. L. Bengtson, and J. A. Peterson. 1972. "An Exploration of the Activity Theory of Aging: Activity Types among In-Movers to a Retirement Community." *Journals of Gerontology* 27:511-523.

- Lin, N. 1999. "Social Networks and Status Attainment." *Annual Review of Sociology* 25:467-487.
- Litwin, H. 2000. "Activity, Social Network and Well-Being: An Empirical Examination." *Canadian Journal on Aging* 19(3):343-362.
- Litwin, H. 2001. "Social Network Type and Morale in Old Age." *The Gerontologist* 41(4):516-524.
- Litwin, H. 2010. "Social Networks and Well-Being: A Comparison of Older People in Mediterranean and Non-Mediterranean Countries." *Journal of Gerontology: Social Sciences* 65B(5):599-608.
- Litwin, H. and R. Landau. 2000. "Social network type and social support among the old-old." *Journal of Aging Studies* 14:213-228.
- Litwin, H. and S. Shiovitz-Ezra. 2006. "Network type and mortality risk in later life." *Gerontologist* 46:735-743.
- Litwin, H. and S. Shiovitz-Ezra. In Press. "Social Network Type and Subjective Well-Being in a National Sample of Older Adults." *Gerontologist*.
- Longino, C. F. and C. S. Kart. 1982. "Explicating activity theory: A formal replication." *Journals of Gerontology* 37:713-722.
- Lowenstein, A. and S. O. Daatland. 2006. "Filial Norms and Family Support in A Comparative, Cross-National Context: Evidence from the OASIS Study." *Aging & Society* 26:203-223.
- Maddox, G. L. 1963. "Activity and Morale: A Longitudinal Study of Selected Elderly Subjects." *Social Forces* 42(2):195-204.
- Marshall, V. W. 1995. "The Micro-Macro Link in the Sociology of Aging." Pp. 337-371 in *Images of Aging in Western Societies*, edited by C. Hummel and C. J. L. D'Epinay. Geneva: Centre for Interdisciplinary Gerontology, University of Geneva.
- Marshall, V. W. In Press. "Global Aging and Families: Some Policy Concerns about the Global Aging Perspective." in *Generation to Generation: Continuity and Discontinuity in Aging Families*, edited by M. Silverstein. Baltimore, MD: Johns Hopkins University Press.

- McDonald, S. R. Benton, and D. Warner. Unpublished Manuscript. "Dual Embeddedness: Informal Job Matching and Labor Market Institutions in the United States and Germany."
- McDonald, S., N. Lin, and D. Ao. 2009. "Networks of Opportunity: Gender, Race, and Job Leads." *Social Problems* 56:385-402.
- Moen, P., D. Dempster-McClain, and R. M. Williams. 1992. "Successful Aging: A Life-Course Perspective on Women's Multiple Roles and Health." *American Journal of Sociology* 97:1612-1638.
- O'Rand, A. M. 2006. "Stratification and the Life Course: Life Course Capital, Life Course Risks, and Social Inequality," Pp. 146-162 in *Handbook of Aging and the Social Sciences*, edited by R. H. Binstock, L. K. George, S. J. Cutler, J. Hendricks, and J. H. Schultz. Burlington, MA: Academic Press.
- Organisation for Economic Co-Operation and Development (OECD). 1990-2005. Social Expenditure Database, ESDS International, University of Manchester
- Pinquart, M. and S. Sörensen. 2000. "Influences of socioeconomic status, social network, and competence on subjective well-being in later life: A meta-analysis." *Psychology and Aging* 15:187-224.
- Prince, M. J., F. Reischies, A. T. Beekman, R. Fuhrer, C. Jonker, S. L. Kivela, B. A. Lawlor, A. Lobo, H. Magnusson, M. Fitcher, H. van Oyen, M. Roelands, I. Skoog, C. Turrina, and J. R. Copeland. 1999. "Development of the EURO-D Scale – A European Union Initiative to Compare Symptoms of Depression in 14 European Centres." *The British Journal of Psychiatry* 174:330-338.
- Raudenbush, S. W. and A. S. Bryk. 2002. *Hierarchical Linear Models: Applications and Data Analysis Methods*. Thousand Oaks, CA: Sage Publications, Inc.
- Rowe, J. and R. Kahn. 1998. *Successful Aging*. New York, NY: Random House.
- Siegrist, J. and M. Wahrendorf. 2009. "Participation in socially productive activities and quality of life in early old age: findings from SHARE." *Journal of European Social Policy* 19:317-326.
- Sirven, N. and T. Debrand. 2008. "Social participation and healthy ageing: An international comparison using SHARE data." *Social Science & Medicine* 67:2017-2026.

- Survey of Health, Ageing, and Retirement in Europe (SHARE). 2006/2007. Release 2.3.1, Mannheim Research Institute for the Economics of Aging (MEA), Mannheim, Germany. <http://www.share-project.org/>
- Tomassini, C. and G. Lamura. 2009. "Population Ageing in Italy and Southern Europe." Pp. 69-89 in *International Handbook of Population Aging*, edited by P. Uhlenberg. Springer.
- Trzcinski, E. 1995. "An Ecological Perspective on Family Policy: A Conceptual and Philosophical Framework." *Journal of Family and Economic Issues* 16(1):7-33.
- Veenstra, G. 2000. "Social capital, SES and health: an individual-level analysis." *Social Science & Medicine* 50:619-629.
- Walker, A. 2005. "Towards an international political economy of ageing." *Ageing and Society* 25:815-839.
- Wellman, B. 1981. "Applying Network Analysis to the Study of Support." Pp. 171-200 in *Social Networks and Social Support*, edited by B. H. Gottlieb. Sage Publications.
- Wenger, C. W. 1997. "Review of Findings on Support Networks of Older Europeans." *Journal of Cross-Cultural Gerontology* 12:1-21.

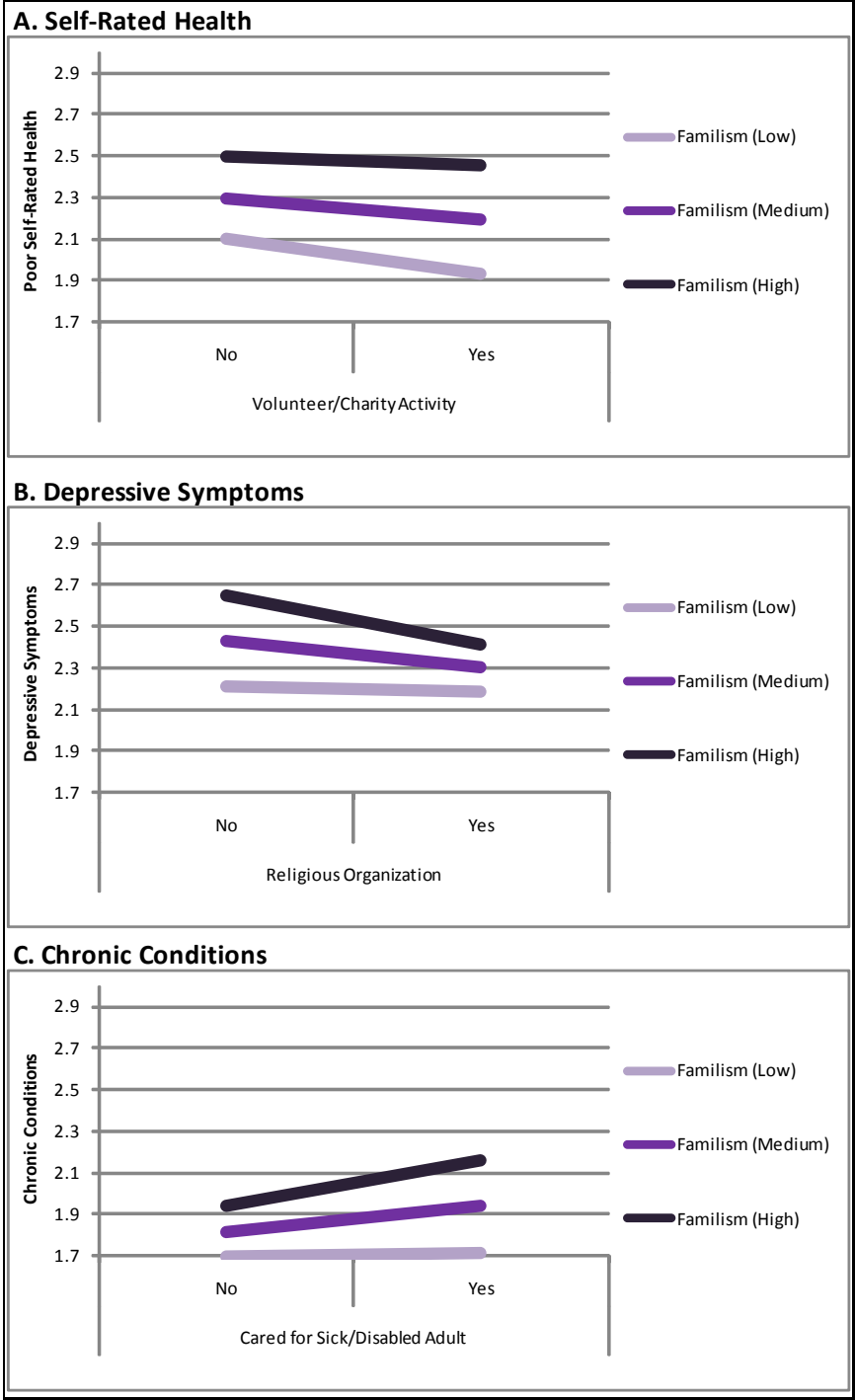


Figure 1. Familism Moderating the Association between Activity-Based Ties and Poor Health

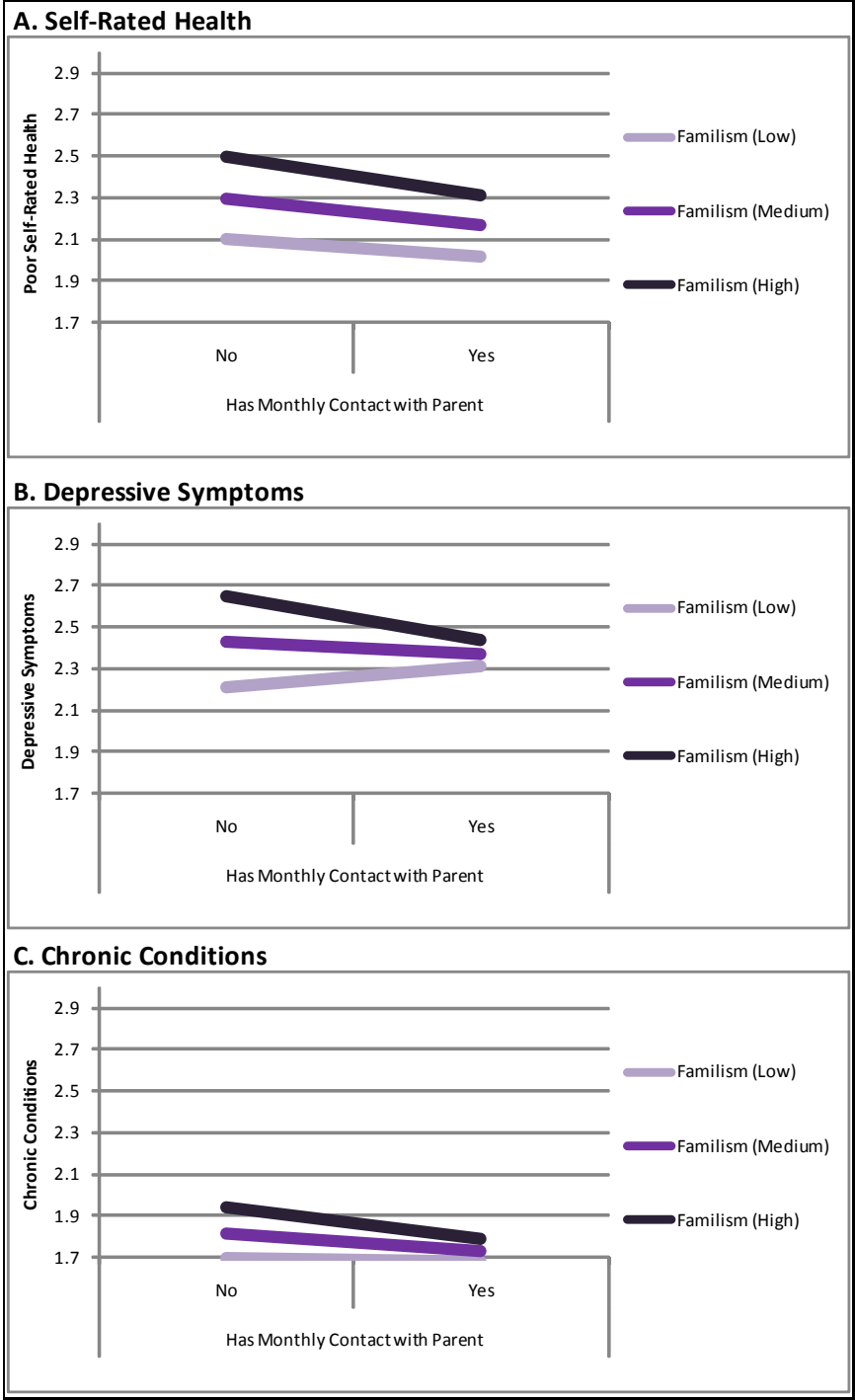


Figure 2. Familism Moderating the Association between Monthly Contact with Parent and Poor Health

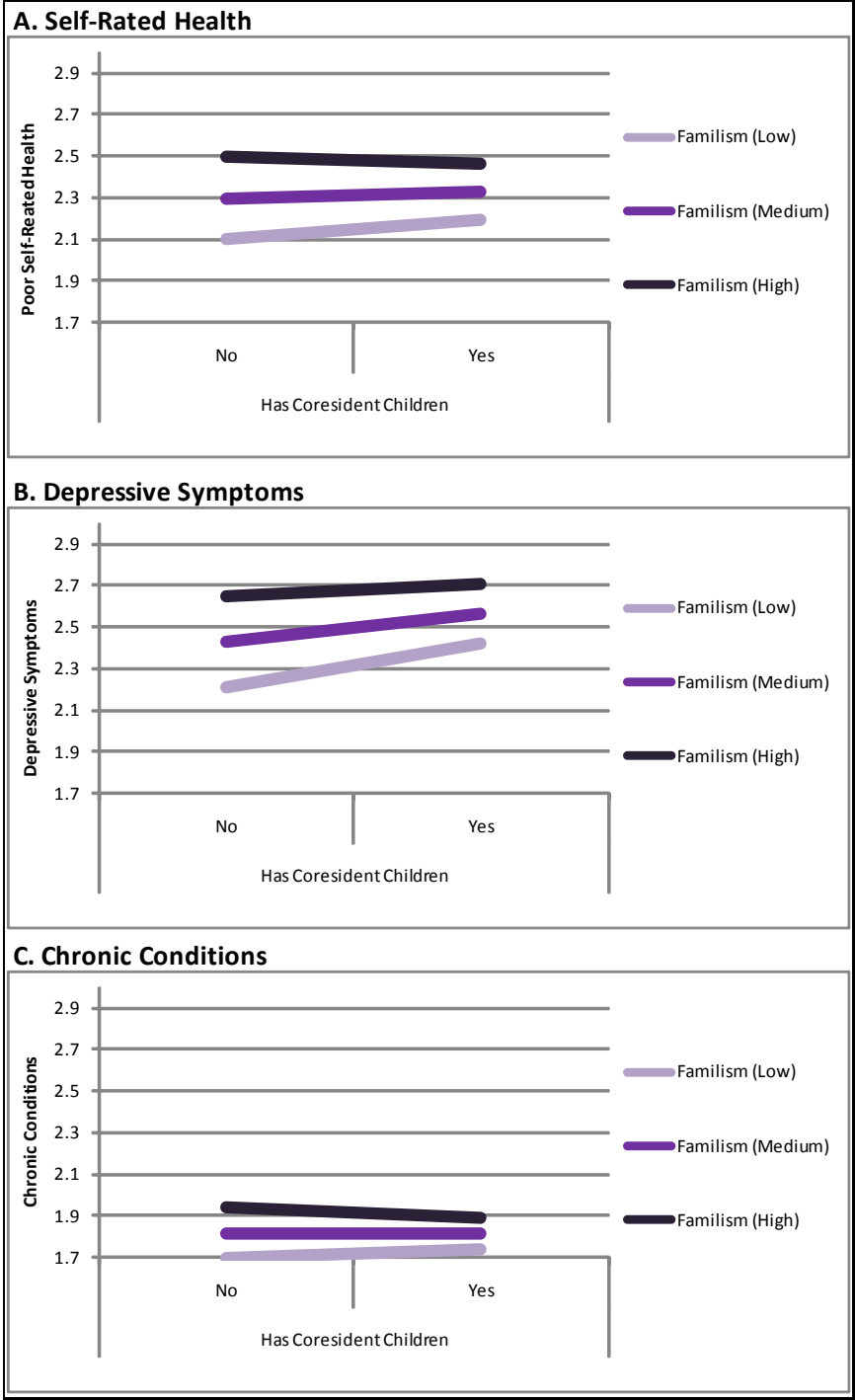


Figure 3. Familism Moderating the Association between Coresident Children and Poor Health

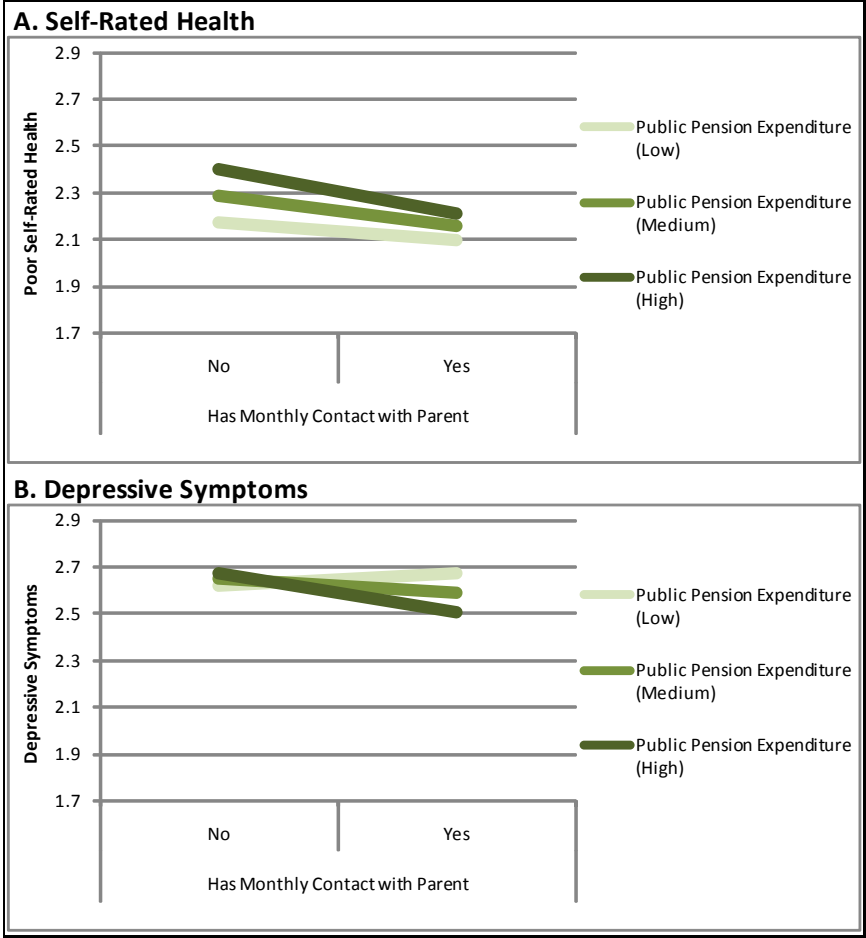


Figure 4. Public Pension Expenditure Moderating the Association between Contact with Parent and Poor Health

