Supplemental Table 1. Grandchild Caregiving on Word Recall (delayed and immediate, standardized), only

	Model 1		
	All Grandparents		
	В	95% CI	
Intercept	0.14	(-0.14, 0.42)	
Grandchild caregiving			
Cares for grandchildren	0.20***	(0.14, 0.27)	
Controls			
Health Conditions			
Self-rated health	0.20***	(0.16, 0.25)	
Has at least one ADL limitation	-0.27***	(-0.38, -0.16)	
Depressive symptoms	-0.03***	(-0.05, -0.01)	
Comorbidities	0.04	(-0.01, 0.08)	
Missing	0.01	(-0.09, 0.10)	
Family Characteristics			
Number of children	0.02*	(-0.0002, 0.03)	
Number of children who have died	-0.04*	(-0.08, -0.01)	
Number of grandchildren under age 16	0.01	(-0.0041, 0.02)	
Doesn't know how many grandchildren under age 16	0.15**	(0.05, 0.26)	
Demographics			
Female	0.04	(-0.03, -0.11)	
Age	-0.01***	(-0.02, -0.01)	
Marital status (Ref: Married or living with partner)			
Never married	0.04	(-0.15, 0.23)	
Separated or divorced	-0.05	(-0.15, 0.05)	
Widowed	-0.10**	(-0.18, -0.03)	
Socioeconomic Indicators			
Education (Ref: No formal)			
Primary	0.21***	(0.14, 0.28)	
Secondary	0.52***	(0.42, 0.62)	
Employment status (Ref: Not working)			
Employed	-0.01	(-0.12, 0.09)	
Home manager	-0.06	(-0.16, 0.03)	
Retired	-0.10*	(-0.18, -0.02)	
Individual earnings and transfers	-0.05*	(-0.09, -0.01)	
Household and Caregiving Characteristics			
Household wealth index	0.04***	(0.02, 0.06)	
Provides care to adult in household	-0.15*	(-0.30,-0.001)	
Number of people in household	-0.03	(-0.07, 0.01)	
Interview month	0.03***	(0.02, 0.04)	
$R^2$	0.23		
F	43.01***		
N	3,668		

two-tailed tests, + p<.10, \* p<.05, \*\*P<.01, \*\*\* p<.001

Supplemental Table 2. OLS Models Predicting Cognitive Function Z-Score with Grandchild Caregiving – Half of the Year vs. Less Intensive

	Model 1		Model 2	
	В	95% CI	В	95% CI
Intercept	0.50***	(0.21, 0.80)	0.56***	(0.28, 0.83)
Grandchild caregiving	0.00	(0.21, 0.00)	0.00	(0.20, 0.00)
Does not care for grandchildren	-0.18**	(-0.30, -0.05)	-0.23***	(-0.30,-0.16)
Does not care for grandenindren	-0.10	(-0.30, -0.03)	-0.23	,
Cares for grandchildren less than half of the year	REF		-0.05	(-0.19, 0.08)
Cares for grandchildren at least half of the year	<b>-</b> 0.05 (-0.08, 0.19)		REF	
Controls				
Health Conditions				
Self-rated health	0.18***	(0.14, 0.23)	0.18***	(0.14, 0.23)
Has at least one ADL limitation	-0.29***	(-0.39, -0.18)	-0.29***	(-0.39, -0.18)
Depressive symptoms	-0.03***	(-0.05, -0.02)	-0.03***	(-0.05, -0.02)
Comorbidities	0.05*	(0.01, 0.09)	0.05*	(0.01, 0.09)
Missing	-0.01	(-0.10, 0.09)	-0.01	(-0.10, 0.09)
Family Characteristics				
Number of children	0.03**	(0.01, 0.04)	0.03**	(0.01, 0.04)
Number of children who have died	-0.05**	(-0.09, -0.01)	-0.05**	(-0.09, -0.01)
Number of grandchildren under age 16	0.01	(-0.003, 0.02)	0.01	(-0.003, 0.02)
Doesn't know how many grandchildren under age 16	0.15**	(0.05, 0.25)	0.15**	(0.05, 0.25)
Demographics				
Female	-0.07*	(-0.14, -0.01)	-0.07*	(-0.14, -0.01)
Age	-0.02***	(-0.02, -0.01)	-0.02***	(-0.02, -0.01)
Marital status (Ref: Married or living with partner)				
Never married	0.06	(-0.12, 0.24)	0.06	(-0.12, 0.24)
Separated or divorced	-0.04	(-0.14, 0.05)	-0.04	(-0.14, 0.05)
Widowed	-0.14***	(-0.21, -0.07)	-0.14***	(-0.21, -0.07)
Socioeconomic Indicators		, , ,		
Education (Ref: No formal)				
Primary	0.37***	(0.30, 0.43)	0.37***	(0.30, 0.43)
Secondary	0.63***	(0.53, 0.72)	0.63***	(0.53, 0.72)
Employment status (Ref: Not working)				
Employed	-0.02	(-0.12, 0.07)	-0.02	(-0.12, 0.07)
Home manager	-0.10*	(-0.20, -0.01)	-0.10*	(-0.20, -0.01)
Retired	-0.08*	(-0.15, 0.003)	-0.08*	(-0.15, 0.003)
Individual earnings and transfers	-0.03	(-0.07, 0.01)	-0.03	(-0.07, 0.01)
Household and Caregiving Characteristics		` / /		, , ,
Household wealth index	0.05***	(0.03, 0.07)	0.05***	(0.03, 0.07)
Provides care to adult in household	-0.08	(-0.23, 0.06)	-0.08	(-0.23, 0.06)
Number of people in household	-0.03+	(-0.07, 0.003)	-0.03+	(-0.07, 0.003)
Interview month	0.02***	(0.01, 0.03)	0.02***	(0.01, 0.03)
$R^2$		0.31		0.31
$\frac{\kappa}{F}$	61.51***		61.51***	
N	3,649		3,649	
two toiled tests $+ n < 10^{-8} + n < 05^{-8} + 0 < 01^{-8} + n < 001^{-8}$	<u>.                                    </u>	-,- 1/	•	-,-,-

