

## Day Reconstruction Method

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## Approaches to Well-being

- How people evaluate their lives
  - “How satisfied are you with your life as a whole?”
  - Basis of most of what we know about well-being
- Answers
  - highly context dependent
  - poorly related to objective conditions

## Approaches to Well-being

- How people live and experience their lives
  - Time use & experience
    - How much time spent doing what?
    - How does it feel?
  - Pioneered by Tom Juster in 70's
    - “An important ingredient in the production and distribution of well-being is the set of satisfactions generated by activities themselves” (Juster, 1985, p. 333)

## Day Reconstruction Method (DRM)

- Builds on Juster's approach
- Takes advantage of last 20 years of cognitive research into reports of emotions and experience
  - Juster: global enjoyment ratings for classes of activities (“dislike very much” to “enjoy a great deal”).
  - DRM: tailored affect profiles for specific episodes of yesterday, which are “reinstated” in memory in some detail

## DRM

### Step 1

- R's reconstruct “yesterday” on a private form
  - List major meaningful episodes from getting up to going to bed, noting some details
  - Can insert new episodes as later ones prompt memories of earlier ones
  - The interlinked structure facilitates rich “reinstatement” of the last day.
- R's indicate approximate times (to estimate duration)
- R's keep this form, which serves as their own memory prompt for later questions.

## DRM

### Step 2

- R's complete a form for each episode, reporting
  - Where
  - Who with
  - What
  - How they felt during the episode
- Specifics tailored to the purpose of the study

## DRM Episode Questions

Where were you? (check one)

☐ At home ☐ At work ☐ Somewhere else

Who were you interacting with (including on the phone, etc)? Check all that apply.

☐ no one  
☐ spouse/significant other ☐ my children  
☐ friends ☐ parents/relatives  
☐ co-workers ☐ boss  
☐ clients/ students ☐ other people

## DRM Episode Questions

What were you doing? (check all that apply)

☐ commuting ☐ working  
☐ shopping ☐ preparing food  
☐ doing housework ☐ taking care of your children  
☐ eating ☐ pray/worship/meditate  
☐ socializing ☐ watching TV  
☐ nap/resting ☐ computer/internet/email  
☐ relaxing ☐ on the phone  
☐ intimate relations ☐ exercising  
☐ other (please specify \_\_\_\_\_)

## DRM Feelings

How did you feel during this episode?

	Not at all					Very much				
Impatient for it to end . . . . .	0	1	2	3	4	5	6			
Happy . . . . .	0	1	2	3	4	5	6			
Frustrated/annoyed . . . . .	0	1	2	3	4	5	6			
Depressed/blue . . . . .	0	1	2	3	4	5	6			
Competent/capable . . . . .	0	1	2	3	4	5	6			
Hassled/pushed around . . . . .	0	1	2	3	4	5	6			
Warm/friendly . . . . .	0	1	2	3	4	5	6			
Angry/hostile . . . . .	0	1	2	3	4	5	6			
Worried/anxious . . . . .	0	1	2	3	4	5	6			
Enjoying myself . . . . .	0	1	2	3	4	5	6			
Criticized/put down . . . . .	0	1	2	3	4	5	6			
Tired . . . . .	0	1	2	3	4	5	6			

## Data Collection

- Initially tested with diverse convenience samples
  - Full day takes about 1 hour
- Currently adapted for representative surveys conducted by Gallup and WHO
  - Different parts of the day for different R's
  - Detailed reports on random subset of episodes
  - 10-15 minutes
- Feasible task, independent of R's education

## Analyses

- Feelings as a function of episode characteristics
- Duration weighted to characterize day
- Provides rich descriptions of the subjective experience related to different activities, situations, interaction partners, etc.
- Can be related to background variables
  - e.g., SES, work conditions, personality