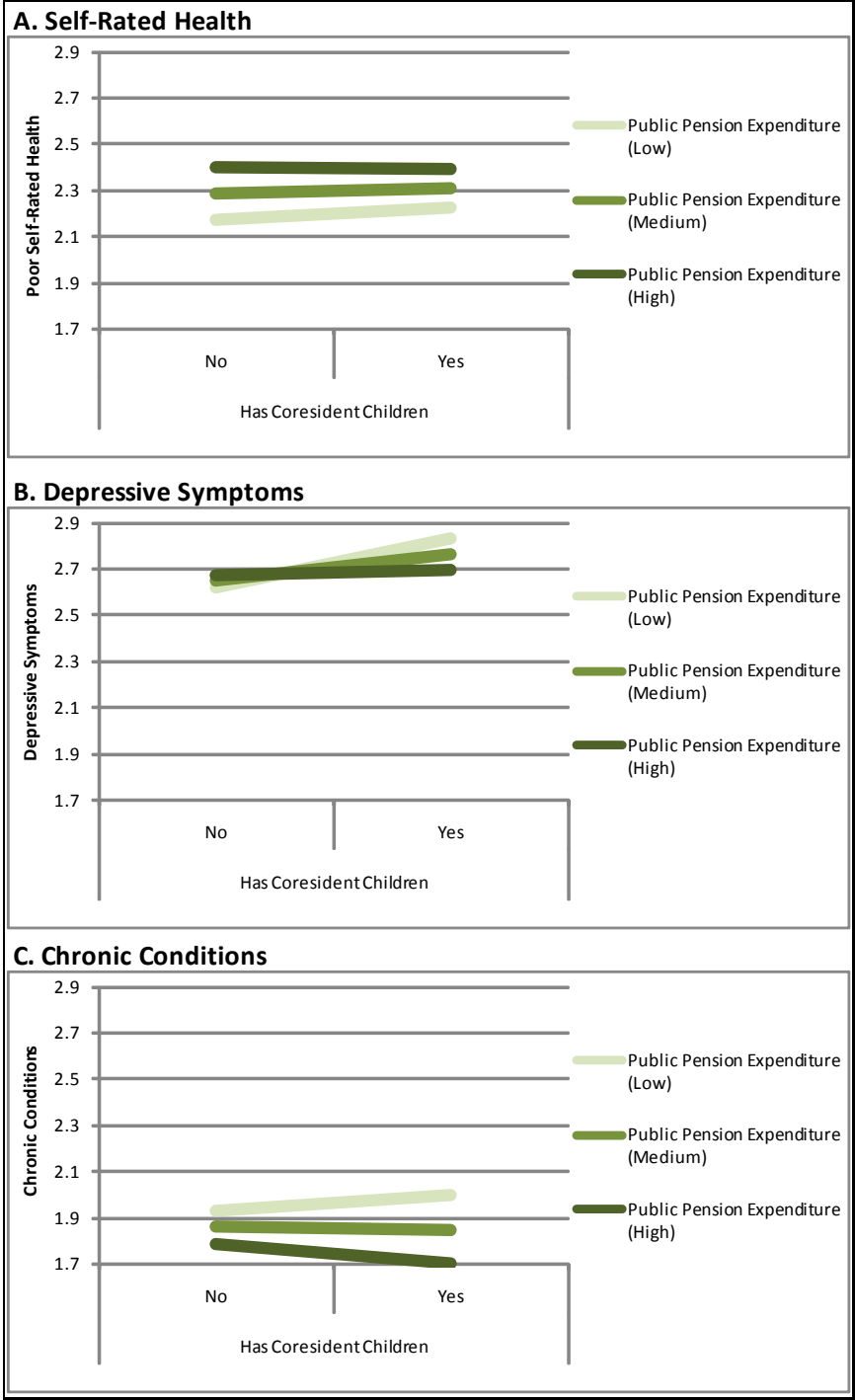


Figure 5. Public Pension Expenditure Moderating the Association between Coresident Children and Poor Health

Table 1. Descriptive Statistics of All Variables Pooled Across Nations

	Mean	S.D.	Min.	Max.
Level 1: Individual-Level				
Health (higher values=worse health)				
Poor Self-Rated Health	2.09	(1.09)	0.00	4.00
Depressive Symptoms (EURO-D)	2.28	(2.25)	0.00	12.00
Chronic Conditions	1.63	(1.50)	0.00	10.00
Social Activity Networks				
<i>Activity-Related Ties/Last Month</i>				
1. Voluntary/Charity Work	0.13	(0.33)	0.00	1.00
2. Cared for Sick/Disabled Adult	0.07	(0.26)	0.00	1.00
3. Help to Friends/Neighbors	0.18	(0.38)	0.00	1.00
4. Education/Training Event	0.07	(0.26)	0.00	1.00
5. Sport/Social/Other Club	0.20	(0.40)	0.00	1.00
6. Religious Org. Activities	0.11	(0.32)	0.00	1.00
7. Political/Community Org.	0.04	(0.21)	0.00	1.00
<i>Family Network Ties</i>				
Married/Partnered	0.75	(0.43)	0.00	1.00
Has Monthly Contact with Parent	0.22	(0.41)	0.00	1.00
Has Children	0.90	(0.29)	0.00	1.00
Has Coresident Children	0.26	(0.44)	0.00	1.00
Covariates				
Age	64.54	(9.79)	50.00	101.00
Female	0.55	(0.50)	0.00	1.00
Foreign-Born	0.07	(0.25)	0.00	1.00
Rural	0.30	(0.46)	0.00	1.00
Education (ISCED)	2.58	(1.48)	0.00	6.00
Household Income (ln)	10.43	(1.83)	0.00	18.76
Employed	0.27	(0.45)	0.00	1.00
Pays for Doctor Visits	0.26	(0.44)	0.00	1.00
Drinks Alcohol Daily	0.20	(0.40)	0.00	1.00
Level 2: Nation-Level				
Culture				
% Prefer Fam.-Based Personal Care for Aged	24.86	(18.06)	1.80	65.97
Policy/Economics				
Public Pension Expenditure/GDP	8.14	(2.23)	2.54	12.04

*Descriptive statistics display unweighted results.

Table 2. Means of All Variables by Nation

	East		South			West						North		
	Poland	Czech Rep	Spain	Italy	Greece	Germany	France	Austria	Belgium	Neth.	Switz.	Ireland	Sweden	Denmark
	N=2263	N=2556	N=1887	N=2723	N=2723	N=2290	N=2468	N=1178	N=2836	N=2382	N=1312	N=474	N=2398	N=2347
Level 1: Individual-Level														
Health (higher values=worse health)														
Poor Self-Rated Health	2.86	2.34	2.44	2.30	1.86	2.20	2.18	2.06	1.98	1.93	1.60	1.64	1.77	1.56
Depressive Symptoms (EURO-D)	3.74	2.10	2.82	2.74	1.75	1.90	2.74	2.05	2.38	1.86	1.78	2.04	1.83	1.78
Chronic Conditions	2.14	1.79	1.77	1.87	1.47	1.51	1.54	1.57	1.59	1.26	1.13	1.67	1.61	1.66
Social Activity Networks														
<i>Activity-Related Ties/Last Month</i>														
1. Voluntary/Charity Work	0.02	0.03	0.03	0.08	0.02	0.15	0.16	0.09	0.17	0.27	0.17	0.17	0.21	0.23
2. Cared for Sick/Disabled	0.04	0.06	0.03	0.04	0.05	0.08	0.09	0.08	0.10	0.11	0.11	0.13	0.10	0.06
3. Help to Friends/Neighbors	0.05	0.13	0.03	0.07	0.08	0.16	0.21	0.17	0.24	0.25	0.20	0.25	0.40	0.28
4. Education/Training Event	0.01	0.04	0.03	0.02	0.03	0.06	0.05	0.04	0.11	0.11	0.16	0.10	0.18	0.11
5. Sport/Social/Other Club	0.02	0.13	0.07	0.08	0.07	0.26	0.23	0.18	0.23	0.33	0.35	0.29	0.28	0.41
6. Religious Org. Activities	0.10	0.05	0.09	0.07	0.28	0.10	0.08	0.09	0.09	0.14	0.14	0.36	0.12	0.08
7. Political/Community Org.	0.02	0.03	0.01	0.02	0.04	0.04	0.05	0.05	0.08	0.04	0.09	0.06	0.05	0.05
<i>Family Network Ties</i>														
Married/Partnered	0.75	0.70	0.78	0.81	0.72	0.81	0.70	0.63	0.74	0.80	0.71	0.64	0.78	0.75
Has Monthly Contact with Parent	0.17	0.20	0.18	0.19	0.24	0.21	0.27	0.14	0.23	0.22	0.27	0.16	0.23	0.25
Has Children	0.94	0.94	0.89	0.90	0.89	0.89	0.89	0.88	0.89	0.90	0.85	1.00	0.93	0.92
Has Coresident Children	0.48	0.22	0.43	0.42	0.41	0.15	0.20	0.16	0.21	0.18	0.19	0.41	0.11	0.12
Covariates														
Age	63.46	63.74	65.94	65.04	64.31	64.47	64.90	66.46	64.58	63.38	64.57	64.15	65.77	63.72
Female	0.56	0.57	0.54	0.54	0.55	0.53	0.57	0.59	0.54	0.54	0.55	0.53	0.53	0.54
Foreign-Born	0.03	0.04	0.02	0.01	0.02	0.16	0.14	0.08	0.07	0.05	0.15	0.08	0.09	0.03
Rural	0.20	0.30	0.33	0.17	0.49	0.34	0.31	0.28	0.21	0.44	0.17	0.29	0.30	0.28
Education (ISCED)	2.27	2.47	1.58	1.89	2.14	3.41	2.46	2.90	2.76	2.80	2.91	3.18	2.71	3.38
Household Income (ln)	9.77	12.10	9.30	9.59	8.93	10.06	10.21	9.96	9.99	10.26	10.99	7.80	12.54	12.48
Employed	0.16	0.28	0.20	0.17	0.28	0.28	0.28	0.14	0.24	0.31	0.40	0.33	0.37	0.41
Pays for Doctor Visits	0.74	0.22	0.11	0.34	0.18	0.06	0.08	0.16	0.16	0.02	0.07	0.55	0.60	0.41
Drinks Alcohol Daily	0.03	0.13	0.21	0.39	0.07	0.15	0.33	0.14	0.28	0.30	0.23	0.07	0.07	0.27
Level 2: Nation-Level														
Culture														
% Prefer Fam.-Based Pers. Care for Age	47.17	31.15	33.03	30.82	65.97	27.67	10.22	19.15	14.62	5.96	21.90	22.13	7.99	1.80
Policy/Economics														
Public Pension Expenditure/GDP	9.34	6.83	7.68	10.62	10.13	10.58	10.18	12.04	6.88	4.84	6.21	2.54	6.98	5.42

*Descriptive statistics display unweighted results.

Table 3. Multilevel Results: SAN and Health

<i>Fixed Effects</i>	Self-Rated Health		Depressive Symptoms		Chronic Conditions	
	1	1A	2	2A	3	3A
Level 1: Individual-Level Effects						
Intercept	2.365 *** (0.087)	2.353 *** (0.078)	2.876 *** (0.149)	2.389 *** (0.137)	1.929 *** (0.070)	1.798 *** (0.071)
Social Activity Network						
<i>Activity-Related Ties/Last Month</i>						
1. Voluntary/Charity Work	-0.168 *** (0.019)	-0.137 *** (0.018)	-0.220 *** (0.040)	-0.139 *** (0.040)	-0.136 *** (0.027)	-0.107 *** (0.026)
2. Cared for Sick/Disabled Adult	0.003 (0.023)	0.008 (0.022)	0.429 *** (0.049)	0.374 *** (0.047)	0.113 *** (0.033)	0.101 ** (0.032)
3. Help to Friends/Neighbors	-0.149 *** (0.016)	-0.082 *** (0.016)	-0.089 * (0.035)	0.024 (0.034)	-0.117 *** (0.023)	-0.009 (0.023)
4. Education/Training Event	-0.234 *** (0.023)	-0.079 *** (0.023)	-0.081 (0.050)	0.037 (0.049)	-0.201 *** (0.034)	-0.020 (0.033)
5. Sport/Social/Other Club	-0.272 *** (0.015)	-0.219 *** (0.015)	-0.426 *** (0.033)	-0.320 *** (0.032)	-0.129 *** (0.022)	-0.068 ** (0.022)
6. Religious Org.	-0.015 (0.019)	-0.064 *** (0.018)	-0.034 (0.041)	-0.145 *** (0.040)	0.136 *** (0.028)	0.046 (0.027)
7. Political/Community Org.	-0.110 *** (0.029)	-0.028 (0.028)	-0.311 *** (0.062)	-0.108 (0.061)	-0.038 (0.042)	0.049 (0.041)
<i>Family Network Ties</i>						
Married/Partnered	-0.198 *** (0.014)	-0.070 *** (0.014)	-0.738 *** (0.030)	-0.392 *** (0.031)	-0.365 *** (0.020)	-0.163 *** (0.021)
Has Monthly Contact with Parent	-0.364 *** (0.015)	-0.131 *** (0.016)	-0.201 *** (0.031)	-0.053 (0.034)	-0.498 *** (0.021)	-0.085 *** (0.023)
Has Children	0.079 *** (0.021)	-0.013 (0.020)	0.092 * (0.044)	-0.058 (0.044)	0.209 *** (0.030)	0.040 (0.029)
Has Coresident Children	-0.118 *** (0.014)	0.016 (0.015)	0.017 (0.031)	0.109 *** (0.032)	-0.285 *** (0.021)	-0.016 (0.021)
Covariates						
Age		-0.034 *** (0.008)		-0.228 *** (0.018)		0.056 *** (0.012)
Age Sq.		0.000 *** (0.000)		0.002 *** (0.000)		0.000 * (0.000)
Female		0.007 (0.012)		0.642 *** (0.026)		0.143 *** (0.017)
Foreign-Born		0.144 *** (0.023)		0.338 *** (0.050)		0.173 *** (0.033)
Lives in Rural Area		-0.026 * (0.013)		0.035 (0.027)		-0.016 (0.018)
Education (ISCED)		-0.095 *** (0.004)		-0.115 *** (0.010)		-0.066 *** (0.006)
Household Income (ln)		-0.017 *** (0.004)		-0.027 ** (0.009)		0.008 (0.006)
Employed		-0.367 *** (0.017)		-0.464 *** (0.036)		-0.412 *** (0.024)
Pays for Doctor Visits		-0.017 (0.015)		0.077 * (0.032)		-0.076 *** (0.021)
Drinks Alcohol Daily		-0.098 *** (0.015)		-0.099 ** (0.032)		-0.074 *** (0.022)
Random Effects						
Level 1: Residual	0.997 *** (0.008)	0.925 *** (0.008)	4.574 *** (0.037)	4.339 *** (0.036)	2.089 *** (0.017)	1.943 *** (0.016)
Level 2: Intercept	0.099 ** (0.039)	0.078 ** (0.031)	0.285 ** (0.113)	0.226 ** (0.090)	0.056 ** (0.022)	0.055 ** (0.022)
Model Fit Statistics						
AIC	84709.3	82574.2	130147.8	128634.4	106763.5	104669.0
BIC	84710.6	82575.4	130149.1	128635.7	106764.8	104670.3

