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The Caregiving Responsibilities of Retirees: What Are They and How Do They Affect Retirees'

Well-being?

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Abstract: Using data from the 2006-2012 American Time Use Survey (ATUS) and the 2010 and 2012 Well-being Modules, this paper examines the demographic correlates of caregiving in retirement.

Different caregiving activities are examined, including caring for household children, caring for non-household children, caring for household adults, and caring for non-household adults. It also examines how different types of caregiving affect retirees' well-being. The data show that younger, unmarried, and

more educated retirees spend more time caring for non-household adults; that younger, female, married,

Hispanic, and more educated retirees spend more time caring for non-household children; that female,

married, black, and less-educated retirees care more for household adults; and that younger, black, Asian,

and less-educated retirees care more for household children. The data also show that caring for non-

household children increases meaning and happiness for the caregiver, that caring for non-household

adults increases happiness for the caregiver, and that engaging in care of non-household children and non-

household adults reduces sadness and pain. However, engaging in care of household adults increases

stress. Engaging in care of non-household children and non-household adults is positively associated

with health. Thus, with the exception of the stress induced by caring for household adults, the results suggest that caregiving by retirees enhances their well-being rather than reduces it.

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Introduction:

Retirees no longer have the requirement to spend time in market work. However, they may have increased other responsibilities such as caring for an elderly parent, spouse, or grandchildren. Johnson and Schaner (2005) report that nearly 40% of people aged 55 and older spent time caring for family members in 2002, and that grandchild care was the most prevalent, followed by parent care, spousal care, and child care. They also found that about 7% of adults aged 55 and older cared for multiple generations of relatives and that the likelihood of providing spousal care increases with age. The U.S. Bureau of Labor Statistics (2013) recently put out a descriptive report using the 2011-2012 American Time Use Surveys also showing the importance of elder care for older Americans.

Caregiving may negatively affect individuals' well-being. Pinquart and Sorenson (2003) performed a meta analysis integrating findings from 84 articles that examined differences in the well-being of caregivers and non-caregivers to frail older adults and found that caregivers had higher levels of stress and depression and lower levels of subjective well-being, physical health, and self-efficacy than non-caregivers. Vitaliano et al. (2003) performed a meta analysis of studies of caregivers with dementia and found that caregivers exhibited a slightly higher risk for health problems than non-caregivers. Pinquart and Sorenson (2004) performed a meta analysis of studies of caregivers for older adults that examined subjective well-being and found that the uplifts of caregiving were associated positively with well-being but that caregiving stressors were associated positively with depression.

However, these studies have focused on a narrow group of caregivers, those caring for frail older adults or adults suffering from dementia, and thus may not apply to caregivers of other adults or children. Therefore, this study expands on previous studies by examining the caregiving of any adult, regardless of whether or not the recipient of care is physically frail or suffers from dementia. It also distinguishes between care of household adults and care of non-household adults because the level and type of care may differ depending on whether the caregivers co-resides with the recipient of care. Because this study focuses on retirees, it also examines the caregiving of children, separately by whether or not the children live with their caregiver, as many grandchildren are often cared for by their grandparents. Finally, while

many studies of caregivers rely on small samples, this study uses the large, nationally-representative American Time Use Survey (ATUS) and its Well-being Modules (WBM).

Data:

The data used in this paper come from the 2006-2012 ATUS and 2010 and 2012 WBM. ATUS respondents are chosen from participants in the Current Population Survey (CPS). After completion of the CPS, one respondent aged 15 or older per household is selected for the ATUS. Each respondent to the ATUS answers some survey questions and completes a 24-hour time diary, where the diary covers the period between 4 a.m. on the day before the interview and 4 a.m. on the day of the interview.

Respondents provide information on the activities they performed on that day, at what times, and with whom. From this ATUS sample is drawn 13,821 retirees, where retirees are defined as individuals who, at the time of the survey, were at least 50 years old; were not currently in the labor force; did not report any minutes spent on work, work-related activities, or travel related to work on their diary day; and reported being retired or that they didn't want a job. Information on individuals' gender, marital status, race, Hispanic ethnicity, education, and region of residence was provided by the ATUS or CPS survey while information on time spent caring for household adults, household children, non-household adults, and non-household children was gleaned from the time diary. Given that the sample is a pooled cross-section, year dummies are included and survey weights are used in all analyses.