two-tailed tests, + p<.10, \* p<.05, \*\*P<.01, \*\*\* p<.001

N=3,649; 19 missing on variable indicating weeks of care; 23% of grandparents provided care for at least three-quarters of the year, and 6% for less than three-quarters

Supplemental Table 3. *OLS Models Predicting Cognitive Function Z-Score with Grandchild Caregiving – Three-quarters of the Year vs. Less Intensive* 

	Model 1		Model 2	
	В	95% CI	В	95% CI
Intercept	0.49***	(0.20, 0.78)	0.56***	(0.29, 0.84)
Grandchild caregiving		, , ,		, , ,
Does not care for grandchildren	-0.16**	(-0.28, -0.05)	-0.24***	(-0.30, -0.17)
Cares for grandchildren less than 3/4 of the year		REF	-0.07	(-0.20, 0.05)
Cares for grandchildren at least ¾ of the year	-0.07	(-0.05, 0.20)		REF
Controls				
Health Conditions				
Self-rated health	0.18***	(0.14, 0.23)	0.18***	(0.14, 0.23)
Has at least one ADL limitation	-0.29***	(-0.39, -0.18)	-0.29***	(-0.39, -0.18)
Depressive symptoms	-0.03***	(-0.05, -0.02)	-0.03***	(-0.05, -0.02)
Comorbidities	0.05*	(0.01, 0.09)	0.05*	(0.01, 0.09)
Missing	-0.01+	(-0.10, 0.09)	-0.0 <u>1</u> 04	(-0.10, 0.09)
Family Characteristics			_	, ,
Number of children	0.03**	(0.01, 0.04)	0.03**	(0.01, 0.04)
Number of children who have died	-0.05**	(-0.09, -0.01)	-0.05**	(-0.09, -0.01)
Number of grandchildren under age 16	0.01	(-0.003, 0.02)	0.01	(-0.003, 0.02)
Doesn't know how many grandchildren under age 16	0.15**	(0.05, 0.25)	0.15**	(0.05, 0.25)
Demographics		, , ,		, , ,
Female	-0.07*	(-0.14, -0.01)	-0.07*	(-0.14, -0.01)
Age	-0.02***	(-0.02, -0.01)	-0.02***	(-0.02, -0.01)
Marital status (Ref: Married or living with partner)		, , ,		, , ,
Never married	0.06	(-0.12, 0.24)	0.06	(-0.12, 0.24)
Separated or divorced	-0.04	(-0.14, 0.05)	-0.04	(-0.14, 0.05)
Widowed	-0.14***	(-0.21, -0.07)	-0.14***	(-0.21, -0.07)
Socioeconomic Indicators		, , ,		, , ,
Education (Ref: No formal)				
Primary	0.37***	(0.30, 0.43)	0.37***	(0.30, 0.43)
Secondary	0.63***	(0.53, 0.72)	0.63***	(0.53, 0.72)
Employment status (Ref: Not working)		(,,		(,,
Employed	-0.02	(-0.12, 0.07)	-0.02	(-0.12, 0.07)
Home manager	-0.10*	(-0.20, -0.01)	-0.10*	(-0.19, -0.01)
Retired	-0.08*	(-0.15, <u>-</u> 0.003)	-0.08*	(-0.15, <u>-</u> 0.003)
Individual earnings and transfers	-0.03	(-0.07, 0.01)	-0.03	(-0.07, 0.01)
Household and Caregiving Characteristics		( , ,		(, ,
Household wealth index	0.05***	(0.03, 0.07)	0.05***	(0.03, 0.07)
Provides care to adult in household	-0.08	(-0.23, 0.06)	-0.09	(-0.23, 0.06)
Number of people in household	-0.03+	(-0.07, 0.002)	-0.03+	(-0.07, 0.004)
Interview month	0.02***	(0.01, 0.03)	0.02***	(0.01, 0.03)
$R^2$	0.31		0.31	
$\overline{F}$	61.55***		61.55***	
N N		3,649		3,649