Note: Standard errors shown in parentheses, *p<0.05; **p<0.01; ***p<0.001

Table 4. Multilevel Results: Nation-Level Characteristics and Health (N=29,837)#

<i>Fixed Effects</i>	Poor SRH				Depressive Symptoms				Chronic Conditions			
	1B	1C	1D	1E	2B	2C	2D	2E	3B	3C	3D	3E
Level 1: Individual- Level Effects												
Intercept	2.372 *** (0.068)	2.370 *** (0.068)	2.364 *** (0.075)	2.362 *** (0.075)	2.319 *** (0.099)	2.240 *** (0.138)	2.399 *** (0.140)	2.405 *** (0.140)	1.796 *** (0.069)	1.794 *** (0.069)	1.797 *** (0.074)	1.802 *** (0.074)
Social Activity Network												
<i>Activity-Related Ties/Last Month</i>												
1. Voluntary/Charity Work	-0.137 *** (0.018)	-0.104 *** (0.022)	-0.137 *** (0.018)	-0.136 *** (0.018)	-0.139 *** (0.040)	-0.154 *** (0.040)	-0.139 *** (0.040)	-0.138 *** (0.040)	-0.106 *** (0.026)	-0.104 *** (0.026)	-0.107 *** (0.026)	-0.106 *** (0.026)
2. Cared for Sick/Disabled Adult	0.007 (0.022)	0.004 (0.022)	0.008 (0.022)	0.006 (0.022)	0.374 *** (0.047)	0.366 *** (0.047)	0.375 *** (0.047)	0.370 *** (0.047)	0.101 ** (0.032)	0.120 *** (0.033)	0.101 ** (0.032)	0.100 ** (0.032)
3. Help to Friends/Neighbors	-0.082 *** (0.016)	-0.084 *** (0.016)	-0.082 *** (0.016)	-0.083 *** (0.016)	0.024 (0.034)	0.015 (0.034)	0.024 (0.034)	0.022 (0.034)	-0.008 (0.023)	-0.011 (0.023)	-0.009 (0.023)	-0.009 (0.023)
4. Education/Training Event	-0.079 *** (0.023)	-0.107 *** (0.025)	-0.079 *** (0.023)	-0.084 *** (0.023)	0.037 (0.049)	0.020 (0.049)	0.037 (0.049)	0.027 (0.049)	-0.020 (0.033)	-0.024 (0.033)	-0.020 (0.033)	-0.022 (0.033)
5. Sport/Social/Other Club	-0.219 *** (0.015)	-0.219 *** (0.015)	-0.219 *** (0.015)	-0.221 *** (0.015)	-0.320 *** (0.032)	-0.355 *** (0.036)	-0.319 *** (0.032)	-0.322 *** (0.032)	-0.068 ** (0.022)	-0.068 ** (0.022)	-0.068 ** (0.022)	-0.068 ** (0.022)
6. Religious Org.	-0.064 *** (0.018)	-0.071 *** (0.018)	-0.064 *** (0.018)	-0.065 *** (0.018)	-0.145 *** (0.040)	-0.132 ** (0.041)	-0.144 *** (0.040)	-0.150 *** (0.040)	0.047 (0.027)	0.040 (0.027)	0.046 (0.027)	0.044 (0.027)
7. Political/Community Org.	-0.028 (0.028)	-0.025 (0.028)	-0.028 (0.028)	-0.026 (0.028)	-0.108 (0.061)	-0.105 (0.061)	-0.108 (0.061)	-0.104 (0.061)	0.049 (0.041)	0.052 (0.041)	0.049 (0.041)	0.050 (0.041)
<i>Family Network Ties</i>												
Married/Partnered	-0.070 *** (0.014)	-0.067 *** (0.014)	-0.070 *** (0.014)	-0.069 *** (0.014)	-0.391 *** (0.031)	-0.387 *** (0.031)	-0.392 *** (0.031)	-0.391 *** (0.031)	-0.163 *** (0.021)	-0.160 *** (0.021)	-0.163 *** (0.021)	-0.162 *** (0.021)
Has Monthly Contact with Parent	-0.131 *** (0.016)	-0.133 *** (0.016)	-0.131 *** (0.016)	-0.132 *** (0.016)	-0.053 (0.034)	-0.058 (0.034)	-0.053 (0.034)	-0.056 (0.034)	-0.084 *** (0.023)	-0.086 *** (0.023)	-0.084 *** (0.023)	-0.086 *** (0.023)
Has Children	-0.013 (0.020)	-0.013 (0.020)	-0.013 (0.020)	-0.011 (0.020)	-0.058 (0.044)	-0.056 (0.044)	-0.058 (0.044)	-0.062 (0.044)	0.040 (0.029)	0.041 (0.029)	0.040 (0.029)	0.035 (0.029)
Has Coresident Children	0.015 (0.015)	0.033 * (0.015)	0.016 (0.015)	0.020 (0.015)	0.109 *** (0.032)	0.134 *** (0.033)	0.108 *** (0.032)	0.117 *** (0.032)	-0.017 (0.021)	-0.003 (0.022)	-0.017 (0.021)	-0.010 (0.021)
Level 2: Nation- Level Effects												
Culture												
% Family- Based Pers. Care for Agec	0.010 (0.005)	0.011 (0.005)			0.013 (0.010)	0.012 (0.008)			0.006 (0.005)	0.007 (0.005)		
Policy/Economics												
Public Pension Expenditure/GDP			0.043 (0.027)	0.052 (0.028)			0.039 (0.050)	0.013 (0.053)			-0.002 (0.026)	-0.032 (0.028)
Level 2*Level 1: Cross- Level Effects												
Culture*Activity-Related Ties												
Familism*1. Voluntary/Charity Work		0.003 * (0.001)										
Familism*2. Cared Sick/Disab. Adult										0.006 ** (0.002)		
Familism*4. Education/Training Event		-0.003 * (0.002)										
Familism*5. Sport/Social/Other Event						-0.005 * (0.002)						
Familism*6. Religious Org.						-0.006 ** (0.002)						

Table 4. Multilevel Results: Nation-Level Characteristics and Health (N=29,837)# (Continued)

	Poor SRH				Depressive Symptoms				Chronic Conditions			
	1B	1C	1D	1E	2B	2C	2D	2E	3B	3C	3D	3E
Culture*Family Network												
Familism*Married/Partnered					-0.005 *** (0.002)							
Familism*Monthly Contact w/ Parent		-0.003 *** (0.001)			-0.009 *** (0.002)					-0.004 *** (0.001)		
Familism*Has Coresident Children		-0.003 *** (0.001)			-0.004 * (0.002)					-0.002 * (0.001)		
Policy/Economics*Family Network												
Pensions*Monthly Contact w/ Parent				-0.026 *** (0.006)				-0.051 *** (0.014)				
Pensions*Has Children								0.051 ** (0.019)				0.042 ** (0.013)
Pensions*Has Coresident Children				-0.015 * (0.006)				-0.044 ** (0.014)				-0.035 *** (0.009)
Random Effects												
Level 1: Residual	0.925 *** (0.008)	0.924 *** (0.008)	0.925 *** (0.008)	0.925 *** (0.008)	4.339 *** (0.036)	4.329 *** (0.035)	4.339 *** (0.036)	4.334 *** (0.036)	1.943 *** (0.016)	1.941 *** (0.016)	1.943 *** (0.016)	1.941 *** (0.016)
Level 2: Intercept	0.038 * (0.021)	0.039 * (0.021)	0.07 ** (0.029)	0.071 ** (0.029)	0.036 (0.066)	0.230 ** (0.095)	0.233 ** (0.096)	0.235 ** (0.097)	0.035 * (0.020)	0.035 * (0.020)	0.059 ** (0.025)	0.061 ** (0.025)
% Family- Based Pers. Care for Age	0.000 (0.000)	0.000 (0.000)			0.001 (0.001)				0.000 (0.000)	0.000 (0.000)		
Model Fit Statistics												
AIC	82581.1	82572.8	82577.2	82564.9†	128638.2	128622.4†	128637.9	128622.9†	104678.4	104684.4	104674.5	104667.2†
BIC	82583.0	82574.7	82578.4	82566.2†	128640.1	128623.6†	128639.2	128624.1†	104680.3	104686.3	104675.8	104668.4†

Note: Standard errors shown in parentheses, *p<0.05; **p<0.01; ***p<0.001

† indicates AIC and BIC statistics are lower than those in Table 3, indicating improved model fit

All models include all covariates (age, age squared, female, foreign-born, lives in rural area, education, household income, is employed, pays for doctor visits, drinks

CHAPTER 4

PAPER 3

National Culture, Welfare State Generosity, and Individual Need: A Multilevel Analysis of European Older Adults' Preferences for Family- versus State-Based Care

A majority of European nations have experienced or will experience within the next five years a shift in their age structure, with national demographic compositions reflecting higher proportions of individuals aged 65 or older than ever before in history (NIA 2007). As older adults age, the need increases for nation-states to consider older adults' options for care. The most common sources of support for older adults come from either the family network, in the form of financial assistance, household maintenance, and personal care, or from the state, in the form of public pensions and public health care. Yet, due to various cultural and material influences, preferences for care in old age likely vary substantially cross-nationally. This variation is important to take into account because older adults' preferences for family- versus state-based care in old age shape the extent to which interactions with family network ties promote health (Chapter 3). Therefore, assuming that scholars, policy-makers, and families are interested in promoting older adults' long-term well-being, a fundamental goal of social research should be to better understand what contextual and individual factors influence older adults' preferences for care in old age. By exploring predictors of older adults' preferences for care, scholars can better understand the various cultural and material dynamics, at the national and individual-level, that shape

older adults' preferences for care in old age. With this knowledge, scholars will be able to recommend revisions to programs, policies, and family support plans that not only more comprehensively account for preferences, but also highlight areas of disjuncture between resources and preferences for care that may constrain individuals' well-being.

Why do older adults' preferences for care vary cross-nationally? In other words, what factors, such as cultural or material characteristics of the nation or individual, shape older adults' preferences for family- versus state-based support in old age? Classical sociologists have long-theorized about the influence of culture and material factors on cross-national variation (Marx and Engels 1845/2004, 1848/2011; Weber 1946/2002, 1949). Contemporary research fields, such as global development, social gerontology, and family demography, link culture and material concerns at the nation- and individual-level. These research fields highlight the role of cultural modernization/development and welfare state generosity on older adults' care options and preferences for care in old age. In addition, public policy research argues that heightened need at the individual-level, such as social disadvantage, is associated with stronger preferences for state-based provisions. Therefore, national and individual characteristics may shape older adults' preferences for care.

In addition, heightened individual-level need may interact with national factors to shape preferences. Few studies, however, examine older adults' preferences for family- versus state-based support and thus little is known about how older adults' preferences for care vary cross-nationally, what factors predict support preferences, and how this process is affected by individuals' social disadvantage. To address this gap in the literature, I

conceptualize individuals as nested within their national context (Marshall, In Press) and explore variation in preferences for care cross-nationally. Specifically, I examine national culture, national policy/economics, and individual-level indicators of need as predictors of older adults' preferences for family- versus state-based care by analyzing a multilevel, cross-national dataset of over 8,000 older adults nested within 14 European nations.

BACKGROUND

Culture as Values, Cultural Zones, and Culture-Based Support Preferences

Classic sociological theorist, Max Weber, defines culture broadly as "...a value-concept... we are cultural beings, endowed with the capacity and the will to take a deliberate attitude toward the world and to lend it significance" (Weber 1949:76). In other words, culture is a set of values. Contemporary studies of culture explore variation in cultural values cross-nationally and note that cultural differences shape cross-national outcomes. 'Modernization theory,' for example, posits that a nation's level of economic development is determined by its ability to cultivate "modernized" values emphasizing democracy and individualism (Coleman 1968; Inkeles and Smith 1974; Rostow 1961). Using individual-level data on a range of cultural values from over 95 nations, Inglehart and Welzel (2005) create a two-dimensional scale of global cultural values, ranging from less "modernized" (traditional, survival-oriented values) to more "modernized" (secular-rational, self-expressive values), and find that these axes coincide with cultural "zones"

cross-nationally, such as zones in Europe based upon Catholic versus Protestant heritage which emphasize the authority of the family versus individualistic values, respectively.

Cross-national variation in culture also emerges as a theme in social gerontological research exploring support options for older adults. Earlier gerontological theories posit that as nations modernize culturally, the status of older adults declines (i.e., 'modernization of aging theory'; Burgess 1960). In other words, individuals in "modernized" nations would cease to prioritize support for older adults. This emphasis on the declining status of the aged, however, ignores the complex relationship between culture and support cross-nationally. For example, recent empirical studies in social gerontology find evidence of a North-South divide in Europe, similar to the Catholic-Protestant contrast noted by Inglehart and Welzel (2005). Southern, Catholic nations, for example, culturally emphasize the traditional role of the family as the primary support system for older adults (Katz et al. 2003). Northern and Western Protestant nations, on the other hand, emphasize "modernized" values of rational individualism, yet rather than ceasing to support older adults all together, individuals in these nations tend to rely on state-based or privately funded support (Brooks and Manza 2006; Lipsmeyer and Nordstrom 2003). Therefore, global development and social gerontological literatures identify similar cultural distinctions in Europe, which appear to be associated with preferences for old-age support.

State-Based Material Influence and Economic Generosity

In contrast to the writings of Max Weber, Karl Marx and Fredrick Engels define culture as created by material factors: “The phantoms formed in the human brain are... sublimates of their material life-process, which is empirically verifiable and bound to material premises. Morality, religion, metaphysics, all the rest of ideology and their corresponding forms of consciousness, thus no longer retain the semblance of independence” (Marx and Engels 1845/2004: 47). According to Marx, material conditions are the primary determinants of cross-national variation. Further, culture can be created by those with material power (e.g., the government) or redefined by material need (e.g., inequality-inspired political revolutions; Marx and Engels 1848/2011).

Thus, although a nation’s values are strongly linked to its cultural heritage, material conditions, such as political-economic characteristics of the state, can also shape present values. Similar to Marx’s conceptualization of culture creation, global development scholars note that a nation state’s current material-based policy/economic traits can shape individual preferences. In their study of cultural zones, Inglehart and Baker (2000) and Inglehart and Welzel (2005) consider the material role of the state. Though they conclude that traditional cultural orientations (e.g., Catholicism) have a persistent, long-term effect on modern cultural values, the authors also find that a nation’s cultural values are path-dependent, or “shaped by its entire economic and historical heritage (Inglehart and Baker 2000:32). For example, Inglehart and Welzel (2005) identify a cultural zone in Europe defined by nation-states’ political-economic pasts—the post-Communist cultural zone. In

these nations, the powerful influence of radical communist policies and post-war economic isolation created a long-lasting cultural effect, with individuals in these nations continuing to place stronger cultural emphasis on economic and physical security compared to Southern or Northern Europe.

Nation-states with stable economies and more productive labor forces are also more likely to have the material capacity to support their populations through state-based economic provisions. For example, Esping-Andersen's (1990) typology of welfare states focuses on the most developed nations of Europe, including classifications such as Liberal (e.g., Switzerland), Conservative (e.g., Austria, Belgium, Germany, France, and Italy), and Social Democratic (e.g., Denmark, Netherlands, and Sweden). Greece, Ireland, Spain and Eastern Europe remain unclassified because of their unique features, yet these nations also are considered less developed than those of Western and Northern Europe and may have less material capacity to provide welfare state support. Individuals in nations experiencing material strain express stronger support for welfare state policies (Blekesaune 2007; Finseraas 2009; Fraile and Ferrer 2005; Seva 2009). Therefore, a lack of welfare state generosity may be linked to stronger preferences for state-based support in old age.

Individual-Level "Need"

Although I view national culture and welfare state generosity as the primary forces that shape older adults' preferences for care in old age, individual-level material needs related to social structural disadvantage are also an important set of factors to consider.

Family demographers, such as Entwisle and colleagues (2007) define social structure as a combination of context and networks. In particular, these authors identify structural constraints to individuals at multiple levels of analysis. In this paper, I apply these authors' concept of social structure to indicators of individual-level disadvantage. Welfare state research also notes the importance of individual-level need in predicting preferences for welfare state policies. Hasenfeld and Rafferty (1989) find that those who are "economically and socially vulnerable," or experiencing some form of material need, function under a self-interest materialist model and thus are more likely to prefer support from the state.

For older adults, disadvantage takes the form of advancing age, poor health, low socioeconomic status, or a lack of family network availability. For example, public policy research finds that older individuals are more likely to support a range of state-based provisions, such as Social Security and public education (Goerres and Tepe 2010; Ponza et al. 1988). The association between age and preferences for state-based support may be due to older adults' interest in their own well-being with age (Ponza et al. 1988) or due to intergenerational altruistic concern for the well-being of their adult children and grandchildren (e.g., Europe; Goerres and Tepe 2010). Finally, the age effect could also reflect cohort or period effects, as these shifts are observed in other studies of sociopolitical attitudes (Danigelis, Hardy, and Cutler 2007). In addition to age, older adults in poor health and those with previous experience with informal support (i.e., have previously received informal support) may prefer state-based care over family, as the former type of care tends to be more formalized and provides access to medical care. Finally, older adults who do not

possess a strong family network (e.g., unmarried, no children living nearby) may have a greater need for state-based support and thus may express preferences in favor of state-based care in old age (Pinquart and Sörensen 2002). Empirical evidence supports the theorization that individual disadvantage is linked to support for state-based provisions (Chappell 1985; Daatland 2001; Daatland and Herlofson 2003; Motel-Klingebiel, Pinquart and Sörensen 2002; Reher 1998; Tesch-Roemer, and von Kondratowitz 2005). Therefore, these measures of individual-level need may directly enhance state-based preferences.

In addition to the direct effect of need, political economy of aging scholar Isabella Aboderin (2004, 2006) finds evidence that heightened material need may reframe national normative culture. Exploring a case study of Ghana, Aboderin examines the effect of mounting economic disadvantage on family norms. Although the normative culture in Ghana is one of mandated familism (e.g., families support older parents in all cases), financial pressure forces adult children to choose between the needs of their young children and their aging parents. Aboderin finds that this pressure creates an interesting cultural outcome. Familistic preferences adjust to financial strain. In Ghana, the norm of familism became slightly “weakened,” allowing adult children to make exceptions to the norm if aging parents were completely unsupportive of their children earlier in the life course, for example. Although Aboderin examines familistic norms among adult children and does not address the preferences of older family members or the role of national policy (as Ghana is not a welfare state), this case study still offers a useful example for exploring the ways in

which heightened individual need may interact with national factors to shape preferences for elder support. It is possible that a similar effect may occur in Europe.

SYNTHESIS, RESEARCH QUESTIONS, AND HYPOTHESES

Drawing from classical and contemporary perspectives on cultural values and material need, I combine literature on global development, social gerontology, and welfare state provisions to explore predictors of older adults' preferences for care in old age. Specifically, I view older adults as nested within their national cultural values, current welfare state conditions, and individual-level needs (e.g., age, health, socioeconomic resources, and informal network availability) and assess the extent to which these factors explain older adults' preferences for care in old age. This approach allows me to posit the mechanisms that connect the individual-level and nation-level. As individuals age within nations from birth to death, they are often socialized in light of their national culture and policy/economic structure. The effect of these socializing aspects, however, may differ for individuals experiencing social disadvantage in the form of individual-level need such as old age, poor health, low income, unemployment, need for informal support, and lack of family availability (e.g., a cross-level interaction effect). Specifically, individual-level need may weaken preferences for family-based support and strengthen preferences for welfare state provisions. Overall, very little research to date has explored older adults' preferences for care in old-age. Those studies that investigate this topic are limited to a few comparative

nations (Pinquart and Sörensen 2002) and do not incorporate a broad conceptualization of national cultural values and welfare state generosity.

In this study, I specifically ask: To what extent are national culture (e.g., “modernized” values) and national economic considerations (e.g., welfare state material generosity) associated with European older adults’ preferences for family-based (versus state-based) support in old age? In addition, is individual-level material need, such as income or family availability, associated with preferences for support family-based support in old age? Finally, does individual-level need alter the relationship between national cultural/economic characteristics (e.g., “modernized” values and welfare state generosity) and older adults’ preferences family-based support in old age?

Based upon the literature, I suggest the following hypotheses regarding older adults’ preferences for support in old age. *Hypothesis 1*: “Modernized” nation-level cultural values are directly associated with weaker preferences for family-based support in old age. Specifically, drawing from the work of Inglehart and Welzel (2005), I hypothesize that national secular-rational (versus traditional) cultural values and self-expressive (versus survival-oriented) values are both associated with weaker preferences for family-based support (and stronger preferences for state-based support). *Hypothesis 2*: Low nation-level welfare state generosity is directly associated with weaker preferences for family-based support and stronger preferences for state-based support. Specifically, lower national expenditures on public pensions and public health are associated with weaker preferences for family-based support and stronger preferences for state-based support. *Hypothesis 3*:

Individual-level “need” is associated with weaker preferences for family-based support and stronger preferences for state-based support. In particular, older individuals with declining health status, who have received informal support in the past, and have a lack of family availability are all more likely to prefer state-based support and less likely to prefer family-based support. *Hypothesis 4:* Individual-level “need” interacts with nation-level cultural values and welfare state generosity. Specifically, although I hypothesize that traditional, survival-oriented values (as opposed to “modernized” values) are directly associated with stronger preferences for family-based care, this effect may be weakened when there is a high degree of individual-level need. In addition, the relationship between national material need (i.e., low welfare state generosity) and decreased support for family-based care in old age may be strengthened in the case of high individual-level need.

