

Kinship Structure, Child Gender and Mother's Life Satisfaction in Malawi

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Understanding young parents' life satisfaction

- Life satisfaction is increasingly seen as an important economic outcome.
 - ▶ Several studies look at the determinants of life satisfaction, including children's gender composition ([Hans-Peter Kohler, 2005](#); [Margolis and Myrskylä, 2016](#); [Song and Gao, 2023](#)).
- In developing countries, child gender may be more important due to stronger gender preferences and cultural norms.
 - ▶ Existing studies find that child gender affects marital and child outcomes, especially in contexts with son preference in Asia ([Jayachandran and Pande, 2017](#); [Das Gupta et al., 2003](#); [Hesketh et al., 2011](#)).
 - ▶ While earlier studies found an absence of son preference or a preference for variety in Sub-Saharan Africa ([Basu and Jong, 2006](#); [Rossi and Rouanet, 2015](#)), recent research suggests that kinship structure mediates this relationship ([Smith-Greenaway et al., 2019](#); [Genicot and Hernandez-de Benito, 2020](#); [Lowes, 2020, 2017](#)).
- With the newly available MICS data on young adults' life satisfaction, we can test for the impact of child's gender on parental life satisfaction.

This paper

- We use the recent MICS surveys from Malawi to study how child gender affects women's life satisfaction.
 - ▶ For mothers with one child, the gender of the child provides a plausible exogenous variation.
- We also look at how the effect differs for matrilineal and patrilineal mothers.
 - ▶ Differences in inheritance systems could influence how much mothers value having daughters.
 - ▶ Malawi is the only country with both variations in kinship structure and sizable life satisfaction data.
- In addition, we examine the impacts on fathers, early child investment and outcomes, as well as the links to stated gender preference measures.

Data and Sample

- **Malawi MICS 2014-2015 and 2019-2020**

- ▶ MICS 04: "How satisfied are you with your life?" with responses ranging from very unsatisfied to very satisfied (5 categories).
- ▶ MICS 06: the question was modified to a ladder scale, where 10 represents the best possible life and 1 the worst: "On which step of the ladder do you feel you stand at this time?"
- ▶ To homogenize the data across waves, we created a binary variable: 1 if the person was very satisfied in MICS 04, and a ladder step of 5 or higher in MICS 06.

▶ Scale Transformation

- **Sample**

- ▶ Women between 18 and 25 years old, whose first birth occurred at 15 years old or older with one child and lineage information.
- ▶ Lineage is defined at the ethnic group level, following Berge et al. (2014) classification.

▶ Lineage classification

Impact of child gender on mother's life satisfaction

	Life overall: Very satisfied (5 to 10)		
	(1)	(2)	(3)
Has Daughter	0.026** (0.031)	-0.029*** (0.002)	-0.014 (0.337)
Has Son		-0.055*** (0.000)	-0.041*** (0.007)
Sample	1 child	1 or 0 children	1 child or married with 0 children
Average satisfaction	0.676	0.731	0.717
R-squared	0.001	0.003	0.001
Observations	5,906	16,418	7,373

- While having a child lowers mother's life satisfaction, having a daughter (compared to having a son) has a smaller negative effect.
- The result is robust to using different LS cut-offs and adding controls.

Contrasting results for matrilineal vs. patrilineal households

	Life overall: Very satisfied (5 to 10)					
	(1)	(2)	(3)	(4)	(5)	(6)
Daughter	0.026** (0.012)	0.022* (0.013)	0.035** (0.015)	0.029 (0.019)	0.040*** (0.015)	0.033* (0.019)
Patrilineal			0.052** (0.021)	0.011 (0.039)	0.043** (0.021)	0.009 (0.039)
Daughter x Patrilineal			-0.057** (0.028)	-0.048 (0.051)	-0.064** (0.029)	-0.049 (0.052)
Wealth controls					✓	✓
Son Mean	0.676	0.676	0.663	0.685	0.663	0.685
Has lineage information	-	Yes	Yes	Yes	Yes	Yes
Restricted to South region	No	No	No	Yes	No	Yes
R-squared	0.001	0.001	0.002	0.003	0.009	0.010
Observations	5,906	5,449	5,449	2,575	5,449	2,575

- While having a daughter has a positive impact for matrilineal mothers, the pattern is opposite for patrilineal mothers.
- For fathers, having a daughter reduces life satisfaction only among patrilineal groups.