All ATUS respondents were selected for the WBM in 2010 and 2012. Because the WBM data are available only for two years, 2010 and 2012, the sample of retirees we are able to use to analyze well-being includes only 3,865 respondents. As part of the WBM, three activities of at least 5 minutes duration were selected randomly from the respondent's ATUS time diary. Sleeping, grooming, personal activities, don't know/can't remember, and refusal/none of your business were not eligible for selection. In the WBM, six questions related to quality of life were asked about each of the selected activities, five affect questions and one question about how meaningful the activity was. Answers to the affect questions ranged from 0 to 6, with 0 being the lowest level and 6 being the highest level. Affect questions related to

how happy, tired, stressed, sad, or how much pain the respondent was experiencing while participating in an activity. The meaningful question also required a response in the range of 0 to 6, with 0 indicating not meaningful at all and 6 indicating very meaningful. In addition to these quality of life measures, a health measure is also available in the WBM. Respondents to the WBM reported whether their health in general was excellent, very good, good, fair, or poor? This information was used to construct an indicator variable for good health that takes on a value of 1 if the respondent reported excellent, very good, or good health and a value of 0 if the respondent reported fair or poor health.

Results:

Determinants of Caregiving

Figure 1 shows the percentage of retirees providing caregiving. 19% of retirees provide caregiving while 81 percent do not. Figure 2 shows the types of caregiving provided by these retirees. 34% of retirees caregivers are caring for and helping non-household adults, 32% are caring for and helping non-household children, 26% are caring for and helping household adults, and 8% are caring for and helping household children. Table 1 shows differences in average minutes spent on caregiving per day by various demographic groups. Whites spend fewer minutes on caregiving than non-whites, individuals with less than a college degree spend more time on caregiving per day than those with at least a college degree, and younger retirees spend more time in caregiving than old retirees.

Because there is a large amount of non-participation in each of these caregiving activities, censored regression models of minutes spent on the four different caregiving activities are estimated.

Table 2 shows these results. Older retirees spend less time caring for household children, household adults, and non-household adults. Female retirees spend more time caring for non-household children and household adults. Married retirees spend more time caring for non-household children and household

¹ In cases of mis-measurement due to the short-term nature of the time-diary, continuous regression models may be preferred. However, censored regression (tobit) models are more appropriate when there is a large amount of true non-participation, as is likely in the case of caregiving by retirees. Estimates of participation probits and continuous time spent regressions are available upon request from the author. Model type does not affect the qualitative conclusions drawn.

adults but less time caring for non-household adults. Blacks spend more time caring for household children and adults. Asians spend more time caring for household children. Other non-whites spend less time caring for non-household adults. Hispanics spend more time caring for non-household children. Greater levels of education reduce the time spent caring for household children and caring for household adults but increase the time spent caring for non-household children and non-household adults.

Caregiving and Well-being

Table 3 shows the daily well-being scores of retirees for each aspect of well-being by whether or not they engage in different types of caregiving. Daily well-being scores are constructed according to instructions in the data documentation for the WBM (U.S. Bureau of Labor Statistics, 2014). Those retirees who engage in any type of caregiving have a greater meaningful score, a greater happy score, a lower sad score, and a lower pain score than those who do not. Well-being is not affected by caring for household children, but caring for household adults increases stress. Caring for non-household children increases meaningful and happy scores but reduces pain scores. Caring for non-household adults increases happy scores and reduces sad and pain scores.