DATA

In order to explore these research questions and hypotheses, I create a cross-sectional, multilevel dataset of older adults nested with nations from a variety of sources. Individual-level data including older adults’ preferences for care and individual-level need are drawn from the Survey of Health, Ageing, and Retirement in Europe (SHARE)⁶. The

⁶ This paper uses data from SHARELIFE release 1, as of November 24th 2010 or SHARE release 2.3.1, as of July 29th 2010. The SHARE data collection has been primarily funded by the European Commission through the 5th framework programme (project QLK6-CT-2001- 00360 in the thematic programme Quality of Life), through the 6th framework programme (projects SHARE-I3, RII-CT- 2006-062193, COMPARE, CIT5-CT-2005-028857, and SHARELIFE, CIT4-CT-2006-028812) and through the 7th framework programme (SHARE-PREP, 211909 and SHARE-LEAP, 227822). Additional funding from the U.S. National Institute on Aging (U01 AG09740-13S2, P01 AG005842, P01 AG08291, P30 AG12815, Y1-AG-4553-01 and OGHA 04-064, IAG BSR06-11, R21 AG025169) as well as from various national sources is gratefully acknowledged (see www.share-project.org/t3/share/index.php for a full list of funding institutions).

SHARE is a cross-national panel dataset of older adults (aged 50 and older) across 14 nations from multiple regions of Europe (Poland, Czech Republic, Spain, Italy, Greece, Germany, France, Austria, Belgium, Netherlands, Switzerland, Ireland, Sweden, and Denmark). I analyze individual-level data from the “drop off” survey subsample, which is randomly drawn from the full sampling frame for Wave 2 (2006-2007) and asks respondents about their preferences for care in old age.⁷ The second wave of SHARE contains the largest number of nations (N=14 in Wave 2 compared to N=11 in Wave 1, adding Poland, Czech Republic, and Ireland to the sample). Therefore, Wave 2 contains the most variation and the larger nation sample size permits multilevel modeling. Of the respondents that are eligible for analysis (i.e., aged 50 or above, not permanently residing in a nursing home, and completed the drop off survey items about preferences for care; N=9390), ten percent of respondents have missing data on one or more of the variables examined. A majority of these missing data are from Ireland, for which imputed values are not yet available.⁸ Not including Ireland, only four percent of the total sample is missing. I combine individual-level SHARE drop off survey data with nation-level data from four public sources. I examine cultural data from the World Values Survey and European Values Study, provided by Inglehart and Welzel (2005; WVS and EVS 1999-2001). Next, I draw from nation-level

⁷ Drop off survey data is still not publicly available for Greece in Wave 2 but is available in Wave 1. Because scores on preferences for family-based care in other nations remained very stable over the two year window between the waves, I included Greece’s data from Wave 1 (2004) as a proxy for preferences for family-based care in 2006/2007 rather than dropping this nation from the sample.

⁸ Ireland is the only nation in the sample without imputed values available for income and education, resulting in substantial missing data in Ireland’s drop off survey subsample for these measures (60 percent missing for income and 40 percent missing for education). Although it is likely that SHARE will address this limitation in future data releases, this issue has yet to be corrected. Therefore, I conduct sensitivity analyses and find that all results, including the interaction with income, remain with or without Ireland included.

welfare state data from the World Bank's World Development Indicators (WDI, 1990-2005) and the Organisation for Economic Co-Operation and Development (OECD, 2003-2005). The analytical sample after listwise deletion includes 8,572 older adults nested in 14 nations.

METHOD

Measurement

Dependent Variable: Older Adults' Preferences for Support in Old Age

For the dependent variable, I examine a continuum of older adults' preferences for family-based vs. state-based support in old age. Higher values indicate stronger preference for family-based support while lower values indicate stronger preference for state-based support. In order to construct this variable, I draw from three questions in the take-home survey asking: "In your opinion, who—the family or the State—should bear the responsibility for each of the following: a) Financial support for older persons who are in need?; b) Help with household chores for older adults who are in need such as help with cleaning, washing?; c) Personal care for older persons who are in need such as nursing or help with bathing or dressing?". Response options for each of these three questions include five response categories: 1) "totally family", 2) "mainly family", 3) "both equally", 4) "mainly state", and 5) "totally state". For each of the three questions, I collapse the response categories into three options: 0) "mainly state/totally state"; 1) "both equally"; and 2) "mainly family/totally family". In order to construct a scale measuring preference for a range of family-based care, each respondent receives a score of "preference for family-

based care in old age” based upon the sum of their responses to each of these three questions. With three categories of response to three items, the maximum score for family-based preference is six. Only respondents with full data on all three questions are included.

National-Level Independent Variables: Cultural Values and Welfare State

In order to empirically document variation in cultural values across the world, I draw from the Inglehart-Welzel scale of cultural values (Inglehart and Welzel 2005), which includes nation-level cultural values created from World Values Survey (WVS) and European Values Study (EVS) data. The Inglehart-Welzel scale is a two-dimensional scale of “modernized” culture (versus not “modernized” culture) and both axes range from -2.5 to 2.5. Higher values on either axis indicate more “modernized” culture. The first axis assesses secular versus traditional values. Secular values emphasize lower religiosity, national pride, and respect for authority as well as higher tolerance towards divorce and raising children with an emphasis on independence (traditional values emphasize the opposite such as authority, conservative family views, etc.). The second axis examines self-expressive values versus survival values. Self-expressive values emphasize the importance of individual liberty, choice in one’s life, and interpersonal trust as well as acceptance or tolerance of homosexuality and signing petitions (survival values emphasize the opposite, including authority as well as economic and physical security). General information regarding the construction of these scales is provided in Inglehart (1997) and Inglehart and Welzel (2005).

Multiple scholars validate the Inglehart-Welzel scale of cultural values (Inglehart and Welzel 2005, 2010; Pryor 2008) and the scale is endorsed by the World Values Survey.

In addition to national cultural values, I explore the role of welfare state generosity. Welfare state generosity is an important predictor to examine because it represents both capacity of the state as well as the support policies of the state, as indicated by the state's level of commitment to public provisions. I examine public pension expenditures and public health expenditures as proportions of each nation's gross domestic product (GDP), both of which are commonly used measures of welfare state generosity (Boeri et al. 2001; Buti, Franco, and Pench 2000; Pampel and Williamson 1988). Public pension expenditure data are from the Organisation for Economic Co-Operation and Development (average of available years, 1990-2005; OECD) and data on public health are from the World Bank's World Development Indicators (average of available years, 2003-2005; WB).

Individual-Level Independent Variables: Indications of "Need"

In order to address the concept of individual-level need, I examine factors that suggest disadvantage among older adults. These factors include age, poor health, socioeconomic need, previous receipt of informal support, and a lack of family availability. With the exception of income, all variables are coded so that higher values indicate higher

need. Age is measured in years⁹ and health need is measured through the presence of instrumental functional limitations (IADLs, 1=difficulty with one or more IADLs, 0=no difficulty with IADLs). Lower socioeconomic status is measured through three variables: 1) household total net income (ln, natural log); 2) whether or not the respondent pays for doctor visits (pays entirely or mostly for visits to a general practitioner, surgery, or inpatient/ outpatient rehabilitation; 1=yes, 0=no); and 3) whether or not the respondent is employed full time (1=not employed full time; 0=employed full time).

Recent receipt of informal support, which may indicate greater personal or practical need, is measured through two variables: 1) whether or not over the last year, the respondent received personal help (“personal care, e.g., dressing, bathing or showering, eating, getting in or out of bed, using the toilet”) from any family member from outside of the household, a neighbor, or spouse/partner (1=yes; 0=no); and 2) whether or not over the last year, the respondent received practical help (“practical household help, e.g., with home repairs, gardening, transportation, shopping, household chores”) from any family member from outside of the household, a neighbor, or spouse/partner (1=yes; 0=no). Finally, a lack of family availability is measured through three variables: 1) not married/partnered (e.g., dummy variables for divorced, widowed, or never married, reference category= married/partnered); 2) no proximal children living within five kilometers of the respondent, including no coresident children (1=no proximal children; 0=has proximal children); and 3)

⁹ Belgium and Denmark have particularly young average ages compared to the other nations in the sample (Table 2). This trend is also evident in the original drop off survey (i.e., it is not the result of biased listwise deletion in this analytical sample). To ensure that this difference is not driving the age effects and the age interactions, I test all of age effects with and without these two nations. All of the direct and interaction effects involving age remain.

no children (including natural, fostered, adopted, and step children of the respondent and/or their spouse/partner; 1=no children; 0=has children).

Individual-Level Covariates

In addition to individual-level measures of need, I control for other individual-level factors that may be related to preferences for care, such as gender (1=female; 0=male), education (ISCED-97), participation in a religious organization over the last month (1=yes; 0=no), foreign-born status (1=born in the country of residence; 0=born outside of the country of residence), and rural residence (1=lives in a “rural area/village” or a “small town”; 0=lives in a “large town”, “suburbs/outskirt of big city”, or a “big city”).

Analysis

To investigate the relationship between national culture, national welfare state generosity, and individual-level need with preferences for family-based support in old age, I perform multilevel modeling. Because older adults in this sample are nested within nations, individuals’ responses across nations are not independent of one another. Therefore, OLS regression methods are not appropriate. Multilevel modeling is a more theoretically and empirically accurate method of addressing my research questions because it takes into account the nested structure of the data, allowing for an accurate estimation of standard errors as well as coefficients (Raudenbush and Bryk 2002). Further, multilevel modeling

allows me to examine 'cross-level interactions' or the ways in the effects of country-level measures on preferences for support may change in the case of heightened individual need.

In this analysis, Level 2 refers to the nation-level and Level 1 refers to the individual-level (see simplified equations of the models below). All continuous independent and covariate variables in the models are grand-mean centered for ease of interpretation. In the first model, I examine the direct effect of national characteristics (Level 2) on old adults' preferences for family-based support in old age (Level 1) as indicated in the nation-level equation. Because the sample includes only 14 nations, I can only include one nation-level (Level 2) variable in the equation at a time. Therefore, I first test national cultural values then examine national welfare state generosity. In the individual-level equation, I examine the direct effect of individual-level need (Level 1) on preferences for family-based support in old age (Level 1). The residual error term is represented by r_{ij} and allows for variation among individuals across nations. For interpretation, I turn to the combined model equation that shows the combined effects of the nation-level and individual-level. In this equation, γ_{00} represents the intercept (mean) for individuals across all nations. Next, $\gamma_{01}(\text{National Cultural Values/Welfare State Generosity})_j$ represents the average effect of each national characteristic on average (intercept) preferences for family-based support. Finally, $\gamma_{10}(\text{Individual-Level Need})_{ij}$ represents the average effect of individual-level need on preferences for family-based support for the i^{th} person in nation j .

In order to test cross-level interaction effects, I include national measures in the β_{1j} nation-level equation. In the individual-level model this effect is represented by

$\beta_{1j}(\text{Individual-Level Need})_{ij}$, which accounts for the combined effect of β_{1j} and $(\text{Individual-Level Need})_{ij}$. Following this coefficient in the combined model, the cross-level interaction effect between national measures and individual-need is represented by $\gamma_{11}(\text{Individual-Level Need})_{ij} * (\text{National Cultural Values/Welfare State Generosity})_j$, which can be interpreted as the effect of individual-level need for the i^{th} person in nation j on the slope of national cultural values/welfare state generosity in nation j . I assume a normal error distribution for all models in this analysis.

Nation-Level (Level 2):

$$\beta_{0j} = \gamma_{00} + \gamma_{01}(\text{National Cultural Values/Welfare State Generosity})_j + u_{0j}$$

$$\beta_{1j} = \gamma_{10} + \gamma_{11}(\text{National Cultural Values/Welfare State Generosity})_j + u_{1j}$$

$$\beta_{2j} = \gamma_{20}$$

Individual-Level (Level 1):

$$Y_{ij} = \beta_{0j} + \beta_{1j}(\text{Individual-Level Need})_{ij} + \beta_{2j}(\text{Covariates})_{ij} + r_{ij}$$

Combined Model (Level 1 and Level 2):

$$Y_{ij} = [\gamma_{00} + \gamma_{01}(\text{National Cultural Values/Welfare State Generosity})_j + \gamma_{10}(\text{Individual-Level Need})_{ij} + \gamma_{11}(\text{Individual-Level Need})_{ij} * (\text{National Cultural Values/Welfare State Generosity})_j + \gamma_{20}(\text{Covariates})_{ij}] + [r_{ij} + (\text{Individual-Level Need})_{ij} u_{1j} + u_{0j}]$$

RESULTS

Descriptive and Bivariate

I will first review the results of the descriptive analysis, which examines descriptive statistics of all of the variables in the analysis, pooled across all 14 nations (Table 1). Next, I examine the means of all measures by nation in order to compare major differences and similarities cross-nationally (Table 2). I also provide a descriptive figure showing the distribution of nations along the two axes of culture (Figure 1A) as well as the two measures welfare state generosity (Figure 1B) in order to identify major national outliers in the sample. Second, I review the results of the bivariate analysis, which examines family-based preferences for care by cultural values (Figure 2) and welfare state generosity (Figure 3). Third, I describe the results from the multilevel analysis by examining the separate direct effects of national culture (Table 3, Models 1 and 2), national welfare state generosity (Table 3, Models 3 and 4), and individual-level indicators of need (Table 3; Model 5). I end with an examination of the full models that include national characteristics and individual-level indicators of need in the same model as well as cross-level effects, or interaction effects, between national characteristics and individual-level indicators of need (Table 5). I present interactions between national factors and individual-level need in Figures 4 and 5.

Descriptive statistics of all variables for the pooled, total sample show that the average score for preferences for family-based support in old age is three (with scores ranging from zero to six; Table 1). Scores for secular (vs. traditional) values and self-expressive (vs. survival) values for the nations in this sample range from nearly negative one

to nearly two, with higher values indicating more secular, more self-expressive values. Because the potential range of scores for 95 nations across the world ranges from -2.5 to 2.5 for each measure, this sample of European nations has slightly higher secular and self-expressive values than the world's average. Average national public pension expenditure is approximately either percent of GDP and average national public health expenditure is approximately six percent of GDP. Of individual-level variables of interest with regard to personal need, the average respondent is nearly 64 years old, reports needing assistance with fewer than one IADL, with a household total gross income from all possible sources of about ten natural log (ranging from zero to 19), does not pay for doctor visits, is not employed full time, does not receive personal or practical help, is married or partnered, and has children who live nearby.

Despite the fact that nations in this sample are all European, there is measurable variation between countries, as highlighted by the descriptive statistics by nation (Table 2). For example, preferences for family-based support in old age are highest in Eastern and Southern Europe (particularly, Poland and Greece, respectively). The lowest score of family-based preferences is in Northern Europe (particularly, Denmark). Average age across the nations ranges from 55 to nearly 66. Belgium and Denmark have particularly young samples from the take-home sample analyzed here (although their ages in the large sample are comparable to other nations). Swiss respondents have the fewest individuals with one or more IADLs (seven percent) compared to Polish respondents (27 percent). Respondents with the lowest proportion of older adults not employed full time and also with the highest

average gross household income reside in Denmark. Very few respondents report having received personal help (ranging from less than one percent in Denmark to five percent in Ireland) although the proportion who received practical help ranges from seven percent (France) to 32 percent (Czech Republic). The proportion currently divorced or widowed ranges from zero (in the smallest sample from Austria) to 11 percent divorced (Denmark) and 28 percent widowed (Ireland). Although a vast majority of all respondents have children, the proportion without children living nearby ranges from 11 percent (Czech Republic) to 36 percent (France).

Next, I turn to the descriptive figures that demonstrate the clustering of nations along the two axes of culture (Figure 1A) and two measures of welfare state generosity (Figure 1B). In Figure 1A, higher scores on both axes indicate more secular, self-expressive values. Here, the distribution of nations clusters around similarities in culture (consistent with the Inglehart-Welzel map of cultural clusters; Inglehart and Welzel 2005). Northern and Western European nations (Sweden, Denmark, Netherlands, and Switzerland) cluster in the upper right corner of the grid, consistent with their location in Protestant Europe. Similarly, traditionally Catholic European nations of Southern Europe (Greece, Italy, and Spain) and Western Europe (Belgium, France, and Austria) as well as the former Communist European nations of Eastern and Western Europe (Czech Republic, Germany) also cluster together. The two outliers on this two-dimensional scale are Poland and Ireland. Poland's relatively high traditional values and survival values (compared to the other 13 nations in

the sample) and Ireland's relatively traditional culture, combined with high self-expressive values distinguish these nations.¹⁰

In Figure 1B, I examine national patterns in welfare state generosity. Welfare state generosity measures show a rough clustering of nations around the welfare state typologies of Esping-Andersen (1990). With high welfare state generosity on both measures, nations classified as Conservative welfare states cluster together in the upper right corner (France, Germany, and Austria). Liberal and Social Democratic states cluster together towards the center of the graph with moderate spending on both measures. Unclassified states of Southern and Eastern Europe (Poland, Italy, and Greece) are characterized by higher public pension expenditures but lower public health spending, with Poland having the lowest spending on health in the sample. Finally, Ireland (also unclassified by Esping-Andersen 1990) acts as the most obvious outlier with moderate public health expenditures but very low public pension expenditures.

Turning to the bivariate results, I examine family-based preferences for care by each national characteristic. Preferences for family-based care by national culture reveal an unsurprising pattern (Figure 2). Secular nations with self-expressive values tend to express lower preferences for family-based care (e.g., Sweden, the Netherlands, and Denmark are clustered at the extreme of this trend in the bottom right; Figure 2A, 2B). At the opposite

¹⁰ It should also be noted that although Ireland experienced economic setbacks throughout the 20th century, the nation as a whole underwent very recent, rapid economic development in the last decade of the 20th century, earning it the nickname 'Celtic Tiger' (Murphy 2000). This rapid shift in development, combined with traditional, Catholic beliefs, familistic tendencies makes Ireland a unique case study in the European Union. Although a thorough discussion of the implications of these factors on Ireland's specific case is beyond the scope of this particular study, it is an important topic to consider in future research (see Chapter 5).

extreme, Poland and Ireland are the most traditional and have the highest preferences for family-based care (Figure 2A). Bivariate results of preferences for family-based care by welfare state generosity are less clear. Although public pension expenditures and preferences for care appear to follow a rough pattern wherein higher public pension spending is linked to higher preference for family-based care, there are numerous exceptions to this trend that do not appear to cluster in a meaningful way. Further, preferences for family-based care by public health expenditures tend to cluster around the mean (Figure 3B). In both graphs of preferences for care by welfare state generosity, however, the Netherlands, Denmark, and Sweden cluster together as do Greece and Poland. Across all descriptive and bivariate results, Ireland, Poland, and Denmark are the most unique nations in the sample (due to their distinct cultural value combination and welfare state generosity measures). Therefore, these cases may create skewed results with such a small sample of nations (Van der Meer, Te Grotenhuis, and Pelzer 2010). To take this potential bias into account, I perform sensitivity tests for all models with and without these outlier nations. Although I do not present full results from the outlier diagnostics, I will discuss those countries identified as potential outliers.

