

Comparing the relationship between sole versus assisted childcare, and subjective well-being in South Africa

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Introduction

- Increasingly governments are collecting data on SWB to augment measures of social progress
- Research on children and SWB:
 - children reduce parent's wellbeing, (McLanahan & Adams 1987; Ross et al. 1990; Evenson & Simon 2005; Clark et al. 2008; Powdthavee 2009; Hansen 2012; Stanca 2012)
 - some find a more positive effect (Kohler et al. 2005; Aassve et al. 2012; Baetschmann et al. 2016)
- Our contributions to this debate:
 1. Distinguish among women according to those who are sole caregivers and those who receive assistance with caregiving
 2. Investigate whether the relationship between caregiving and SWB differs depending on whether care is provided to a woman's own child or someone else's child.

Responsibility for physical childcare

- **Dependent children at home** (Shields & Wooden 2003; Evenson & Simon 2005)
- **Women – ‘role strain’** (Kandel et al. 1985; Rosenfeld 1989)
- **Controlling for stressors associated with childcare**
(Ross & van Willigen 1996; Bird 1997; Avison et al. 2007)
- **Relationship between physical childcare & SWB →
Is a woman responsible for physical childcare?**

Does assistance with childcare play a role?

- Assistance can alleviate stresses of childcare – depends on quality of relationship with helper (Thoits 2011; Nomaguchi et al 2012)
 - strengthen social networks (Nomaguchi & Milkie 2003)
- Existing quantitative research on the relationship between assistance with childcare and wellbeing:
 - ‘Assistance’ is a composite measure (Mulsow et al. 2002; Mikucka & Rizzi 2016)
 - Small and/or select samples (Agache et al. 2014; Alfayumi-Zeadna et al. 2015)
 - Spousal support & work family conflict (Ross et al. 1983; Nasuridin & Hsea 2008)
 - Time-use data: Adult companions (Roeters & Gracia 2016; Meier et al. 2018)

Co-residency with & caring for other people's children

- **Grandmothers** (Hayslip et al. 1998; Goodman & Silverstein 2006)
- **Step-mothers, adoptive mothers** (Lansford et al. 2001; Nelson et al. 2014; Ceballo et al. 2004)
- **Kinship care** (McFadden 1998; Casas 2006)
- **Results depend on sample, methods, cultural context**

SA provides a useful context to compare:

- 1. How sole versus assisted childcare is related to SWB.***
- 2. How caring for own versus other children is related to SWB.***

South African context:

Among Africans:

- Low marital rates, extra-marital childbirth, absent fathers & mothers (Swartz 2002; Posel and Devey 2006; Posel and Rogan 2009)
 - Multi- and skip generational living (Klasen & Woolard 2008; Ardington & Leibbrandt 2010)
 - Kinship ties (Schatz 2007; Knight & Yamin 2015)
 - Importance of motherhood & 'shared mothering' (Cockerton 2000; Magwaza 2003)
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- Low marriage rates and absent fathers mean many women are unlikely to have a spouse to help them with childcare
 - Not all mothers are primary caregivers. Many women living with and caring for other people's children

Relationship between children & SWB in SA – previous studies

- SA studies have explored relationship between SWB and aspects of family life – control for children
- Posel & Casale (2015) – differences in SWB within households (married or cohabiting union)
- Botha & Booysen (2013) – relationship between SWB and married compared to cohabiting couples
- Ebrahim et al (2013) – difference in SWB among population groups

Data & methods

- Data: National Income Dynamics Study (NIDS)
 - First national panel study of individuals in South Africa
 - Began in 2008
 - Currently 5 waves
- Waves 1 to 5
- Women aged 15 and older
- Pooled sample: 33,498 African women
- SWB: *Using a scale of 1 to 10 where 1 means “Very dissatisfied” and 10 means “Very satisfied”, how do you feel about your life as a whole right now?*
- Key variables of interest:
 - Number of children a woman is co-resident with
 - Woman is the sole caregiver of at least one child she cares for
 - Number of children woman is assisted with
- Children aged 0-14

