Measuring children's time use in MICS

Lauren Pandolfelli, Division of Data, Analytics, Planning & Monitoring, UNICEF United Nations 9th Global Forum on Gender Statistics, Johannesburg, South Africa, 29 August 2023



Why measure children's time use?

"Before we can evaluate how well children are doing and why some are doing better than others, it is important to understand what they are doing, with whom, and in which social contexts and institutions."

Harding (1997)



Addressing the data gaps

- Limited understanding about how the way children spend their time affects their wellbeing and shapes their opportunities
- Gender disparities in time use begin to form in childhood yet focus of time use data collection largely on adult population
- No standard data collection tools to measure children's time use



Challenges collecting time use data in MICS

- Seasonality bias
- Limited use of time pieces in remote and low literacy areas
- Social desirability bias
- Enumerator training requirements

Challenges (cont'd): Self vs proxy reporting



Is there social desirability bias when caregivers report? (e.g. under/over reporting of stigmatized/desirable activities)

How accurate is caregivers reporting? Do they know what children are doing?

At what age can children selfreport?



Parents underreport girls' domestic work (Levison 2000)

Social desirability bias by proxy respondent may decrease with age (Janzen 2016)

Discrepancies in time spent in paid/unpaid work, sleep and leisure

Few discrepancies in time spent learning (Rost 2020)

From age 8-10, most children can report on their own time (Eurostat 2016)

TU instruments typically completed by caregivers of children 12 yrs. or younger and by children themselves, 13-17 yrs.

Considerations for time use data collection in MICS



Field testing

- Stylized questions vs. time diary
- Child versus caregiver reporting
- Adequacy of time use categories adapted from ICATUS 2016
- Additional respondent burden in multi-topic survey
- Low literacy, rural settings
- Enumerator training



Overview of children's time use field testing

	Malawi (2017)	Belize (2019)	Zimbabwe (2022)					
Instrument	Stylized questions with 2 reference periods (7 days & 24 hrs.)	Survey-based time diary (past 24 hrs.) Adaptation of ICATUS 2016 to prioritize children's activities	Survey-based time diary (past 24 hrs.) Further adaptation of ICATUS 2016 Introduction of contextual questions					
Sample design	Split purposive sample of 447 households in 2 rural districts (Nkhata Bay and Balaka)	Probability-based sample of 680 households in 2 districts (mostly rural; urban)	Split purposive sample of 250 households in urban, peri- urban and rural settings in Mutare					
Respondent	Proxy reporting by primary caregiver of children aged 5-17	Proxy reporting by primary caregiver of children aged 5-17	Self-reporting by adolescents aged 15-17 and proxy reporting by primary caregiver of adolescents aged 15-17					
Implementing partners	UNICEF Malawi & Malawi National Statistical Office	UNICEF Belize & Statistical Institute of Belize	UNICEF Zimbabwe & Zimbabwe National Statistics Agency					

- In general, respondents pleased to speak about their day/their child's day
- Stylized questions & time diary
 - **Respondent fatigue** observed with stylized questions, potentially owing to cognitive burden of retrieval and aggregation
 - Diary performed better but probing needed to avoid gaps in accounting of activities
- Some difficulty collecting accurate information in low-literacy settings
 - Non-numeric responses ("a bit", "not long" etc.) required time estimation after extensive probing

Child self reporting versus care-giver proxy reporting:

- Caregivers not as able to report child's activities and duration when child away from home
- Caregivers found it harder than children to report activities children were engaged in, even when children at home

- Quality data depends on good interviewer-respondent rapport and strong interviewing skills
 - Interviewing techniques differ from typical MICS survey administration (facilitated conversation rather than scripted set of questions)
- With adequate training and practice, interviewers' probing and activity coding skills significantly improve
- CAPI can minimize entry and estimation errors with prompts and consistency checks but can interfere with interview's flow
- Training manuals need to be customized to provide country-relevant examples to aid in activity coding
- Sufficient time for training is critical

Developing a time diary meaningful for children involved:

- Re-classification and re-grouping of ICATUS domain activities and introduction of new activity labels to prioritize children's activities and align with UNICEF programming
- Examples School attendance in person/remote, gaming separately from play, socialization in person/through digital technologies, social media as entertainment

> Tradeoff between granularity and complexity of coding and interviewers' training

- Introduction of **contextual questions** related to homework support/tutoring, digital/online engagement associated with learning, socialization and civic participation (Zimbabwe)
- ICATUS activities adaptation and contextual questions were understood, but small samples did not capture low prevalence activities in testing locations

What's next?