Multilevel

Nation-Level and Individual-Level

Turning to the multilevel regression results, I begin with a description of the direct, separate effects of national culture, national welfare state generosity, and individual-level

indicators of need. In Table 3, I predict individual-level preferences for family-based care in old age using national cultural values (Models 1 and 2), national welfare state generosity (Models 3 and 4), and individual-level “need” (Model 5). All models are adjusted for covariates. Secular cultural values are not statistically significantly related to preferences for family-based care, although the coefficient is negative (Table 3; Model 1). Self-expressive cultural values are statistically significantly associated with a lower preference for family-based care (Model 2). Although measures of welfare state generosity are only marginally statistically significant ($p < 0.10$), they operate in opposite directions. Higher public pension spending is associated with stronger preferences for family-based care (Model 3) while higher public health spending is associated with weaker preferences for family-based care (and thus higher preferences for state-based care in old age). Individual-level indicators of need (Model 5), such as age and previous receipt of personal help, are statistically significantly associated with stronger preference for family-based care. However, poorer health (one or more IADLs), being currently divorced (versus married/partnered), and not having children living nearby are all statistically significantly associated with weaker preference for family-based care (and a thus stronger preference for state-based).

Turning to the model fit statistics and the proportion of variance explained by each set of variables, AIC and BIC model fit statistics indicate that Model 2 is the best fit to these data in Table 3. In other words, national self-expressive culture is the best predictor of variation in preference for family-based care in old age. In fact, individual-level indicators of “need” (Model 5) offer, relatively, the worst fit to these data with the highest AIC and BIC

model fit statistics. Within-nation variance decomposition indicates the proportion of the variation at the individual-level while between-nation variance decomposition indicates the proportion of variance at the nation-level variable. Across all models, a majority of the variance explained is at the individual-level (within-nation).

Moving to Table 4, I describe the results of the full models, which include national predictors and individual-level predictors in the same model as well as cross-level interaction effects between national characteristics and individual-level need. In Table 4, Models including the designation “A” (Models 1A, 2A, 3A, and 4A) are full models that include nation-level predictors with the addition of all individual-level indicators of “need.” As in Table 3, all models in Table 4 also contain all covariates. At the nation-level, secular values are still not associated with preferences for family-based care (Model 1A). Consistent with Table 3 (Model 2), higher self-expressive values are statistically significantly associated with lower preference for family-based care in old age even after taking into account the effects of individual-level “need” (Table 4; Model 2A). The effects for welfare state generosity remain, with both measures being only marginally associated with preferences for care in the same direction as in Table 3. Individual-level indicators of “need” remain virtually unaffected by the addition of nation-level measures. Age, IADLs, receipt of personal help, being divorce (versus married/ partnered), and having no children living nearby remain consistently statistically significantly associated with preferences for family-based care. In other words, self-expressive culture and individual-level “need” are both directly associated with preferences for family-based care, net of the effects of the other.

Cross-Level Effects

Cross-level interaction effects between the national characteristics and individual-level need are displayed in Table 4 and are indicated by models with the designation “B” (Models 1B, 2B, 3B, and 4B). I display only statistically significant cross-level interaction effects in the table. For ease of interpretation, I present the cross-level interaction effects in graphical form (Figures 5 and 6). In addition, although Table 4 displays numerous interaction effects, I conservatively graph only those interactions that are not sensitive to the inclusion of outliers (i.e., those effects that remain with or without outliers included).

Figure 5 displays cross-level interactions between age and national cultural values. In the full model, individuals in nations with stronger secular (Figure 3A), self-expressive (Figure 5B) values have weaker preferences for family-based care. The slope of this line, however, differs by age. In a sample of individuals aged 50 and older, the association between secular and self-expressive values and weaker preference for family-based care is strongest among younger older adults (I will explore the meaning of this finding for age versus cohort further in this discussion section). In other words, younger individuals in nations with more “modern” values are the most likely to express low support for family-based care. Figure 6 illustrates the cross-level interactions between socioeconomic “need” and national welfare state generosity. In Figure 6A, individuals in nations with higher public pension expenditures also express stronger preferences for family-based care. In nations with low public pension expenditures, preferences for family-based care are particularly

stronger for respondents who are not employed full time. In nations with high public pension expenditures, however, it is the opposite—respondents who are not employed full time are less likely to prefer the family (and more likely to prefer the state). Finally, Figure 6B displays the interaction between public health expenditures and income. High public health spending is generally associated with lower preferences for family-based care. Yet, this effect is particularly strong for individuals with lower household income. Examining the effect of socioeconomic “need” in both graphs as measured through a lack of full-time employment and lower income (Figure 6A, 6B), those with greater socioeconomic need in nations with high welfare state generosity have weaker preferences for family-based care and stronger preferences for state-based. I discuss the meaning of these findings below.

DISCUSSION

Self-Expressive National Culture

Studies of public opinion toward the welfare state typically focus on nation-level and individual-level measures of economic need. Global development scholars, however, have highlighted the importance of considering “modernized” national cultural values and social gerontologists emphasize the regional variation in familistic versus non-familistic cultures. In this study, I examine the direct effects of national culture on older adults’ preferences for care in old age. I find partial support for my first hypothesis. “Modernized” culture, measured as high self-expressive values, is strongly and directly associated with older adults’ preferences for care, even after controlling for nation-level welfare state generosity

and individual measures of “need.” Specifically, older adults in nations with a strong self-expressive culture are significantly less likely to prefer family-based care and more likely to prefer state-based care.

Before I continue to interpret the role of culture, I consider alternative mechanisms that may be omitted from the analysis. Self-expressive values are theoretically intricately connected to national development (Inglehart and Baker 2000). Therefore, in addition to the nation-level variables presented in the tables, I perform additional tests of commonly used nation-level economic and development-related variables to ensure that the findings of this analysis are not simply reflections of broad development (results not presented but are discussed below). Specifically, I examine the association between preferences for care and nation-level wealth (GDP, PPP, constant 2005 dollars; World Bank, averaged from available years 1990-2005), broad social-economic development (inequality-adjusted Human Development Index; United Nations for the only available year, 2010), and income inequality (Gini Coefficient, United Nations, 2008). Of these factors, only one measure of development has a statistically significant direct association with preferences for care: the inequality-adjusted Human Development Index (HDI). Like self-expressive values, broad social economic development (HDI) is associated with weaker preferences for family-based care and also interacts with age. Indeed, self-expressive values and development (HDI) are highly correlated ($0.85, p < 0.001$). Yet, a comparison of models using self-expressive values versus development (HDI) reveals that cultural values have a stronger coefficient and explain more of the variation in preferences for care than development (as indicated by

smaller model fit statistics; AIC=32366.8, compared to AIC=32375.4). Therefore, self-expressive values may be a more accurate reflection of the nation-level forces potentially “driving” older adults’ preferences for care, compared to national development.

Having provided some basic evidence that suggests the associations between self-expressive values and preferences for care may reflect “culture” and not just development, I consider the role that culture plays in preferences for care and support options. One of the most important findings of this analysis is that older adults’ preferred support options are shaped by their cultural identities. For example, filial ties remain strong in Southern and Eastern Europe and traditional, survival values are more common. Also in Southern and Eastern Europe, coresidence is high, children are more likely to live near their aging parents, and both parents and children expect to rely on one another for support. Although these states have the support of an at least moderately generous welfare state, they prefer the help of family to state-based care. In fact, older adults’ preferences for family care in these nations remains strongly associated with national cultural values, net of individual-level needs such as advancing age, poor health, lower socioeconomic conditions, receipt of support, and lack of family availability. In other words, even though individual-level material need may also be an important factor (which I will discuss shortly), the relationship between less “modernized” values and stronger preferences for family-based care is clear.

The Complex Nature of the Welfare State

Although national culture is directly associated with older adults' preferences for care, welfare state generosity is not. Associations between welfare state generosity and preferences for care are marginal, but they also appear to reflect something more complex than simply national material resources. For example, public pension spending is related to family-based preferences while public health spending is related to state-based preferences. It may be that these variables are capturing patterns beyond just state generosity. For example, although more traditional nations prefer family-based care, they also tend to have relatively strong public pension support (e.g., Poland, Italy, and Greece). The most culturally "modernized" (secular, self-expressive oriented) nations, on the other hand, have lower pension support and some are also experiencing a broad retrenchment of public pensions (e.g., Sweden, the Netherlands, and Denmark), although they retain relatively strong public health programs. Public health spending corresponds more closely to economic development and national wealth than does pension spending. As social gerontologists suggest, current retrenchments of welfare state policies related to pensions (and perhaps eventually public health) may be driven by ideological influences, such as neoliberalism. Neoliberalism is characterized by high levels of self-expressive values, which are also more likely to be found in less traditional nations that do not prefer family care. The complex association between culture/ideology and the welfare state may help explain the direction of associations between public pensions, public health, and preferences for

care. With this in mind, the results do not support my hypothesis that national welfare state generosity is directly associated with European older adults' preferences for care.

Individuals' Health and Family Needs

In addition to the distinct and direct relationship between national culture and preferences for care, individual-level indicators of need are independently associated with preferences. This finding offers partial support for my third hypothesis and theories of material self-interest. Specifically, poorer health status and a lack of family availability are both associated with lower preferences for family-based care. The presence of difficulties with instrumental activities of daily living (such as using a telephone, doing laundry, housekeeping, care for finances, and medication administration) is a type of declining health status that requires functional assistance from others. Even if an older adult lives in a nation where traditional values are high (and thus is more likely to prefer family-based care), the presence of this health limitation is directly associated with a lower preference for family-based support. Considering the association between poor health and preferences, combined with the effect of age, one gains an interesting view of the perspectives of older adults cross-nationally. Age, for example, is associated with a higher preference for family-based care, net of health status. If I interpret this finding to be the effect of advancing age (and not a cohort or period effect), then healthy older adults may welcome family-based care with age, while those approaching older ages may anticipate declines in health and thus consider more formalized support options, rather than just

family-based options. However, it is equally possible that this “age” effect actually reflects cohort differences between older and younger groups or period effects in the nation as a whole. I consider these possibilities in more depth in the next section.

In addition, family availability is a key resource for older adults across the nations in this sample. Older adults with a lack of family ties are, not surprisingly, less likely to prefer family-based support and more likely to desire state involvement. Like declining health status, a lack of family availability (e.g., divorce) is linked to lower preferences for family-based care, net of national characteristics. The same relationship holds for older adults who do not have children living nearby. Proximal children are a major resource for care in old age (Bengtson and Lowenstein 2003) and older adults without proximal children appear to be aware of this vulnerability through their expression of preference for state-based care rather than family-based. Again, by considering predictors of state-based support in light of predictors of family-based support, I reveal insight into the mechanisms shaping care preferences. Although low family availability is associated with state-based preferences, having received personal help from others is associated with stronger preference for family-based care. Due to the way this variable was asked, I cannot determine if help is from kin or non-kin, but it may be from either source. Therefore, if an older adult is receiving personal help from *someone*, then he/she may be less willing to endorse state-based support. Otherwise, under a family-based care system, older adults who are divorced and do not have children living nearby are at a clear, potentially long-term disadvantage.

National Factors Accentuated with Age and Socioeconomic Need

Finally, despite the direct effects of national self-expressive values and individual needs, individual-level need also appears to interact with national cultural values and welfare state generosity (Table 4; Figures 5 and 6). These findings offer partial support to my fourth hypothesis. Beginning with national cultural values, individuals in nations with more “modernized” (secular and self-expressive) cultures tend to have stronger support for state-based care (Figure 5). Yet, this relationship is particularly strong for younger individuals in the sample. Put another way, the observed association with age (which may suggest that people of older ages tend to have stronger family-based preferences) is not found in nations with more traditional, survival-oriented values. Only individuals in non-traditional nations experience a shift toward family-based care in older age groups.

One important potential explanation for this effect is that the association is not based upon advancing at age all and is, rather, a cohort effect resulting from period-related shifts in national values over time. Even in “modern” nations, younger cohorts (e.g., 50-60 years old), for example, are likely to have even *less* traditional values than older cohorts (e.g., 70-80 years old). Indeed, Inglehart and Baker (2000) note that “modern” values are on the rise in developed nations and thus younger cohorts have more exposure to those values than older cohorts, potentially ingesting and expressing that cultural influence for a greater proportion of their lives. This possible explanation makes even more sense when one considers the lack of age effect for individuals in not “modernized” (i.e., survival-oriented) nations, who have yet to undergo the post-industrial cultural shift. Although these cross-

sectional data do not allow me to empirically test this explanation, future waves of SHARE data will provide this opportunity. On the other hand, if the age effect found here is truly the result of advancing age, it may be that older adults in good health generally prefer family-based support and are more likely to express that preference when they live in a “modernized” nation.

Although welfare state generosity is not directly associated with preferences for care (the effects are marginally statistically significant), individual-level socioeconomic need appears to alter the relationship between welfare state generosity and older adults’ preferences for care (Figure 6). Public pension spending is linked to preferences for family-based support while public health spending is linked to state-based preferences. Yet, in nations with high pension or health spending and heightened individual socioeconomic need, the pattern is in the same direction: towards state-based care. Not being employed full time and being of lower income are both associated with a stronger preference for state-based care for individuals in nations with high welfare state generosity (both types of “need” are symbolized by the lighter of the two lines; Figure 6A and 6B). In nations with low welfare state generosity, the effect is actually opposite (though very slight), with heightened individual “need” associated with stronger preferences for family-based care.

This finding further underscores the importance of considering complex nature of the welfare state. Although many scholars conceptualize the welfare state as an economic/policy-based construct, the previous section noted the potential for state-based socialization. As some political scientists have argued, it may be that individuals’

perceptions about policies are influenced by the types of policies already in place (Mares and Carnes 2009). Unlike Aboderin's (2004, 2006) findings that extreme need weakens familism, individuals experiencing socioeconomic strain in combination with relatively weak state-based support continue to support normative family-based care. Individuals living weaker welfare states are already more apt to rely on family and thus intensify that preference when under strain. Those in generous welfare states rely more heavily on state support when financially strained. However, because all of the nations in this sample have some sort of welfare state option and experience far less individual financial strain than individuals in Ghana, the European case study likely provides an inadequate comparison to Aboderin's findings and does not reflect a similar extreme degree of national and individual financial disadvantage.

In addition, welfare state generosity models are unable to control for national culture and thus may simply reflect general "modernized" values. Therefore, I examine descriptive and bivariate data comparing self-expressive values and welfare state generosity across nations (Table 2; Figures 2 and 3). Self-expressive values do not correspond clearly to patterns of welfare state generosity. Sweden, for example, has the highest self-expressive values of the sample yet falls squarely in the middle of the range of welfare state generosity according to both measures. Likewise, Austria and France have the most generous welfare states in the sample but both are near the mean on self-expressive values. Poland is the only nation with very low self-expressive values and very low welfare state generosity. Yet, outlier analysis previously confirmed that the interaction effects presented here are present

with or without Poland in the sample. Therefore, although it is still possible that welfare state generosity may reflect some aspect of culture, the measures used here suggest that it is unlikely the case. Based upon empirical literature noting the effect of existing policy on individuals' preferences for policy, it is more likely the case that European aging adults turn to what they know best (the family or the state) in times of socioeconomic strain.

CONCLUSION

Although I have explored a number of arguments that I believe are informative in understanding the role of culture, material need, and the dual influence of these factors on older adults' preferences for care cross-nationally, this study contains important limitations. First, this study uses cross-sectional data and therefore any claims of causality are tentative and require future waves of SHARE to explore these topics longitudinally. Second, there may be unobserved factors within nations, such as local labor force conditions, that shape individuals' needs (Blome, Keck, and Alber 2009). Although this study does not directly address work force conditions, this consideration is intertwined with needs and support options across the life course and should be considered in future studies (Marshall 1995). Third, I chose national measures based upon relevant literature and data availability. It is possible that the variables explored here do not capture national and individual concepts perfectly. Self-expressive values, for example, reflect "modernized" values but do not directly assess perceptions of the family or the state. Similarly, there may be better ways to operationalize welfare state generosity. Future studies could combine age measures with

welfare state data longitudinally to create a score for each individual by nation, assessing the length of time each respondent was exposed to a particular welfare state policy.

Despite limitations, this paper provides important contributions to the literature on global development, social gerontology, family demography, and public policy. National cultural values are directly associated with older adults' preferences for care while welfare state generosity is not. Material need, it seems, is most important at the individual-level, where poor health status and a lack of family network availability reflect social disadvantage and thus are linked to preferences for state-based assistance. Finally, older adults' preferences for care are context-specific. Non-traditional, self-expressive values are spreading across Europe (Inglehart 2008) and therefore, younger individuals in "modernized" nations are more likely to favor state-based support. Older individuals in "modernized" nations, however, maintain a preference for family care. In all types of nations, socioeconomic disadvantage may cause older adults to gravitate towards convention by supporting the type of care that is already prominent in their country.

In conclusion, national culture, welfare state generosity, and individual disadvantage offer some explanation for why and how older adults' preferences for care vary cross-nationally. Preferences for family- versus state-based care in old age are likely primarily determined by cultural values. Yet, despite the age/cohort effect, individuals experiencing heightened socioeconomic need tend to gravitate towards state-based care. This need-based intensification of state-based preferences, however, applies mainly to older adults in strong welfare states. When facing low welfare state supports in combination with

individual need, older adults lean towards family-based support, which is likely the normative care type in weak welfare states. These findings highlight the importance of taking national culture and material influences, as well as individuals' needs, into account when designing policies, programs, or family care plans. Further, preferences for support in old age are not static nationally. Rather, these preferences vary depending on cultural context, current national support policies, and individual needs. This paper offers a first step towards addressing the diverse care preferences and care needs of older adults in a culturally, economically, and demographically transitioning world.

REFERENCES

- Aboderin, I. 2004. "Decline in Material Family Support for Older People in Urban Ghana, Africa: Understanding Processes and Causes of Change." *Journals of Gerontology Series B-Psychological Sciences and Social Sciences* 59:S128-S137.
- Aboderin, I. 2006. *Intergenerational Support and Old Age in Africa*. New Brunswick, NJ: Transaction Publishers.
- Bengtson, V. and A. Lowenstein, eds. 2003. *Global Aging and Challenges to Families*. New York, NY: Walter D. Gruyter, Inc.
- Blekesaune, M. 2007. "Economic Conditions and Public Attitudes to Welfare Policies." *European Sociological Review* 23:393-403.
- Blome, A., W. Keck, and J. Alber. 2009. *Family and the Welfare State in Europe: Intergenerational Relations in Ageing Societies*. UK: Edward Elgar Publishing.
- Boeri, T., A. Borsch-Supan, A. Brugiavini, R. Disney, A. Kapteyn, and F. Peracchi, eds. 2001. *Pensions: More Information, Less Ideology: Assessing the Long-Term Sustainability of European Pension Systems: Data Requirements, Analysis and Evaluations*. New York, NY: Springer.
- Brooks, C., and J. Manza. 2006. "Social policy responsiveness in developed democracies." *American Sociological Review* 71:474-494.
- Burgess, E. W. 1960. "Aging in western culture." Pp. 3-28 in *Aging in Western Societies*, edited by E.W. Burgess. Chicago, IL: University of Chicago Press.
- Buti, M., D. Franco, and L. R. Pench, eds. 2000. *The Welfare State in Europe: Challenges and Reforms*. UK: Edward Elgar Publishing.
- Chappell, N. L. 1985. "Social Support and the Receipt of Home Care Services." *The Gerontologist* 25:47-54.
- Coleman, J.S. 1968. "Modernization: Political Aspects." Pp. 395-402 in *International Encyclopedia of the Social Sciences (Volume 10)*, edited by D.L. Sills. Washington, DC: Free Press.
- Daatland, S. O. 2001. "Ageing, Families and Welfare Systems: Comparative Perspectives." *Zeitschrift Fur Gerontologie Und Geriatrie* 34:16-20.