Table 4 shows linear regressions of the various well-being measures on the demographic characteristics and caregiving variables. Results from two model specifications are presented. The first model specification includes only one caregiving dummy for "any caregiving" along with the demographic variables. The second model specification includes individual dummy variables for the different types of caregiving, with the omitted category being no caregiving. The results from the first model show that engaging in any caregiving increases meaningfulness and happiness and reduces sadness and pain of the caregiver. Results from the second model show that these positive results stem from caring for non-household children and non-household adults. The results also show, however, that caring for household adults is positively associated with stress.

insert discussion of Table 5 on health probits

Conclusion:

Using data from the 2006-2012 American Time Use Survey (ATUS) and the 2010 and 2012

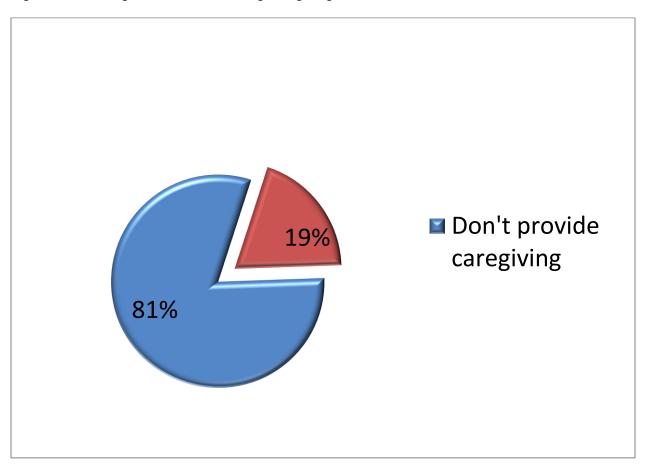
Well-being Modules, this paper examines the demographic correlates of caregiving in retirement.

Different caregiving activities are examined, including caring for household children, caring for non-household adults. It also examines how different types of caregiving affect retirees' well-being. The data show that younger, unmarried, and more educated retirees spend more time caring for non-household adults; that younger, female, married, Hispanic, and more educated retirees spend more time caring for non-household children; that female, married, black, and less-educated retirees care more for household adults; and that younger, black, Asian, and less-educated retirees care more for household children. The data also show that caring for non-household adults increases meaning and happiness for the caregiver, that caring for non-household adults increases happiness for the caregiver, and that engaging in care of non-household children and non-household adults reduces sadness and pain. However, engaging in care of household adults increases stress. Engaging in care of non-household children and non-household adults; the results suggest that caregiving by retirees enhances their well-being rather than reduces it.

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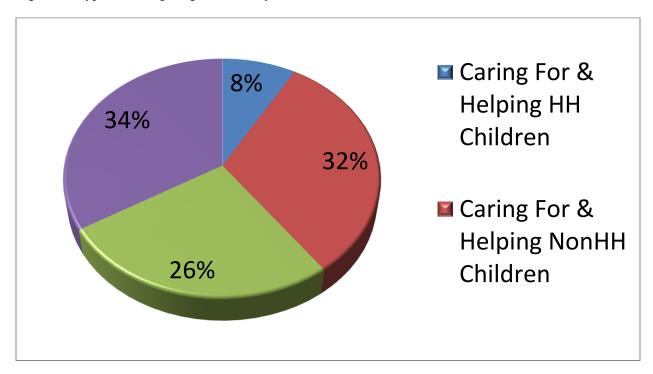
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Figure 1. Percentage of Retirees Providing Caregiving



Number of observations = 13,821. Survey weights were used.

Figure 2. Types of Caregiving Provided by Retirees



Number of observations 2,483. Survey weights were used.

Table 1. Differences in Caregiving Minutes across Demographic Groups of Retirees

Average Minutes Spent on Caregiving Per Day	$\Pr > \mathbf{t} $	Statistical Significance		
113.6	0.245			
119.7				
116.2	0.4378			
120.2				
115.6	0.0482	**		
130.5				
122.1	0.579			
117.1				
119.7	0.0618	*		
109.3				
126.5	0.0001	**		
107.2				
	113.6 119.7 116.2 120.2 115.6 130.5 122.1 117.1 119.7 109.3	Spent on Caregiving Pr > t		

Number of observations is 2,483. Survey weights were used.