Child investment and outcomes

- We find that matrilineal households make more material investments in young daughters compared to sons.
 - ▶ Matri HHs provide more books and shop toys, whereas patri HHs provide more homemade toys and objects (e.g., rocks) to daughters.
- We do not detect any statistically significant differences in other types of investments such as child health or mother's time.
 - ▶ Fathers spend less time with daughters, especially in patri HHs.
- However, girls have better early child development index scores compared to boys, especially among matrilineal households.

Child gender and early childhood development (3-4 years old)

	Early childhood development index (weighted average)			
	(1)	(2)	(3)	(4)
Daughter	0.242*** (0.062)	0.025 (0.137)	0.276*** (0.074)	0.281*** (0.074)
Patrilineal				0.095 (0.106)
Daughter x Patrilineal				-0.245 (0.154)
Quadratic age controls	✓	✓	✓	✓
Wealth controls	✓	✓	✓	✓
Has lineage information	-	Yes	Yes	Yes
Lineage	-	Patrilineal	Matrilineal	-
Son Mean	-0.092	-0.007	-0.123	-0.123
R-squared	0.073	0.102	0.069	0.070
Observations	918	192	639	831

- The index includes 9 cognitive and social outcomes, including identifying at least 10 letters in the alphabet and getting along well with other children.

Conclusion

- We provide evidence that having a daughter increases mother's life satisfaction in Malawi, but only among matrilineal households.
 - ▶ One of few studies investigating a determinant of life satisfaction in a developing country setting using an identification strategy.
- Depending on kinship structure, child gender also matters for some early childhood investment and development outcomes.
 - ▶ This finding supplements the recent literature on the impact of child gender on marital and child outcomes.
- Examining life satisfaction patterns can provide additional insights into the role of child gender preference.
 - ▶ We compare these results with those based on stated gender preferences from the DHS survey, which reveal smaller differences among young parents.

Stated gender preferences (DHS data)

	Mother son preference index				Father son preference index			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Patrilineal	0.025 (0.415)	0.023 (0.465)	0.031*** (0.004)	0.037** (0.015)	0.092 (0.214)	0.063 (0.403)	0.107*** (0.000)	0.098** (0.015)
Wealth controls		✓		✓		✓		✓
Child gender control		✓		✓		✓		✓
Child restriction	1 child	1 child	-	-	1 child	1 child	-	-
Age restriction	15-24 years old	15-24 years old	15-49 years old	15-49 years old	15-24 years old	15-24 years old	15-49 years old	15-49 years old
Matrilineal Mean	-0.037	-0.037	-0.052	-0.052	0.217	0.217	0.143	0.143
R-squared	0.000	0.013	0.001	0.006	0.004	0.028	0.005	0.020
Observations	2,751	2,751	22,385	12,497	513	513	3,547	1,587

Notes: The outcome variable "Son preference index" equals 1 if parents report a preference for more sons than daughters, 0 if they have no preference or want a balanced number of boys and girls and -1 if they want more daughters than sons.

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Distribution of raw outcome variables and transformations

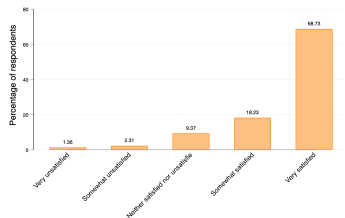


Figure: Raw life satisfaction variable MICS 05

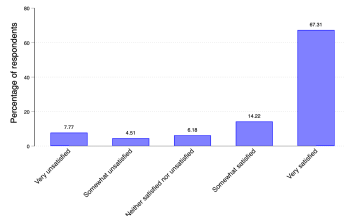


Figure: Transformed life satisfaction variable MICS 06

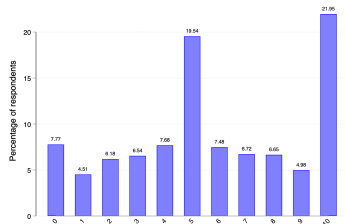


Figure: Raw life satisfaction variable MICS 06

Lineage Classification (Berge et al. 2014)

Ethnic group	Lineage
Chewa	Matrilineal
Yao	Matrilineal
Lomwe	Matrilineal
Ngoni in Central and Southern region	Matrilineal
Ngoni in Northern region	Patrilineal
Tumbuka	Patrilineal
Tonga	Patrilineal
Sena	Patrilineal
Nkhonde	Patrilineal