- (1) OLS regressions:

$$SWB_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \dots + \beta_k X_{kit} + u_{it}$$

$$i = 1, 2, \dots, N$$

$$t = 1, 2, 3, 4, 5$$

- (2) Fixed Effects regressions:

$$\begin{aligned} & (SWB_{it} - \overline{SWB}_i) \\ &= \beta_1 (X_{1it} - \overline{X}_{1i}) + \beta_2 (X_{2it} - \overline{X}_{2i}) + \dots + \beta_k (X_{kit} - \overline{X}_{ki}) + (\alpha_i - \overline{\alpha}_i) + (\varepsilon_{it} - \overline{\varepsilon}_i) \end{aligned}$$

- Other variables include: age, age squared, marital status, perceived health status, importance of religious activities, level of education, per capita household income, rural/urban

(Correia, Sergio. 2017. "Linear Models with High-Dimensional Fixed Effects: An Efficient and Feasible Estimator" Working Paper. <http://scoreia.com/research/hdfe.pdf>)

Table 1: Caregiving and child coresidency characteristics of women, pooled sample

<i>Woman is living with at least one child (any)</i>	0.790 (0.006)
Woman is living with at least one own child (own only)	0.206 (0.005)
Woman is living with at least one other child (other only)	0.367 (0.006)
Woman is living with at least one own & one other child	0.217 (0.005)
<i>Woman is primary physical caregiver of at least one child (any)</i>	0.513 (0.004)
Woman is primary physical caregiver of at least one child (own only)	0.326 (0.005)
Woman is primary physical caregiver of at least one child (other only)	0.132 (0.004)
Woman is primary physical caregiver of at least one own & one other child	0.055 (0.002)
<i>Among women who are physical caregivers of at least one child (any):</i>	
Among women caring for own children: Woman is sole carer of at least one own child	0.468 (0.007) [#]
Among women caring for other children: Woman is sole carer of at least one other child	0.558 (0.008)
Among women caring for own children: Woman assisted with at least one own child	0.575 (0.006)
Among women caring for other children: Woman assisted with at least one other child	0.570 (0.007)

Data: NIDS 2008, 2010/11, 2012, 2014, 2016

Table 2: Average level of SWB by co-residency and caregiver status, pooled sample

	Own child(ren) ^a	Any child(ren) ^b
N		33498
Women is co-resident with at least one child	4.907 (0.034) 14181	4.925 (0.033) 26474
Women is not co-resident with at least one child	4.948 (0.033) 19312	4.952 (0.040) 7016 ¹
N		33498
Primary physical caregiver of at least one child	4.899 (0.035) 12739	4.866 (0.033) [#] 17169
Not a primary physical caregiver (may or may not be co-resident with a child)	4.951 (0.033) 20754	4.999 (0.034) 16324
Woman is the sole caregiver of all children she cares for	4.553 (0.044) [#] 5401	4.525 (0.041) [#] 6998 ¹
Woman is assisted with at least one child that she cares for	5.155 (0.037) 7327	5.102 (0.034) 10148

Data: NIDS 2008, 2010/11, 2012, 2014, 2016

[#]Indicates significant differences among women, within each co-residency or caregiver category, at the five per cent level.

Table 3: Characteristics of women, pooled sample

	Not caregiver	Caregiver (any)	Caregiver (at least 1 own child)
N	16327	17171	12740
Subjective well-being	4.999 (0.034)	4.866 (0.033)*	4.899 (0.035)
Age	38.643 (0.313)	39.654 (0.236)	33.232 (0.136) [#]
Married	0.153 (0.005)	0.276 (0.007)*	0.255 (0.008)
Never married	0.623 (0.006)	0.504 (0.008)*	0.596 (0.010) [#]
Cohabiting	0.045 (0.003)	0.073 (0.004)*	0.088 (0.005)
Divorced or widowed	0.179 (0.005)	0.148 (0.005)*	0.061 (0.003) [#]
Perceived health: very good or excellent	0.555 (0.006)	0.567 (0.006)	0.646 (0.006) [#]
Grade 0 to grade 3	0.039 (0.002)	0.046 (0.003)	0.028 [#] (0.003)
Grade 4 to grade 7	0.160 (0.006)	0.177 (0.006)	0.137 (0.008) [#]
Grade 8 to matric Certificate, degree or diploma	0.558 (0.007)	0.553 (0.009)	0.660 (0.009) [#]
Log per capita household income	6.962 (0.024)	6.620 (0.021)*	6.631 (0.023)