* Activity measure is statistically different across groups at the 90% confidence level

** Activity measure is statistically different across groups at the 95% confidence level

Table 2. Censored Regression Models of Minutes Spent by Retirees on Caregiving

1 4010 2. CC		of HH		non-HH			Care of non-HH		
	Chil	dren	Chil	dren	Care of H	Care of HH Adults		ults	
Variables	M.E.	Sig.	M.E.	Sig.	M.E.	Sig.	M.E.	Sig.	
Age	-0.2010	***	-0.5822	***	-0.0231		-0.2988	***	
Female	0.0106		3.7369	***	1.3935	**	0.6851		
Married	-0.1233		3.4247	***	6.3374	***	-1.2372	*	
Black	2.5268	***	-1.8187		1.8863	*	-1.2119		
Asian	6.2190	**	0.4930		-1.4317		-1.5041		
Other									
Race	1.3905		1.5668		10.4471		-3.3142	*	
Hispanic	1.5293		3.6996	*	1.0534		0.6702		
High									
School	-0.7997	*	3.0872	**	-1.4812		3.5501	***	
Some									
College	-0.2977		0.7055		-1.1309		4.6813	***	
College	-1.4643	***	1.7351		-2.4316	***	2.3307		
Advanced	·								
Education	-0.7679	*	4.1489	*	-0.8068		4.7150	***	

Region and year are included in the regressions but are not included in the table.

Number of observations = 13,821. Survey weights were used.

^{*} indicates significance at the 10% level

^{**} indicates significance at the 5% level *** indicates significance at the 1% level

Table 3. Average Daily Well-being Scores of Retirees by Caregiving Status

	Meaningful Score		Happy Score	Sig.	Sad Score	Sig.	Tired Score	Sig.	Pain Score	Sig.	Stress Score	Sig.
Any Care	4.6222	**	4.6448	**	0.5199	**	1.7311		1.0110	**	0.9253	
No Care	4.3202		4.4527		0.6749		1.7692		1.2169		0.9123	
Care for HH Children	4.5208		4.4585		0.5539		1.6109		1.5123		1.1894	
No Care for HH Children	4.3779		4.4915		0.6456		1.7640		1.1709		0.9106	
Care for non-HH Children	4.8801	**	4.7749	**	0.3770	**	1.6751		0.8199	**	0.7992	
No Care for non- HH Children	4.3477		4.4725		0.6614		1.7673		1.1991		0.9223	
Care for HH Adults	4.5220		4.4837		0.7022		1.9346		1.1340		1.1388	**
No Care for HH Adults	4.3714		4.4914		0.6406		1.7511		1.1787		0.9012	
Care for non-HH Adults	4.4678		4.6639	**	0.5002	**	1.6954		0.9212	**	0.8183	
No Care for non- HH Adults	4.3725		4.4759		0.6567		1.7674		1.1983		0.9233	

Number of observations is 3,865. Survey weights were used.

* Activity measure is statistically different across groups at the 90% confidence level

** Activity measure is statistically different across groups at the 95% confidence level

Table 4. Linear Regressions of Well-being Measures

	Meaningful		Meaningful Happy		S	Sad		Tired		Pain		Stress	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
Any	0.25***		0.16**		-0.13**		-0.05		-0.21***		0.01		
Care													
Any		0.13		-0.01		-0.11		-0.13		0.28		0.26	
Care of													
HH													
Children													
Any		0.51***		0.25**		-0.26***		-0.11		-0.37***		-0.12	
Care of													
Non-HH													
Children													
Any		0.03		-0.09		0.10		0.17		-0.04		0.25**	
Care of													
HH													
Adults													
Any		0.08		0.20**		-0.14*		-0.08		-0.28***		-0.11	
Care of													
Non-HH													
Adults													

Model (1) includes any caregiving dummy (omitted category is no care).

Model (2) includes separate caregiving dummies for each type of care (omitted category is no care).

Age, gender, marital status, race, Hispanic ethnicity, education levels, regions, and a 2012 dummy are included in the regressions but are not included in the table.

Number of observations is 3,865. Survey weights were used.

^{*} indicates significance at the 10% level

^{**} indicates significance at the 5% level

^{***} indicates significance at the 1% level

Insert Table 5 with health probit results