Time use module for children 10-17 yrs. now available as complementary topic in MICS7

- Direct reporting for children aged 15-17
- Proxy reporting by caregiver for children aged 10-14
- Tool package includes administration guidelines, interviewer's instructions, protocols and ethical considerations for interviewing children
- Further methodological work to lower direct reporting for children 10-14 as well as to collect time use data for children below age 10

TIME USE									TU				
TU1. Check WB4: Respondent's age?					1	2⇔End							
(he/she) v questions follow-up responder TU3. I will	voke up until the tin TU8-TU10: at wha question, move on 1t did during the da	ne (he/she) went to sle t time did the activy st to the next row and as y and forgot to mention what you did yesterday	ep. For each activity the resp art, how long did it take and the respondent about the a n.	pondent reports, choos at what time did it end ctivity (he/she) did nex	e and record in TU7 the appropriate Depending on the activity reported t. After recording all activities and r	e code from the l by the respond relevant follow-	list the activities (he/she) did during the list of activity codes provided at the end lent, you will be prompted to ask a follo up questions, ask TU20 to check once a you did. These can include active tasks	l of the time diary. Th w-up question. Record gain if there is any oth	en, proceed to ask d the answer to the her activity the				
	time did you wake	Ū.		HOURS AND MINU	UTES:								
TU5. What time did you go to sleep for the night yesterday?			HOURS AND MINUTES:										
TU6.	TU7. What did you do	TU8. What time did this activity	TU9. How long did you do this activity?	TU10. What time did this activity end?	TU11. Check TU7: Is activity code 080, 090, 110, 120, 130, 150 or 042?	TU12. Did you play online/	TU13. With whom did you play? A ALONE (ONLINE / OFFLINE)	TU14. Did you watch this online/over the	TU15. Did you get the news online/over the				

TU5. What t	time did you go to	sleep for the night yest	erday?		HOURS AND MIN	UTES:	_									
TU6. Activity order	TU7. What did you do (first/next)? Choose activity code from list on the following page	TU8. What time did this activity start?	TU9. How do this a	r long did you activity?	TU10. What time did this activity end?	TU11. Check TU7: Is activity code 080, 090, 110, 120, 130, 150 or 042? 1 YES, TU7=080 2 YES, TU7=090 ⇔ TU14 3 YES, TU7=110 ⇔ TU15 4 YES, TU7=120 ⇔ TU16 5 YES, TU7=130 ⇔ TU17 6 YES, TU7=150 ⇔ TU18 7 YES, TU7=042 ⇔ TU19 8 NO, OTHER CODES ∳ Go to next row and record next activity in TU7	TU12. Did you play online/ over the internet? 1 YES 2 NO	TU13. W A ALONE B WITH F (ONLI) C WITH F D WITH G E WITH F ONLIN Record all record c, Probe: An Go to begi record new	E (ON RIEN NE / C RIEN OTHE RIEN E ! menti D, E ij iyone (LINE DS IN DFFLI DS O RS O DS A ioned. f TU1. else?	/ OFF N PER NLIN NLIN ND O Do n 2=2	watch this OFFLINE) PERSON b) LINE LINE D OTHERS D OTHERS D on tot -2 Go to beginning of next row and record next record next the news online/over the internet? the news on not the news online/over the internet? the news online/over the internet? the news online/over the internet? the news online/over the internet? the news online/over the internet? the news online/over the news online/over the news online/over the news online/over the news online/over the news over t		vs over the t? ginning of and pat		
ORDER	ACTIVITY	START TIME	HOURS	MINUTES	END TIME		YES NO						YES	NO	YES	NO
001		4:00			:	1 2 3 4 5 6 7 8 9	1 2	A	В	С	D	Е	1	2	1	2
002		:			:	1 2 3 4 5 6 7 8 9	1 2	Α	В	С	D	Е	1	2	1	2
003		:			:	1 2 3 4 5 6 7 8 9	1 2	A	В	С	D	Е	1	2	1	2
004		:			:	123456789	1 2	A	В	С	D	Е	1	2	1	2
005		:			:	1 2 3 4 5 6 7 8 9	1 2	A	в	С	D	Е	1	2	1	2
006		:			:	123456789	1 2	Α	В	С	D	Е	1	2	1	2
007		:			:	1 2 3 4 5 6 7 8 9	1 2	A	в	С	D	Е	1	2	1	2
800		-			-	123456789	1 2	A	в	С	D	E	1	2	1	2



Thank You

© UNICEF/SUDA2014-XX228/Noorani