Data: NIDS 2008, 2010/11, 2012, 2014, 2016

*Indicates significant differences between non-caregiver and caregiver (any), at the five per cent level.

[#]Indicates significant differences between non-caregiver and caregiver (any), at the five per cent level.

Table 3: Characteristics of women, pooled sample continued

	Sole caregiver (at least 1 child)¹	Assisted caregiver (at least 1 child)	Sole caregiver (at least 1 own child)	Assisted caregiver (at least 1 own child)
N	8432	10150	5961	7328
Subjective well-being	4.569 (0.040)	5.102 (0.034)*	4.574 (0.043)	5.155 (0.037)*
Age	41.530 (0.286)	38.588 (0.248)*	34.723 (0.170)	32.070 (0.152)*
Married	0.247 (0.008)	0.301 (0.008)*	0.212 (0.009)	0.290 (0.009)*
Never married	0.508 (0.010)	0.493 (0.009)	0.620 (0.011)	0.575 (0.010)*
Cohabiting	0.059 (0.004)	0.085 (0.005)*	0.069 (0.005)	0.105 (0.006)*
Divorced or widowed	0.186 (0.007)	0.121 (0.005)*	0.098 (0.005)	0.029 (0.002)*
Religion is important	0.947 (0.003)	0.944 (0.003)	0.942 (0.004)	0.942 (0.003)
Perceived health: very good or excellent	0.561 (0.008)	0.570 (0.007)	0.645 (0.008)	0.648 (0.007)
Grade 0 to grade 3	0.050 (0.004)	0.045 (0.003)	0.032 (0.003)	0.025 (0.003)
Grade 4 to grade 7	0.201 (0.008)	0.162 (0.006)*	0.159 (0.009)	0.121 (0.007)*
Grade 8 to matric Certificate, degree or diploma	0.527 (0.012)	0.567 (0.009)*	0.645 (0.012)	0.672 (0.009)
Log per capita household income	6.533 (0.020)	6.662 (0.022)*	6.536 (0.023)	6.696 (0.024)*

Data: NIDS 2008, 2010/11, 2012, 2014, 2016

*Indicates significant differences between sole and assisted caregiver , at the five per cent level.

Table 4: Predicting SWB among African women with co-resident biological children aged 0-14

	Pooled OLS		Fixed effects	
	Basic control variables	Final	Basic control variables	Final
	Column i	Column ii	Column iii	Column iv
No of co-resident biological children	0.011 (0.015)	0.029 (0.028)	-0.011 (0.025)	-0.031 (0.038)
Woman is sole caregiver of at least one biological child		-0.303 (0.055)***		-0.285 (0.064)***
No. of co-resident biological children woman is assisted caregiver of		0.081 (0.032)**		0.141 (0.045)***
R ²	0.072	0.076	0.022	0.026
N	33198	33198	33169	33169

Data: NIDS, 2008, 2010/11, 2012, 2014, 2016

Notes: ***Indicates significant difference at 1 percent level; **Indicates significant difference at 5 percent level; *Indicates significant difference at 10 percent level.

Table 5: Predicting SWB among African women with co-resident children (any) aged 0-14

	Pooled OLS		Fixed effects	
	Basic control variables Column i	Final Column ii	Basic control variables Column iii	Final Column iv
No of co-resident children	0.058 (0.011)***	0.058 (0.012)***	0.012 (0.020)	0.007 (0.021)
Woman is sole caregiver of at least one child		-0.291 (0.033)***		-0.330 (0.052)***
No. of co-resident children woman is assisted caregiver of		0.073 (0.016)***		0.111 (0.026)***
R ²	0.074	0.078	0.022	0.028
N	33198	33198	33169	33169

Data: NIDS, 2008, 2010/11, 2012, 2014, 2016

Notes: ***Indicates significant difference at 1 percent level; **Indicates significant difference at 5 percent level; *Indicates significant difference at 10 percent level.