- Daatland, S. O., and K. Herlofson. 2003. "'Lost solidarity' or 'changed solidarity': a comparative European view of normative family solidarity." *Ageing & Society* 23:537-560.
- Danigelis, N. L., M. Hardy, and S. I. Cutler. 2007. "Population aging, intracohort aging, and sociopolitical attitudes." *American Sociological Review* 72:812-830.
- Entwisle, B., K. Faust, R. R. Rindfuss, and T. Kaneda. 2007. "Networks and Contexts: Variation in the Structure of Social Ties." *American Journal of Sociology* 112(5):1495-1533.
- Esping-Andersen, G. 1990. *Three Worlds of Welfare Capitalism*. Oxford: Polity Press.
- European Values Study (EVS). 1999-2001. GESIS Data Archive, Cologne, Germany. Data File 1.1.0.
- Finseraas, H. 2009. "Income Inequality and Demand for Redistribution: A Multilevel Analysis of European Public Opinion." *Scandinavian Political Studies* 32:94-119.
- Fraile, M., and M. Ferrer. 2005. "Explaining the determinants of public support for cuts in unemployment benefits spending across OECD countries." *International Sociology* 20:459-481.
- Goerres, A., and M. Tepe. 2010. "Age-based self-interest, intergenerational solidarity and the welfare state: A comparative analysis of older people's attitudes towards public childcare in 12 OECD countries." *European Journal of Political Research* 49:818-851.
- Hasenfeld, Y. and J. A. Rafferty. 1989. "The Determinants of Public Attitudes toward the Welfare State." *Social Forces* 67:1027-1048.
- Inglehart, R. 1997. *Modernization and Postmodernization: Cultural, Economic, and Political Change in 43 Societies*. Princeton, NJ: Princeton University Press.
- Inglehart, R. 2008. "Changing values among western publics from 1970 to 2006." *West European Politics* 31:130-146.
- Inglehart, R., and W. E. Baker. 2000. "Modernization, cultural change, and the persistence of traditional values." *American Sociological Review* 65:19-51.

- Inglehart, R. and C. Welzel. 2005. *Modernization, Cultural Change and Democracy: The Human Development Sequence*. Cambridge, MA: Cambridge University Press.
- Inglehart, R. and C. Welzel. 2010. "Changing Mass Priorities: The Link between Modernization and Democracy." *Perspectives on Politics* 8(2):551-567.
- Inkeles, A. and D. H. Smith. 1974. *Becoming Modern*. Cambridge, MA: Harvard Univ. Press.
- Katz, R. et al. 2003. "Family Norms and Preferences in Intergenerational Relations: A Comparative Perspective." Pp. 305-326 in *Global Aging and Challenges to Families*, edited by V. L. Bengtson and A. Lowenstein. New York, NY: Walter D. Gruyter, Inc.
- Lipsmeyer, C. and T. Nordstrom. 2003. "East versus West: comparing political attitudes and welfare preferences across European societies." *Journal of European Public Policy* 10:339.
- Mares, I. and M. E. Carnes. 2009. "Social Policy in Developing Countries." *Annual Review of Political Science* 12:93-113.
- Marshall, V. W. 1995. "The Next Half-Century of Aging Research—and Thoughts for the Past." *Journal of Gerontology Social Sciences* 50B (3):S131-S133.
- Marshall, V. W. In Press. "Global Aging and Families: Some Policy Concerns about the Global Aging Perspective." In *Generation to Generation: Continuity and Discontinuity in Aging Families*, edited by M. Silverstein. Baltimore, MD: Johns Hopkins Univ. Press.
- Marx, K. and F. Engels. 1845/2004. *The Germany Ideology*, edited by C. J. Arthur. International Publishers, Inc.
- Marx, K. and F. Engels. 1848/2011. *The Communist Manifesto*. Tribeca Books.
- Motel-Klingebiel, A., C. Tesch-Roemer, and H.-J. von Kondratowitz. 2005. "Welfare States Do Not Crowd Out the Family: Evidence for Mixed Responsibility from Comparative Analyses." *Aging and Society* 25:893-882.
- Murphy, A. E. 2000. "The 'Celtic Tiger'—An Analysis of Ireland's Economic Growth Performance." Working Paper No 2001/16. Department of Economics, Trinity College, Dublin, Ireland. Robert Schuman Centre for Advanced Studies. European University Institute.

- National Institute on Aging (NIA). 2007. "Why Population Aging Matters: A Global Perspective." Public Report by the National Institutes of Health, US Department of Health and Human Services, and US Department of State.
- Organisation for Economic Co-Operation and Development (OECD). 1990-2005. Social Expenditure Database, ESDS International, University of Manchester
- Pampel, F. C. and J. Williamson. 1988. "Welfare Spending in Advanced Industrial Democracies, 1950-1980." *The American Journal of Sociology* 93(6):1424-1456.
- Pinquart, M. and S. Sörensen. 2002. "Older Adults' Preferences for Informal, Formal, and Mixed Support for Future Care Needs: A Comparison of Germany and the United States." *International Journal of Aging and Human Development* 54(4):291-314.
- Ponza, M., G. J. Duncan, M. Corcoran, and F. Groskind. 1988. "The Guns of Autumn?: Age Differences in Support for Income Transfers to the Young and Old." *The Public Opinion Quarterly* 52:441-466.
- Pryor, F. L. 2008. "Culture rules: A note on economic systems and." *Journal of Comparative Economics* 36:510-515.
- Raudenbush, S. W. and A. S. Bryk. 2002. *Hierarchical Linear Models: Applications and Data Analysis Methods*. Thousand Oaks, CA: Sage Publications, Inc.
- Reher, D. S. 1998. "Family Ties in Western Europe: Persistent Contrasts." *Population and Development Review* 24:203-234.
- Rostow, W.W. 1961. *The Stages of Economic Growth*. Cambridge, MA: Cambridge Univ. Press.
- Seva, I. J. 2009. "Local Contexts, Social Risks and Social Spending Preferences: A Multi-Level Approach." *Acta Sociologica* 52:249-262.
- Survey of Health, Ageing, and Retirement in Europe (SHARE). 2006/2007. Release 2.3.1, Mannheim Research Institute for the Economics of Aging (MEA), Mannheim, Germany. <http://www.share-project.org/>
- United Nations (UN). 2010. *Human Development Report: The Real Wealth of Nations: Pathways to Human Development*. <http://hdr.undp.org/en/statistics/hdi/>

Van der Meer, T., M. Te Grotenhuis, and B. Pelzer. 2010. "Influential Cases in Multilevel Modeling." *American Sociological Review* 75:173-178.

Weber, M. 1946/2002. *The Protestant Ethic and the Spirit of Capitalism*, translated by S. Kalberg. Los Angeles, CA: Roxbury Publishing Company.

Weber, M. 1949. "Objectivity in Social Science and Social Policy." Pp. 50-112 in *The Methodology of the Social Sciences*, edited by E. Shils and H. A. Finch. Washington, DC: Free Press.

World Bank (WB), World Development Indicators. 2003-2005. International Bank for Reconstruction and Development/ the World Bank. Washington D.C., 2006.
<http://data.worldbank.org/indicator/NY.GDP.PCAP.PP.KD>

World Values Survey (WVS). 1981-2008. Official Aggregate v.20090901, 2009. World Values Survey Association. Aggregate File Producer: ASEP/JDS, Madrid.
www.worldvaluessurvey.org

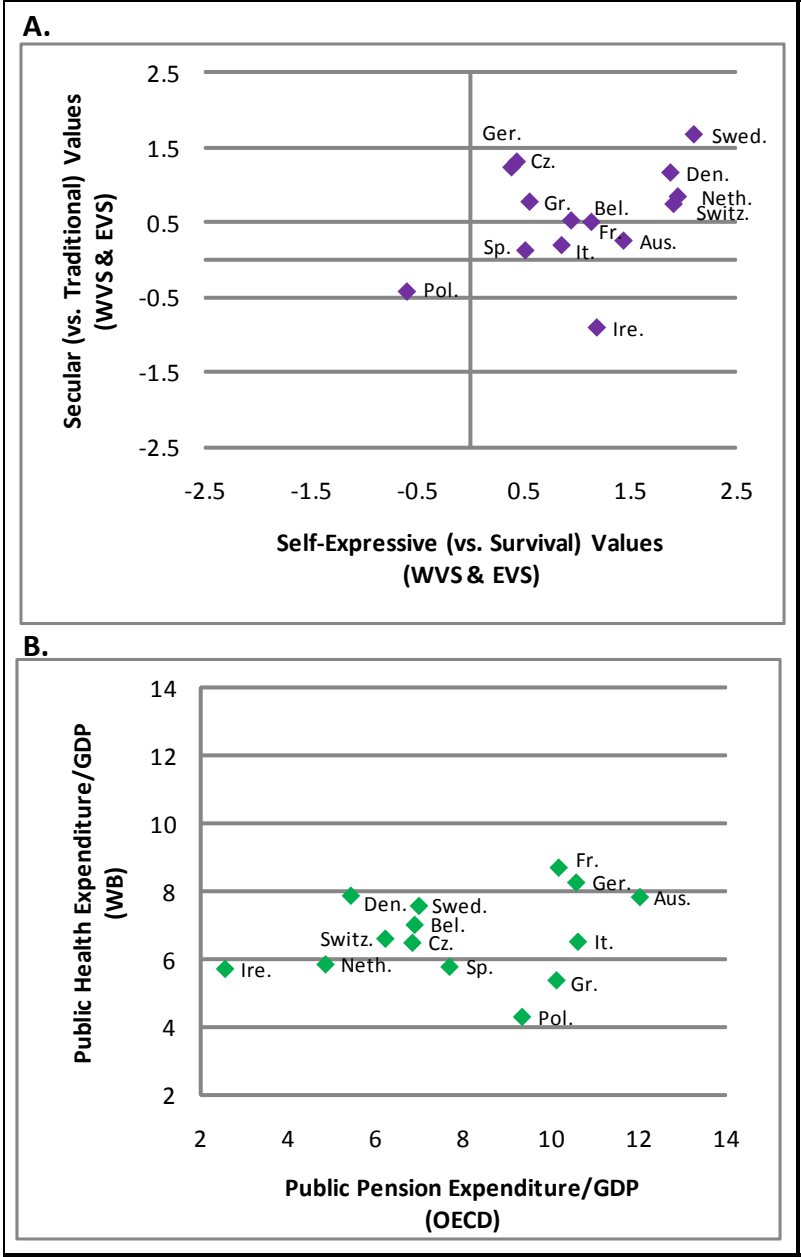


Figure 1. SHARE Countries by National Cultural Values and Welfare State Generosity

