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TIME CAN BE VIEWED AS THE ULTIMATE CONSTRAINT ON HUMAN ACTIVITY. UNLIKE OTHER RESOURCES, IT IS SHARED EQUALLY BY EVERYONE. EACH OF US HAS 24 HOURS PER DAY.

LE TEMPS PEUT ÊTRE CONSIDÉRÉ COMME LA CONTRAINTE ULTIME DE L'ACTIVITÉ HUMAINE. CONTRAIREMENT À D'AUTRES RESSOURCES, IL EST PARTAGÉ ÉGALEMENT PAR TOUS. CHACUN DE NOUS A 24 HEURES PAR JOUR.



Why research time-use?

- Time-use data includes information on most common human activities
- Reveals behavior of individuals and behavior of groups
- Can be used to make comparisons between groups and over time
- Can inform policy decisions



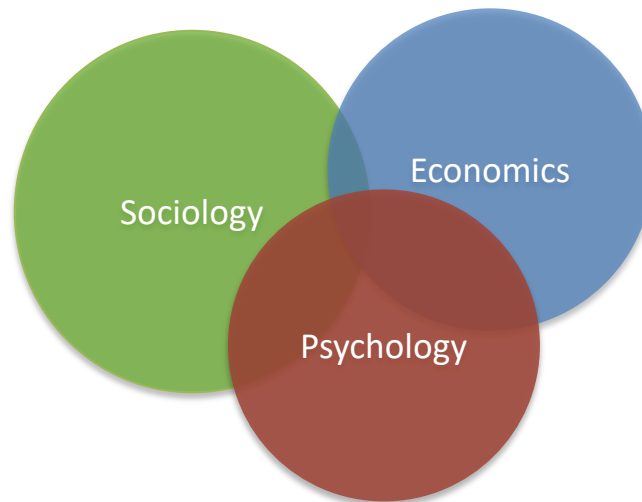
Why research time-use?

How much time is spent on (x) activity by men
vs. women?

How much time is spent on productive work?
How much time is spent on non-market work?

Exploring differences between societal groups

*Informing economic models and social accounting
systems*



What patterns exist in the sequencing of activities?
How does our use of time relate to mood?

Exploring behavioral correlates and determinants.

*Time poverty
Transportation policy
Environmental impact
Gender equality
Determinants of health
Work-life balance*

...



How do we collect data?

- Direct observation
- Survey
- Experience sampling
- Databases of time-stamped information
- **Time-use diaries**

Sample Diary



Diary/ Person id	Starting time	Ending time	Main activity	Parallel activity	Who with:				
					Alone	Spouse	Children	Other Persons	
a	04:00	07:20	Sleep						
a	07:20	07:50	Shower						
a	07:50	08:30	Had breakfast	Read newspaper			Ch		
a	08:30	08:40	Walked to bus		A				
a	08:40	09:00	Bus to job					OP	
a	09:00	11:20	Paid work					OP	
a	11:20	11:50	Lunch break: meal	Talked with colleag.				OP	
a	11:50	12:00	Lunch break: walk	Talked with colleag.				OP	
a	12:00	12:30	Lunch break: walk		A				
a	12:30	16:30	Paid work					OP	
a	16:30	16:50	Bus to home	Read newspaper	A				
a	16:50	17:00	From bus by foot		A				
a	17:00	17:40	Cooked supper	Talked with children			Ch		
a	17:40	18:20	Had supper	Talked with family		Sp	Ch		
a	18:20	19:10	Dish washing	Listened to radio	A				
a	19:10	21:00	TV			Sp	Ch		
a	21:00	22:10	Took a walk	Talked with spouse		Sp			
a	22:10	22:20	Shower						
a	22:20	04:00	Sleep						



How do we compare data?

Harmonization

- Consistent activity list
- Consistent operational definition of factors such as:
 - Multi-tasking
 - Transportation
 - Granularity of tracking

Methodological considerations



- Length of observation window
- Continuous recording or fixed intervals
- Self-coding or post-coding
- Size of sample
- Population choice
- Contextual questions



Dimensions of time-use

duration

timing

sequence

frequency

Quantity of time

How much time do I
spend brushing
my teeth?

Time of day

What time of day
do I brush my
teeth?

Order of activities

What activities do
I do before and
after brushing my
teeth?

Number of occurrences

How many times do
I brush my teeth?



UN. (2013). Guidelines for Harmonizing Time-Use Surveys. United Nations Economic Commission for Europe.

Juster, F., & Stafford, F. (1991). The allocation of time: Empirical findings, behavioral models, and problems of measurement. *Journal of Economic Literature*, 29(2), 471–522.

Eurostat. (2008). Harmonised European time use surveys: 2008 Guidelines. European Commission.