Robustness Checks:

- **Binary variable for child co-residency**
- **Women who are aged 15 or older in wave 1**

Binary variable for child co-residency

	Pooled OLS		Fixed effects	
	Basic control variables Column i	Final Column ii	Basic control variables Column iii	Final Column iv
Woman is co-resident with at least one biological child	-0.027 (0.030)	0.001 (0.047)	-0.079 (0.047)*	-0.061 (0.058)
Woman is sole caregiver of at least one biological child		-0.260 (0.055)***		-0.282 (0.066)***
No. of co-resident biological children		0.109 (0.025)***		0.139 (0.034)***
woman is assisted caregiver of				
R ²	0.072	0.076	0.022	0.026
N	33198	33198	33169	33169

Data: NIDS, 2008, 2010/11, 2012, 2014, 2016

Notes: ***Indicates significant difference at 1 percent level; **Indicates significant difference at 5 percent level; *Indicates significant difference at 10 percent level.

Binary variable for child co-residency

	Pooled OLS		Fixed effects	
	Basic control variables	Final	Basic control variables	Final
	Column i	Column ii	Column iii	Column iv
Woman is co-resident with at least one child	0.322 (0.040)***	0.388 (0.041)***	0.133 (0.056)***	0.189 (0.058)***
Woman is sole caregiver of at least one child		-0.347 (0.034)***		-0.369 (0.052)***
No. of co-resident children woman is assisted caregiver of		0.063 (0.015)***		0.095 (0.026)***
R ²	0.075	0.080	0.022	0.028
N	33198	33198	33169	33169

Data: NIDS, 2008, 2010/11, 2012, 2014, 2016

Notes: ***Indicates significant difference at 1 percent level; **Indicates significant difference at 5 percent level; *Indicates significant difference at 10 percent level.

Sample: Women who are aged 15 or older in wave 1

	Pooled OLS		Fixed effects	
	Basic control variables Column i	Final Column ii	Basic control variables Column iii	Final Column iv
No of co-resident biological children	0.034 (0.016)**	0.044 (0.029)	-0.023 (0.024)	-0.032 (0.038)
Woman is sole caregiver of at least one biological child		-0.285 (0.059)***		-0.314 (0.064)***
No. of co-resident biological children woman is assisted caregiver of		0.090 (0.034)***		0.128 (0.043)***
R ²	0.075	0.078	0.023	0.028
N	27598	27598	27580	27580

Data: NIDS, 2008, 2010/11, 2012, 2014, 2016

Notes: ***Indicates significant difference at 1 percent level; **Indicates significant difference at 5 percent level; *Indicates significant difference at 10 percent level.

Sample: Women who are aged 15 or older in wave 1

	Pooled OLS		Fixed effects	
	Basic control variables	Final	Basic control variables	Final
	Column i	Column ii	Column iii	Column iv
No of co-resident children	0.059 (0.011)***	0.056 (0.012)***	0.104 (0.063)***	0.179 (0.063)***
Woman is sole caregiver of at least one child		-0.266 (0.036)***		-0.390 (0.052)***
No. of co-resident children woman is assisted caregiver of		0.086 (0.017)***		0.090 (0.024)***
R ²	0.077	0.081	0.024	0.031
N	27598	27598	27580	27580

Data: NIDS, 2008, 2010/11, 2012, 2014, 2016

Notes: ***Indicates significant difference at 1 percent level; **Indicates significant difference at 5 percent level; *Indicates significant difference at 10 percent level.

Conclusion

Difference in the relationship between sole and assisted childcare and SWB

Little difference between caring for own and other people's children.

- *Physical care*
 - Women benefit from enhanced social ties (Schatz 2007)
 - 'Shared mothering' (Magwaza 2003)