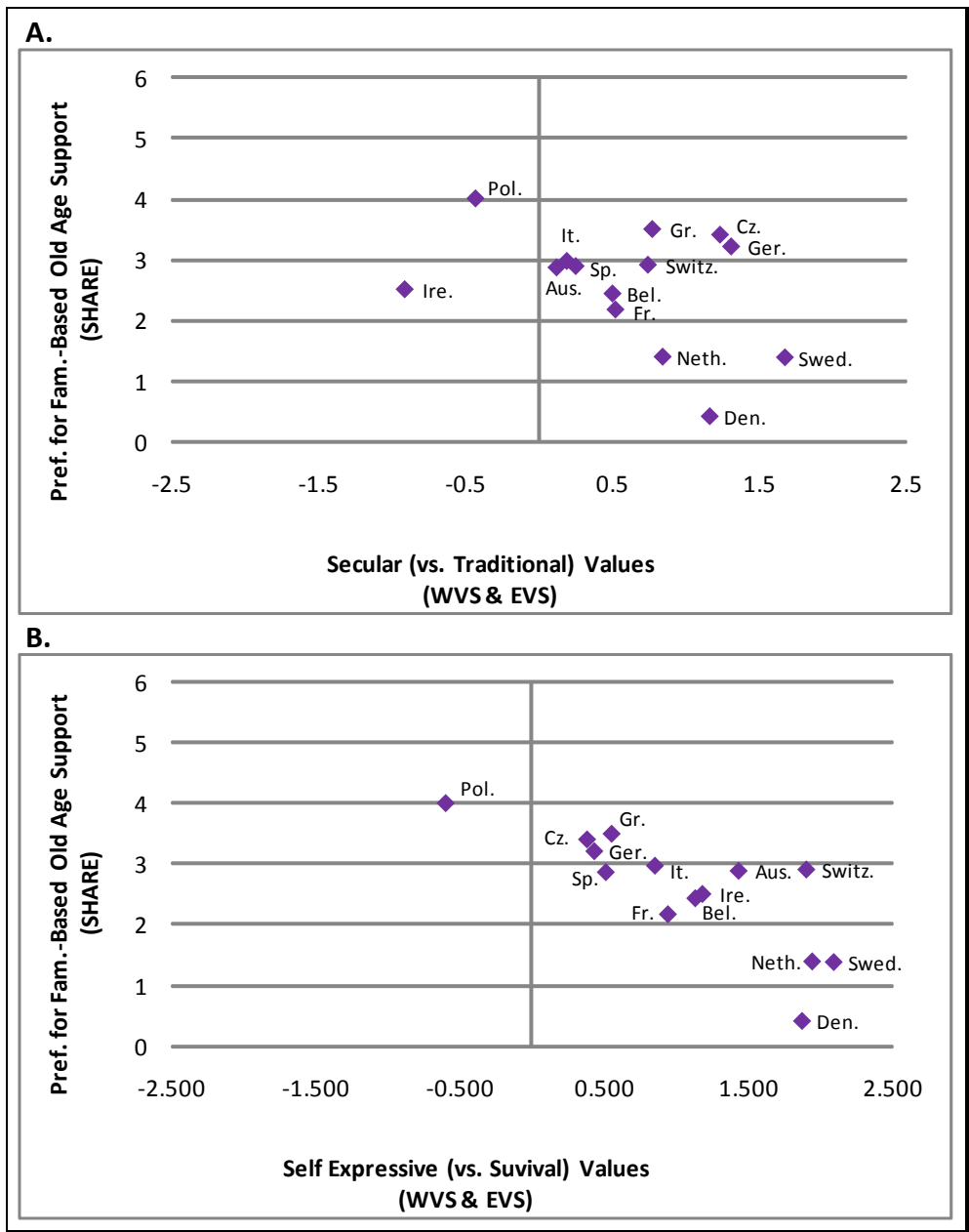


Figure 2. Preferences for Family-Based Care by National Cultural Values

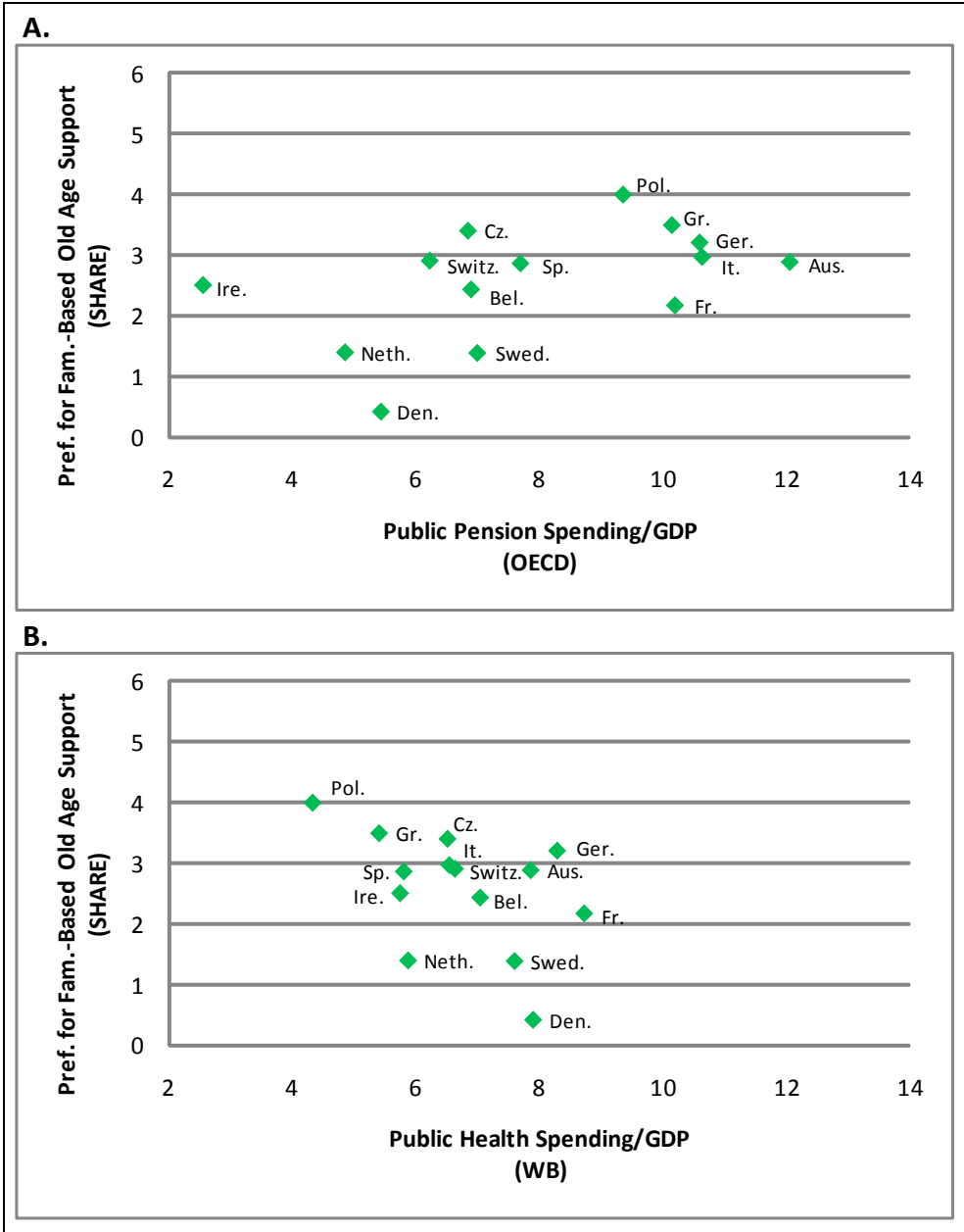


Figure 3. Preferences for Family-Based Care by Welfare State Generosity

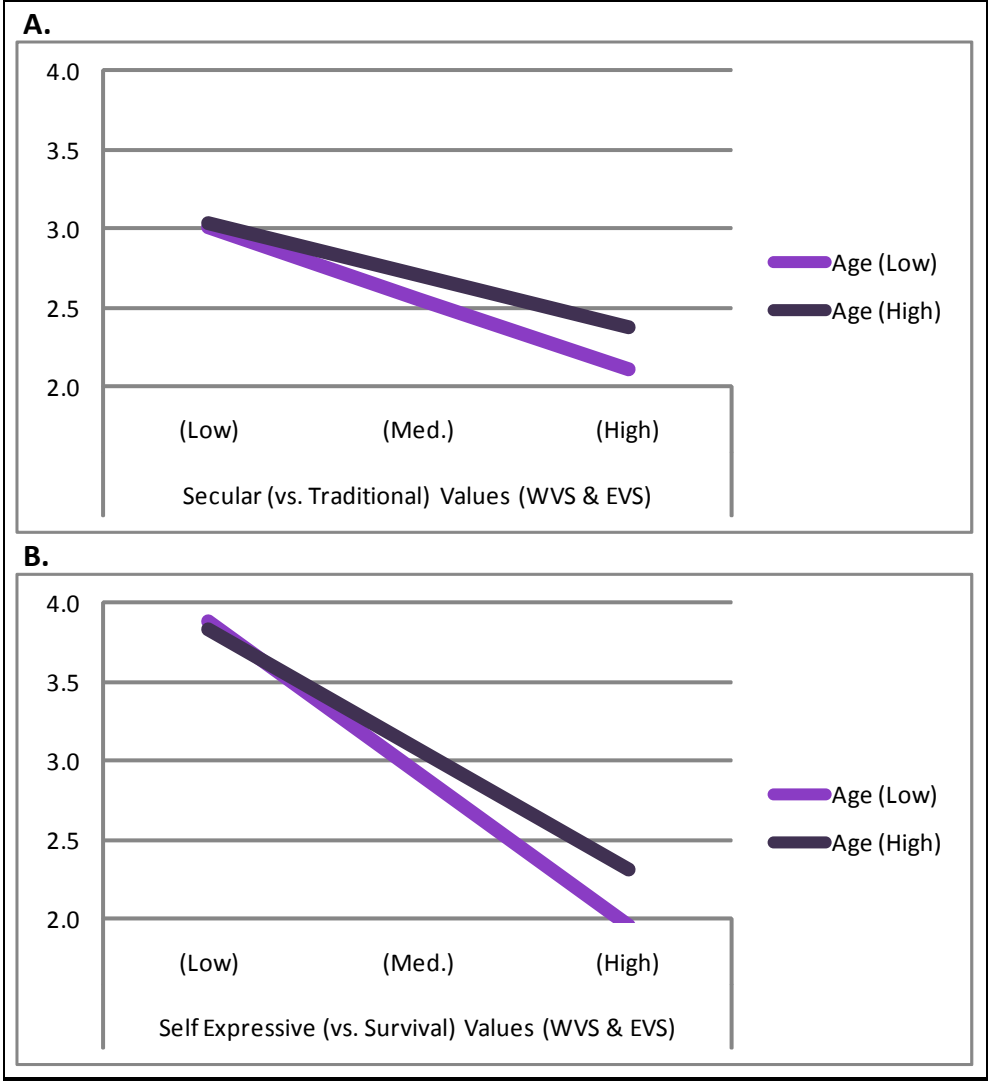


Figure 4. Age Moderating the Association between National Cultural Values and Preferences for Family-Based Care

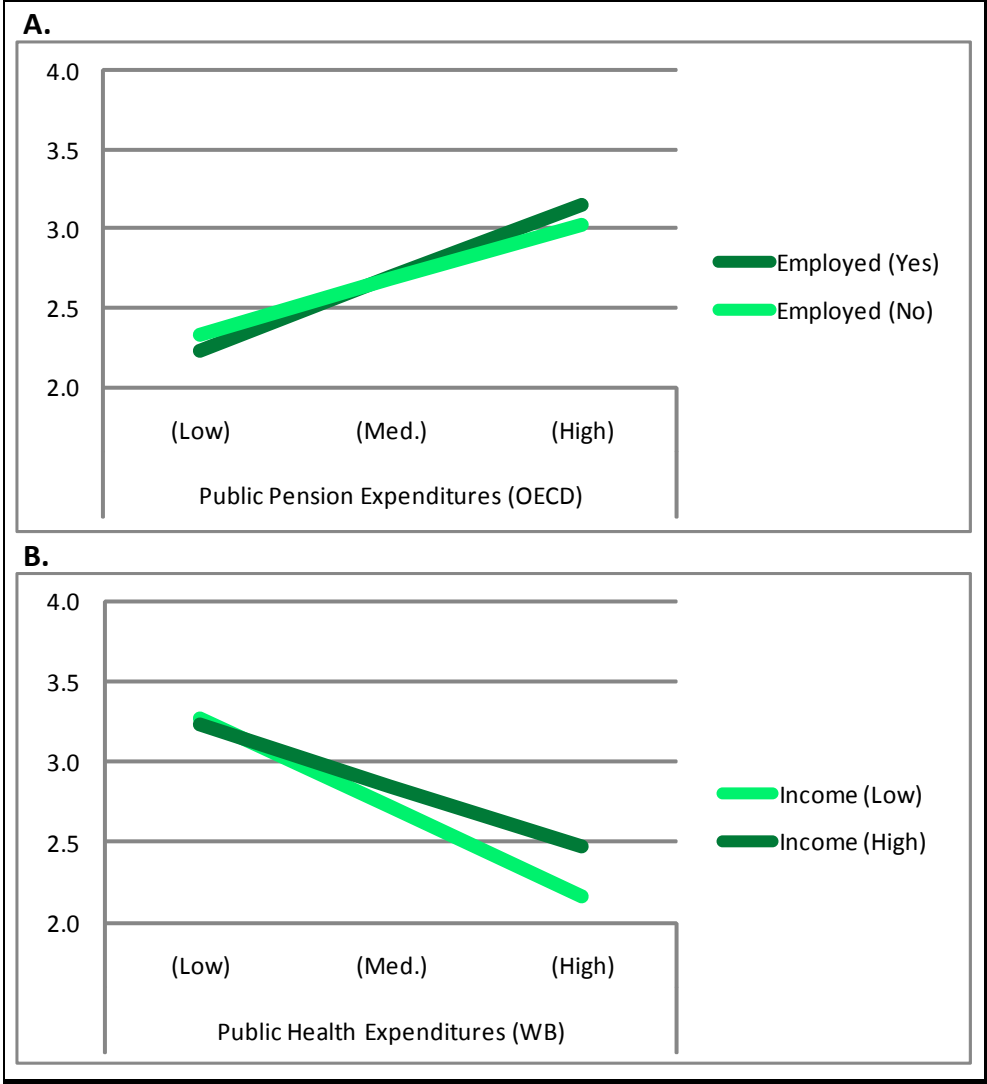


Figure 5. Socioeconomic Need Moderating the Association between National Welfare State Generosity and Preferences for Family-Based Care

Table 1. Descriptive Statistics of All Variables Pooled Across Nations

	Mean	S.D.	Min.	Max.
Dependent Variable (Individual-Level)				
Pref. for Fam.-Based Support (vs. State)	3.010	(1.804)	0.000	6.000
Level 2: Nation-Level				
Cultural Values				
Secular (vs. Traditional) Values	0.570	(0.671)	-0.910	1.670
Self-Expressive (vs. Survival) Values	0.680	(0.803)	-0.600	2.090
Welfare State Generosity				
Public Pension Expenditure/GDP	8.233	(2.159)	2.540	12.040
Public Health Expenditure/GDP	6.215	(1.274)	4.310	8.720
Level 1: Individual-Level				
Indications of "Need"				
Age	63.543	(9.870)	50.000	98.000
IADLs (1+)	0.164	(0.370)	0.000	1.000
Household Income (ln)	10.488	(1.790)	0.000	18.763
Pays for Doctor Visits	0.298	(0.457)	0.000	1.000
Not Employed	0.705	(0.456)	0.000	1.000
Received Personal Help	0.029	(0.168)	0.000	1.000
Received Practical Help	0.175	(0.380)	0.000	1.000
Divorced	0.055	(0.229)	0.000	1.000
Widowed	0.145	(0.352)	0.000	1.000
Never Married	0.037	(0.189)	0.000	1.000
No Children Nearby	0.204	(0.403)	0.000	1.000
No Children	0.085	(0.279)	0.000	1.000
Covariates				
Female	0.544	(0.498)	0.000	1.000
Education (ISCED)	2.542	(1.411)	0.000	6.000
Attends Religious Org.	0.128	(0.335)	0.000	1.000
Foreign-Born	0.067	(0.249)	0.000	1.000
Lives in Rural Area	0.294	(0.456)	0.000	1.000

Note: Descriptive statistics display unweighted results.

Table 2. Means of All Variables by Nation

	East		South			West						North		
	<i>Poland</i>	<i>Czech Rep</i>	<i>Spain</i>	<i>Italy</i>	<i>Greece</i>	<i>Germany</i>	<i>France</i>	<i>Austria</i>	<i>Belgium</i>	<i>Neth.</i>	<i>Switz.</i>	<i>Ireland</i>	<i>Sweden</i>	<i>Denmark</i>
	N=1459	N=1543	N=322	N=645	N=1397	N=425	N=602	N=68	N=86	N=437	N=668	N=319	N=365	N=236
Dependent Variable (Individual-Level)														
Pref. for Fam.-Based Support (vs. State)	3.995	3.399	2.860	2.966	3.492	3.205	2.168	2.882	2.430	1.391	2.904	2.502	1.381	0.411
Level 2: Nation-Level														
Cultural Values														
Secular (vs. Traditional) Values	-0.430	1.230	0.120	0.190	0.770	1.305	0.520	0.250	0.500	0.840	0.740	-0.910	1.670	1.160
Self-Expressive (vs. Survival) Values	-0.600	0.380	0.510	0.850	0.550	0.430	0.940	1.430	1.130	1.940	1.900	1.180	2.090	1.870
Welfare State Generosity														
Public Pension Expenditure/GDP	9.340	6.830	7.680	10.620	10.130	10.580	10.180	12.040	6.880	4.840	6.210	2.540	6.980	5.420
Public Health Expenditure/GDP	4.310	6.500	5.790	6.530	5.390	8.280	8.720	7.850	7.030	5.860	6.620	5.730	7.590	7.890
Level 1: Individual-Level														
Indications of "Need"														
Age	63.977	63.458	63.301	63.473	65.555	62.840	63.075	62.779	53.953	63.451	63.123	64.592	64.011	55.415
IADLs (1+)	0.273	0.157	0.161	0.133	0.186	0.108	0.138	0.191	0.093	0.162	0.069	0.163	0.085	0.076
Household Income (ln)	9.801	12.113	9.580	9.843	8.985	10.154	10.346	10.269	10.298	10.402	10.988	10.310	12.636	12.781
Pays for Doctor Visits	0.723	0.222	0.155	0.372	0.168	0.049	0.095	0.132	0.140	0.032	0.046	0.539	0.553	0.466
Not Employed	0.841	0.709	0.696	0.744	0.754	0.680	0.666	0.853	0.291	0.741	0.566	0.674	0.570	0.284
Received Personal Help	0.036	0.032	0.034	0.036	0.034	0.028	0.010	0.015	0.012	0.014	0.018	0.050	0.022	0.008
Received Practical Help	0.146	0.320	0.093	0.096	0.140	0.285	0.071	0.162	0.151	0.156	0.124	0.201	0.153	0.178
Divorced	0.024	0.093	0.012	0.019	0.039	0.061	0.080	0.000	0.105	0.066	0.091	0.019	0.060	0.106
Widowed	0.175	0.173	0.062	0.096	0.215	0.096	0.118	0.000	0.035	0.066	0.118	0.276	0.041	0.051
Never Married	0.029	0.021	0.093	0.043	0.047	0.031	0.043	0.015	0.035	0.027	0.057	0.013	0.038	0.038
No Children Nearby	0.114	0.163	0.208	0.143	0.192	0.278	0.360	0.338	0.198	0.261	0.298	0.150	0.312	0.212
No Children	0.054	0.057	0.140	0.090	0.103	0.115	0.100	0.059	0.093	0.089	0.174	0.000	0.079	0.055
Covariates														
Female	0.557	0.567	0.432	0.505	0.566	0.522	0.560	0.647	0.430	0.538	0.561	0.517	0.526	0.487
Education (ISCED)	2.238	2.519	1.873	2.107	2.006	3.482	2.739	2.941	3.256	2.897	3.165	3.138	2.751	3.742
Attends Religious Org.	0.091	0.044	0.050	0.050	0.314	0.092	0.075	0.118	0.023	0.133	0.139	0.370	0.096	0.064
Foreign-Born	0.023	0.046	0.040	0.012	0.019	0.174	0.184	0.103	0.151	0.034	0.174	0.110	0.101	0.042
Lives in Rural Area	0.190	0.305	0.273	0.216	0.450	0.393	0.239	0.235	0.221	0.341	0.202	0.251	0.274	0.462

Note: Descriptive statistics display unweighted results.

Table 3. Multilevel Results: Nation-Level Characteristics, Individual-Level Need, and Preferences for Family-Based Care (N=8,572)†

	Cultural Values		Welfare State Gen.		"Need"
	1	2	3	4	5
FIXED EFFECTS					
Level 2: Nation-Level					
Cultural Values					
Secular (vs. Traditional) Values	-0.523 (0.371)				
Self-Expressive (vs. Survival) Values		-1.016 *** (0.217)			
Welfare State Generosity					
Public Pension Expenditure/GDP			0.176 # (0.091)		
Public Health Expenditure/GDP				-0.362 # (0.198)	
Level 1: Individual-Level					
Intercept	2.503 *** (0.251)	2.869 *** (0.180)	2.568 *** (0.239)	2.685 *** (0.259)	2.564 *** (0.263)
Indications of "Need"					
Age					0.007 ** (0.002)
IADLs (1+)					-0.174 *** (0.051)
Household Income (ln)					0.018 (0.013)
Pays for Doctor Visits					-0.014 (0.044)
Not Employed					-0.005 (0.048)
Received Personal Help					0.215 * (0.108)
Received Practical Help					-0.020 (0.050)
Divorced					-0.165 * (0.078)
Widowed					0.014 (0.056)
Never Married					0.024 (0.111)
No Children Nearby					-0.147 ** (0.055)
No Children					0.055 (0.088)
RANDOM EFFECTS					
Level 1: Residual	2.526 *** (0.039)	2.526 *** (0.039)	2.526 *** (0.039)	2.526 *** (0.039)	2.518 *** (0.039)
Level 2: Intercept	0.866 ** (0.356)	0.351 ** (0.147)	0.767 ** (0.316)	0.787 ** (0.039)	0.936 ** (0.370)
Variance Decomposition					
Within-Nation	74.480	87.798	76.719	76.240	72.898
Between-Nation	25.520	12.202	23.281	23.760	27.102
Model Fit Statistics					
AIC	32362.1	32351.7	32363.4	32362.2	32379.2
BIC	32363.4	32353.0	32364.7	32363.5	32380.5

Note: Standard errors shown in parentheses, #p<0.10, *p<0.05; **p<0.01; ***p<0.001

† Models include all covariates (female, education, foreign-born, attends religious services, and lives in a rural area)

Table 4. Multilevel Results: Cross-Level Interaction Effects and Preferences for Family-Based Care (N=8,572)†

	<i>Cultural Values</i>				<i>Welfare State Generosity</i>			
	Secular Values*Need		Self-Exp. Values*Need		Public Pension*Need		Public Health*Need	
	1A	1B	2A	2B	3A	3B	4A	4B
FIXED EFFECTS								
<i>Level 2: Nation-Level</i>								
Cultural Values								
Secular (vs. Traditional) Values	-0.546 (0.370)	-0.585 (0.371)						
Self-Expressive (vs. Survival) Values			-1.023 *** (0.216)	-1.073 *** (0.215)				
Welfare State Generosity								
Public Pension Expenditure/GDP					0.177 # (0.091)	0.213 * (0.091)		
Public Health Expenditure/GDP							-0.364 # (0.199)	-0.367 (0.206)
<i>Level 1: Individual-Level</i>								
Intercept	2.563 *** (0.252)	2.588 *** (0.252)	2.932 *** (0.182)	2.964 *** (0.181)	2.629 *** (0.242)	2.644 *** (0.240)	2.746 *** (0.262)	2.739 *** (0.272)
Indications of "Need"								
Age	0.007 ** (0.002)	0.007 ** (0.002)	0.007 ** (0.002)	0.008 ** (0.002)	0.007 ** (0.002)	0.007 ** (0.002)	0.007 ** (0.002)	0.007 ** (0.002)
IADLs (1+)	-0.174 *** (0.051)	-0.160 ** (0.051)	-0.175 *** (0.051)	-0.145 ** (0.051)	-0.174 *** (0.051)	-0.172 *** (0.051)	-0.174 *** (0.051)	-0.163 ** (0.051)
Household Income (ln)	0.021 (0.013)	0.021 (0.013)	0.020 (0.013)	0.021 (0.013)	0.020 (0.013)	0.020 (0.013)	0.020 (0.013)	0.037 ** (0.014)
Pays for Doctor Visits	-0.015 (0.044)	-0.016 (0.044)	-0.017 (0.044)	0.005 (0.044)	-0.013 (0.044)	-0.006 (0.044)	-0.015 (0.044)	-0.014 (0.044)
Not Employed	-0.006 (0.048)	-0.027 (0.049)	-0.006 (0.048)	-0.037 (0.049)	-0.006 (0.048)	-0.017 (0.048)	-0.006 (0.048)	-0.023 (0.049)
Received Personal Help	0.215 * (0.108)	0.167 (0.109)	0.215 * (0.108)	0.240 * (0.108)	0.216 * (0.108)	0.216 * (0.108)	0.215 * (0.108)	0.227 * (0.108)
Received Practical Help	-0.020 (0.050)	-0.028 (0.050)	-0.021 (0.050)	-0.016 (0.049)	-0.020 (0.050)	-0.021 (0.050)	-0.020 (0.050)	-0.020 (0.049)
Divorced	-0.164 * (0.078)	-0.144 # (0.086)	-0.165 * (0.078)	-0.161 * (0.078)	-0.165 * (0.078)	-0.167 * (0.078)	-0.164 * (0.078)	-0.137 # (0.078)
Widowed	0.014 (0.056)	0.019 (0.057)	0.013 (0.056)	0.018 (0.056)	0.015 (0.056)	0.011 (0.056)	0.014 (0.056)	0.018 (0.056)
Never Married	0.025 (0.111)	0.012 (0.111)	0.023 (0.111)	0.010 (0.111)	0.024 (0.111)	0.015 (0.111)	0.024 (0.111)	0.040 (0.111)
No Children Nearby	-0.146 ** (0.055)	-0.132 * (0.056)	-0.146 ** (0.055)	-0.155 ** (0.055)	-0.147 ** (0.055)	-0.146 ** (0.055)	-0.146 ** (0.055)	-0.157 ** (0.055)
No Children	0.055 (0.088)	0.053 (0.088)	0.056 (0.088)	0.067 (0.088)	0.055 (0.088)	0.055 (0.088)	0.055 (0.088)	0.059 (0.088)

Table 4. Multilevel Results: Cross-Level Interaction Effects and Preferences for Family-Based Care (N=8,572)† (Continued)

	<i>Cultural Values</i>				<i>Welfare State Generosity</i>			
	Secular Values*Need		Self-Exp. Values*Need		Public Pension*Need		Public Health*Need	
	1A	1B	2A	2B	3A	3B	4A	4B
Level 2*Level 1: Cross-Level Interaction Effects								
Secular Values (vs. Trad.)*"Need"								
Secular*Age		0.009 ** (0.003)						
Secular*Pays for Doctor Visits		0.133 * (0.058)						
Secular*Received Personal Help		-0.449 ** (0.143)						
Secular*Divorced		-0.055 (0.142)						
Secular*Never Married		-0.080 (0.164)						
Secular*Widowed		0.166 * (0.076)						
Secular*No Children Nearby		-0.168 * (0.074)						
Self Exp. Values (vs. Surviv.)*"Need"								
Self-Expressive*Age				0.013 *** (0.002)				
Self-Expressive*Pays for Doctor Visits				0.158 ** (0.054)				
Public Pension*"Need"								
Public Pension*Not Employed						-0.052 ** (0.018)		
Public Health*"Need"								
Public Health*Age								0.005 *** (0.001)
Public Health*Household Income								0.031 ** (0.012)
RANDOM EFFECTS								
Level 1: Residual	2.518 *** (0.039)	2.509 *** (0.038)	2.518 *** (0.039)	2.508 *** (0.038)	2.518 *** (0.039)	2.516 *** (0.039)	2.518 *** (0.039)	2.513 *** (0.038)
Level 2: Intercept	0.858 ** (0.352)	0.855 ** (0.352)	0.347 ** (0.146)	0.342 ** (0.144)	0.771 ** (0.318)	0.758 ** (0.313)	0.790 ** (0.326)	0.852 ** (0.353)
Variance Decomposition								
Within-Nation	74.595	74.577	87.876	88.014	76.564	76.570	76.117	74.688
Between-Nation	25.405	25.423	12.124	11.986	23.436	23.143	23.883	25.213
Model Fit Statistics								
AIC	32377.2	32364.9	32366.8	32343.4	32378.7	32376.2	32377.4	32377.6
BIC	32378.5	32366.2	32368.1	32344.6	32379.9	32377.5	32378.7	32378.8

Note: Standard errors shown in parentheses, #p<0.10, *p<0.05; **p<0.01; ***p<0.001

† Models include all covariates (female, education, foreign-born, attends religious services, and lives in a rural area)

CHAPTER 5

CONCLUSION

“The inadequacy of much of the research on old age comes from its focus on what old people do rather than on the social conditions and policies that cause them to act as they do.”