two-tailed tests, + p<.10 , \* p<.05, \*\*P<.01, \*\*\* p<.001 N=3,649; 19 missing on variable indicating weeks of care

## Supplemental Table 4. OLS Models Predicting Cognitive Function Z-Score with Grandchild Caregiving – Sensitivity to Age

	Model 1		
	В	95% CI	
Intercept	0.51**	(0.20, 0.83)	
Grandchild caregiving			
Cares for grandchildren	0.24***	(0.15, 0.32)	
X Aged 65+	-0.05	(-0.17, 0.07)	
		( <del>-0.29, -</del>	
Aged 65+	-0. <del>2</del> 1 <u>2*</u>	0.13 <u>0.02,</u> 0.23)	
Controls	-0. <u>2</u> 1 <u>2</u>	<u>0.23</u> )	
Health Conditions			
Self-rated health	0.18***	(0.14, 0.23)	
Has at least one ADL limitation	-0.29***	(-0.39, -0.18)	
Depressive symptoms	-0.03***	(-0.05, -0.01)	
Comorbidities	0.05*	(0.01, 0.09)	
Missing	-0.01	(-0.10, 0.09)	
Family Characteristics			
Number of children	0.03**	(0.01, 0.04)	
Number of children who have died	-0.05**	(-0.09, -0.02)	
Number of grandchildren under age 16	0.01	(-0.003, 0.02)	
Doesn't know how many grandchildren under age 16	0.15**	(0.05, 0.25)	
Demographics	0.054	(0.14, 0.04)	
Female	-0.07*	(-0.14, -0.01)	
Age	-0.02***	(-0.03, -0.02)	
Marital status (Ref: Married or living with partner)	0.05	(0.12.0.22)	
Never married	0.05 -0.04	(-0.13, 0.23) (-0.14, 0.05)	
Separated or divorced Widowed	-0.04	(-0.21, -0.06)	
Socioeconomic Indicators	-0.14	(-0.21, -0.00)	
Education (Ref: No formal)			
Primary	0.37***	(-0.31, 0.44)	
Secondary	0.62***	(0.53, 0.72)	
Employment status (Ref: Not working)	0.02	(0.00, 0.72)	
Employed	-0.02	(-0.12, 0.08)	
Home manager	-0.10*	(-0.19, -0.01)	
Retired	-0.08*	(-0.16, -0.01)	
Individual earnings and transfers	-0.03	(-0.07, 0.01)	
Household and Caregiving Characteristics			
Household wealth index	0.05***	(0.03, 0.07)	
Provides care to adult in household	-0.10	(-0.24, 0.05)	
Number of people in household	-0.03+	(-0.07, 0.004)	
Interview month	0.02***	(0.01, 0.03)	
$R^2$	0.31		
F	59.82***		
N		3,668	

two-tailed tests, + p<.10 , \* p<.05, \*\*P<.01, \*\*\* p<.001 n=1660 (45%) are aged 65+