(Estes 1979:11)

How does a multilevel theoretical conceptualization of macro-level national and meso-level individual social context, combined with empirical data on national and individual characteristics, offer insight into cross-national patterns of older adults' social activity networks, health, and preferences for care in old age? Why are the findings of this dissertation important for the study of aging cross-nationally? In this chapter, I offer an assessment of the findings of this project, the limitations of this approach, and future directions for research. Overall, this dissertation project offers a theoretical and empirical contribution to the fields of sociology and social gerontology by combining theoretical perspectives from multiple fields at the macro- and meso-level in order to empirically assess cross-national variation in older adults social lives, their health outcomes, and their preferences for care in old age. Substantively, the results from this study reveal the profound influence of national culture in shaping older adults' preferences for social

interaction and old-age support as well as the constraining role of national and individual economic disadvantage on older adults' opportunities for social and physical well-being.

CULTURALLY-DRIVEN SOCIAL NETWORKS AND CARE PREFERENCES

I begin with a discussion of the role of national cultural values in potentially shaping social activity network participation and preferences for family- versus state-based care in old age. In particular, I highlight the historic and modern role of traditional cultural values, the link between traditional values and family-based orientations, the social activity and care preferences of modernized nations, and potentially confounding correlates of culture, such as development.

Historic Traditionalism

Through historical comparisons, descriptive data, and multilevel analyses of the nations in this sample, a theme of historic traditionalism emerges. Consistent with the life course perspective's principle of historical time and place (Elder 1985), the nations of Europe, particularly those in Southern Europe, are still guided by traditional cultural values resulting from Catholic histories. Southern Europe, for example, expresses a high degree of traditional familism. This orientation places a high value on the family as the primary caretaker of older adults and a low emphasis on self-expressive individualism. Further, it is likely that these strong familistic values are reinforced by the Catholic traditions of these nations. Thus, Southern Europe demarcates a divide across the continent in terms of family

network ties and preferences for care. Older adults in these regions have high access to family network ties, as most are married and a substantial proportion have children living nearby (Chapter 2). Further, it seems as though individuals in traditional, familistic nations also expect and desire care from family (Chapter 4). These findings are consistent with the literature on regional familism, which notes that Southern European nations are more familistic in terms of their interactions and cultural expectations.

Newly Documented (and Explained) Variation

However, because this project uses the most recent wave of SHARE data that incorporated Eastern Europe and Ireland, I am able to offer new insights into the connection between national cultural norms, economic development, and support options for older adults by discussing new and unique European case studies. In particular, the three ‘newest’ nations in SHARE (Poland, the Czech Republic, and Ireland) all experienced economic and political post-war isolation that created traditional brew of national characteristics and family patterns. These nations, for example, have been economically disadvantaged compared to the rest of Europe for most of the 20th century, express strong familistic values, and have some of the highest rates of proximal children in the entire sample (in addition to Spain and Italy; Chapter 2). SHARE’s recent inclusion of these nations provides sample diversity that was unavailable in earlier waves of data. Results from these ‘newest’ nations point to the continued importance of examining differences beyond

region. I examine brief case study profiles of the Czech Republic and Ireland to demonstrate their regional outlier status and unique combination of cultural and economic features.

The Czech Republic, for example, has a cultural combination of traditionalism and secularism. Although Poland remained Catholic throughout the cold war, communist rule in the Czech Republic firmly discouraged religiosity, as reflected in the nation's high scores on secularism (Chapter 2, 4). Therefore, Czech Republic's "traditional" values are not religious values, but rather an emphasis on economic security and support for authority (i.e., survival values), a relatively low emphasis on self-expressive individualism, and a continued tradition of familism (Chapter 2). Despite being strongly secular, however, the Czech Republic is markedly similar to Poland and Ireland with regards to older adults' family tie availability (Chapter 2, 4). In this manner, the older Czech cohorts are rather traditional. Yet, since the fall of communism, the Czech Republic is experiencing rapid economic development due to private investments and education (Sobotka, Zeman, and Kantorová 2003), which has led to a demographic and cultural transition among the youngest cohorts. For example, the Czech Republic is beginning to present a "modern" demographic profile, such as declining fertility and declining marriage rates. This demographic shift is typically reflective of a transition towards "modernized" self-expressive values (Inglehart and Baker 2000). For these reasons, it is likely that the Czech Republic will continue to provide a unique case study in culture, economics, and family ties over the next century.

Like the Czech Republic, Ireland is also a unique case study in culture and economics. With a traditionally Catholic history, Ireland places a strong emphasis on familism and in this

way is an outlier in Northern and Western Europe (Chapter 2, 4; Leira 1999). Because of this traditional, Catholic orientation, Ireland is more culturally comparable to Southern Europe. Ireland is an economic outlier as well. Compared to Western and Northern Europe, Ireland spent a vast majority of the 20th century significantly economically disadvantaged (Murphy 2000). However, from approximately 1995 to 2006 Ireland underwent an unprecedented economic revolution, which propelled its economy well above the European Union average and earned it the nickname 'Celtic Tiger' (similar to the term 'Asian Tigers,' which describes the rapid economic development of Asian nations such as South Korea and Taiwan). Although this term may be a misnomer, as a majority of Ireland's economic development was the result of market booms in technology and software production that were directly funded by the United States (Murphy 2000), the impact of this economic transition on Ireland's local labor markets and education systems is profound. Therefore, like the Czech Republic, Ireland has experienced rapid economic development alongside traditional cultural values, creating the potential for interesting new variation in normative family structures and families' economic opportunities, which may be reflected in old age support options over the next century.

All in all, Czech Republic and Ireland are important cases in Wave 2 of SHARE because they illustrate the overlap of the life course perspective's emphasis on macro-level historical, cultural, and economic conditions with meso-level linked lives, such as family-based transitions in marriage and fertility. Further, these findings contrast the 19th century industrialized development in Western/ Northern Europe, which is commonly regarded as

the normative pathway to modernization. Despite quite different historical trajectories, there exist interesting commonalities between Catholic and post-Communist Europe in terms of cultural values, economic development, and family ties. The ability to identify and empirically explore these cross-national differences and similarities is an improvement upon previous studies, which crudely characterize differences as “regional” and thus neglect the rich cultural, historical, and family-based histories of European outliers.

Individualized Activity Ties and Non-Family Care Preferences

In contrast to Southern and Eastern Europe, “modernized” cultural values, along with non-family social and care preferences, emerge primarily in Northern and Western Europe (although there are interesting exceptions). These “modernized” values are somewhat secular, self-expressive individualistic, and emphasize the value of friends in life (Chapter 2). Secularism is highest in Denmark, Sweden, Germany, and the Czech Republic. Perhaps because of this cross-regional pattern, secularism is not a strong predictor of older adults’ preferences for care. Rather, self-expressive values (which are common in most of Western Europe and all of Northern Europe including Ireland) appear to be the guiding cultural force of preferences and are associated with non-family care preferences (e.g., state-based; Chapter 4). Further, these values correlate highly with an emphasis on friends and participation in activities. Although family ties are in some cases linked to poorer health in these nations (e.g., coresident children; Chapter 3), in many ways this association is irrelevant because self-expressive nations tend to enjoy the highest levels of health and, not

surprisingly, economic development. In this way, Austria, Belgium, the Netherlands, Switzerland, Ireland, Sweden, and Denmark are the European elites, a point which I will elaborate on in the next section.

CROSS-NATIONAL INEQUALITY, WITHIN-NATION MATERIAL NEEDS

Although cultural values are some of the strongest and most consistent predictors of social activity network ties, health, and preferences for care in old age, these patterns all point to an underlying theme of cross-national structural inequality. In this section, I discuss activity-related ties as a socioeconomic privilege and reflect upon social structures that promote disadvantage among the European non-elite.

Privileged Social Network Opportunities

My results reveal that social activity networks are associated with health, yet cultural context conditions the types of ties that are most beneficial to health (Chapter 3). In addition, activity-related ties, which are theorized to be the most beneficial overall, are most accessible to older adults in an economically privileged set of nations (Chapter 2). Across the whole sample, both activity-related ties and family network ties are generally associated with better health (Chapter 3). In light of national contexts, however, family network ties are mainly advantageous for individuals in highly familistic nations that have stronger public pension systems. In fact, some family network ties (e.g., coresident children) are actually linked to poorer health for individuals in nations low in familism and public

pension expenditures. As familism and public pension expenditures are only moderately correlated ($r=0.56$, Chapter 1), these measures are not simply capturing the same nations. Rather, experiencing a health benefit from family network ties may be dependent upon preferring that interaction (familism) and perhaps having the economic means to interact with financial independence, thanks to higher public pension provisions (Chapter 3).

In addition, activity-related ties are primarily utilized by individuals in non-familistic, wealthy nations (Chapter 1). The lowest proportion of activity-related ties is concentrated in Poland, Czech Republic, and Spain while the higher proportion is concentrated in Ireland, Sweden, and Denmark (Northern Europe) and sometimes Western Europe (e.g., Netherlands, Switzerland). As I discussed in Chapter 1, it is likely that participation in activities requires individuals to have material resources (e.g., time/money resources to donate to charities, education, sports, or support to others). In this way, the findings are consistent with the political economy of aging perspective, which takes a materialist conflict-oriented approach in social structure (Estes 2001; Marshall In Press; Walker 2005) and Entwisle, Faust, Rindfuss, and Kaneda's (2007) concept of constraining contexts. Therefore, although activity-related ties are beneficial, they are only accessible by the most economically developed nations. Further, the health benefits of family network ties are dependent upon not only cultural desire of those ties but also strong pension benefits (economic) perhaps allowing family members to socialize with lower economic strain.

Structural Disadvantage and the European Elite

In the end, my results suggest that there exists clear structural disadvantage regarding health and support options in Europe. Further, this disadvantage operates at the macro- and meso-level. At the macro-level, national contextual constraints include low welfare state generosity and delayed economic development. At the meso-level, individual and network dynamics, poorer health, low socioeconomic status, or lack of family network availability, constrain SAN access and participation, health, and care options in old age. Despite the strong influence of national culture in this analysis, the underlying implications of the study highlight the role of material disadvantage. Despite the benefits of family network ties for older adults in familistic, less economically developed European nations, older adults in non-familistic, highly economically developed nations enjoy better health regardless of their ties (Chapter 3). Specifically, although non-familistic nations are likely to experience a lack of family network tie availability, this is potentially offset by individual material advantage in the form of high education and high income, national material advantage in the form of stronger economic development, and individual social advantage in the form of high access to activity participation (which likely reflects both individual and national material advantage). In this way, national preferences for state-based care may also represent social advantage (Chapter 4). Older adults in these nations simply possess more resources and thus are less reliant upon family ties.

What do these findings mean for older adults in highly familistic, less economically developed European nations with lower access to activity participation? I previously

identified these nations as primarily located in Southern and Eastern Europe. Not only have these nations experienced delayed economic development due to historic setbacks (Chapter 2), but they also have poorer health despite all SAN tie interactions and gain very little from activity-related ties. Older adults in these nations have higher access to family than activity-related ties and prefer family-based care. Yet, their preference for family-based care may also be the result of a lowered state capacity to strongly support older adults through high public pension and public health expenditures. As Europe continues to “modernize,” historically disadvantaged, less economically developed, familistic nations may be continually contextually underprivileged compared to the European elite and structurally isolated from the beneficial effects of activity participation.

Equalizing Policies?

In order to address this contextually constraining form of macro- and meso-level social structure, one option would be to promote activities in familistic nations by offering opportunity to build infrastructure that would enhance activity participation, such as educational facilities. Or, social gerontologists could encourage policies promoting material resources at both the individual- and national-level, which would allow older adults to enjoy family network interactions under less financial strain (thereby allowing those interactions to be more positive in nature and thus promote health). These investments, however, are a moot point if the nations of Europe maintain a North/West-South/East division. Southern

and Eastern Europe's continued participation in the global economic market may offer a long-term solution, but such a discussion is beyond the spans of this project.

LIMITATIONS

Although this project provides a number of new insights into the complexity of multilevel social context and older adults' lives, there are number of important limitations to this dissertation. First, I analyze a cross-sectional dataset, which cannot explore change in SAN ties or national characteristics over time. Therefore, the relationships reported and discussed in this dissertation are not causal. SHARE data collection, however, is approved until 2030 and SHARE will soon release revised, preliminary Wave 3 results that will continue to offer the opportunity for longitudinal examinations. Second, although I have included a wide range of national characteristics, the empirical measures I chose may not fully capture cross-national variation in the lives of older adults. Futures studies should continue to assess a range of empirical cross-national measures of culture, policy, and economics. Finally, this study focuses on the nation- and individual-level and is not able to measure within-national regional, cultural, or political differences. Unobserved variation within nations is an important issue to consider and likely offers insight into some of the patterns observed. This type of analysis, however, is currently not possible with SHARE data but may be possible with other cross-national individual-level datasets.

FUTURE RESEARCH

In the future, I plan to elaborate on this project in a number of ways. First and most immediately, I plan to examine predictors of older adults' formal health care utilization in Europe. This consideration is an important part of the story that I was not able to address in the chapters presented here. Second, I plan to extend the analyses presented here with longitudinal data (SHARE Wave 3 and beyond) as it becomes available. Third, I intend to use cross-national European biomarker data as they become available (SHARE recently began pilot biomarker collection in sample nations). Fourth, I would like to eventually develop a comparative case study between the two culturally and economically unique cases of the Czech Republic and Ireland. Because the changes in these nations are very recent, there is a great deal of room for scholars to explore the long-term implications of these transitions. Fifth, I eventually would like to expand my focus beyond Europe by analyzing other comparative data sources. For example, SHARE is congruent with the HRS and the English Longitudinal Study of Ageing (ELSA). Further, these US- and Europe-based studies are harmonized and conceptually comparable to longitudinal data in Asia, including the Chinese Health and Retirement Study (CHARLS), the Korean Longitudinal Study of Aging (KLoSA), and the Longitudinal Aging Study of India (LASI). Because country-level data on these countries are accessible through a wide range of international organizations (e.g., World Bank, World Health Organization), this combination of datasets presents an exciting opportunity to explore health and aging from a comparative, longitudinal, multilevel perspective.

Despite limitations, this dissertation offers new insight into the ways in which national culture and national policy/economics condition older adults' social activity networks and health as well as the ways in which individual-level need may alter the influence of national characteristics on preferences for care in old age. Therefore, this multilevel consideration of macro- and meso-level social context is a first step to broadening our substantive understanding of the social lives, health, and care preferences of aging world and I look forward to pursuing this integrated perspective in my future work.

REFERENCES

- Elder, G. H. Jr. 1985. "Perspectives on the Life Course." in *Life Course Dynamics*, edited by G. H. J. Elder. Ithaca, NY: Cornell University Press.
- Entwisle, B., K. Faust, R. R. Rindfuss, and T. Kaneda. 2007. "Networks and Contexts: Variation in the Structure of Social Ties." *American Journal of Sociology* 112(5):1495-1533.
- Estes, C. 1979. *The Aging Enterprise*. San Francisco, CA: Jossey Bass.
- Estes, C. 2001. *Social Policy and Aging*. Thousand Oaks, CA: Sage Publications, Inc.
- Inglehart, R. and W. E. Baker. 2000. "Modernization, cultural change, and the persistence of traditional values." *American Sociological Review* 65:19-51.
- Leira, A. (Ed.) 1999. *Family Change: Practices, Policies, and Values*. Stamford, CT: JAI Press.
- Marshall, V. W. In Press. "Global Aging and Families: Some Policy Concerns about the Global Aging Perspective." in *Generation to Generation: Continuity and Discontinuity in Aging Families*, edited by M. Silverstein. Baltimore, MD: Johns Hopkins University Press.
- Murphy, A. E. 2000. "The 'Celtic Tiger'—An Analysis of Ireland's Economic Growth Performance." Working Paper No 2001/16. Department of Economics, Trinity College, Dublin, Ireland. Robert Schuman Centre for Advanced Studies. European University Institute.
- Sobotka, T., K. Zeman, and V. Kantorová. 2003. "Demographic Shifts in the Czech Republic after 1989: A Second Demographic Transition View." *European Journal of Population* 19:249-277.
- Walker, A. 2005. "Towards an international political economy of ageing." *Ageing and Society* 25:815-839.