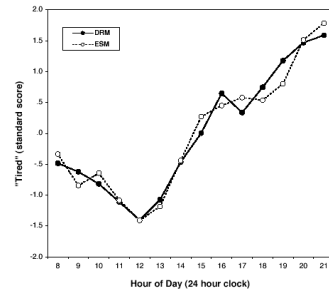
## Validation

- Gold standard for measuring momentary experience is ESM
- Against ESM data from the same person for the same day
- Against ESM profiles from other persons for the same type of episode
- Non-obvious ESM patterns
  - Can we reproduce non-obvious patterns observed in ESM?
  - E.g., diurnal patterns

## Tiredness

- People predict a linear increase in tiredness over the course of the day.
- ESM shows
  - you start out tired
  - tiredness drops over the morning
  - is lowest at lunch
  - increases after that
- DRM replicates this pattern, which R's can't report introspectively (Kahneman et al., *Science*, 2004)

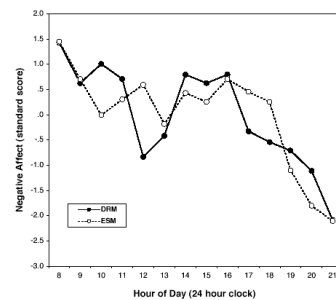
## "Tired" in DRM and ESM



## Negative Affect

- People do not predict diurnal patterns for negative affect, which they see as situation driven.
- ESM shows diurnal pattern
- DRM replicates it – without introspective insight.

## Negative Affect in DRM and ESM



## Validity

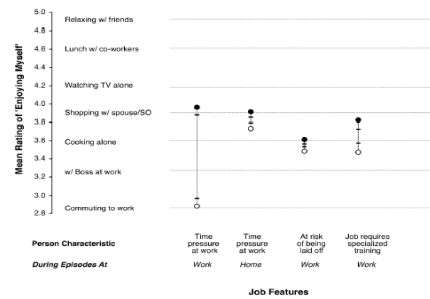
- More examples in Kahneman et al., *Science*, 2004
- DRM replicates non-obvious ESM findings
- ESM and DRM profiles show good correspondence

## Some Illustrative Observations

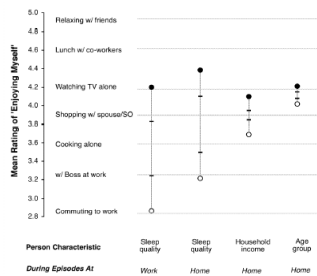
## Activities & Affect

Activity	Net Affect	% time	Net affect = positive minus negative (possible range -6/6)
intimate relations	4.26	1.6	N = 909 employed women
relaxing	3.71	14.3	24% African-American
socializing	3.59	14.8	22% Hispanic
eating	3.35	14.7	49% White
pray/meditate	3.26	2.8	Household income \$54.7k
watching TV	3.17	15.2	
preparing food	2.90	7.7	
shopping	2.81	3.0	
childcare	2.55	7.9	
internet/email	2.50	11.8	
doing housework	2.39	14.7	
working	2.25	40.5	
commuting	2.10	10.5	

## "Enjoying Myself"



## "Enjoying Myself"



## Features More Correlated with Job Satisfaction Than Job Affect (DRM)

	Satisfaction > Affect	
Current job compared to previous	.31	.17
Low status job (-)	.23	.11
Overqualified for my job (-)	.20	.12
Requires specialized education/training	.20	.09
Can make decisions that help people	.20	.11
Household income	.20	.04
Excellent benefits	.17	.09

## Features Less Correlated with Job Satisfaction Than Job Affect (DRM)

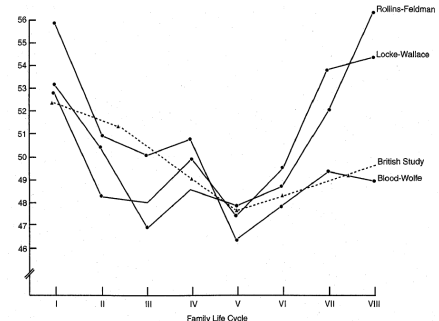
	Satisfaction < Affect	
Affective Disposition	.25	.42
Constant pressure to work fast (-)	.19	.28
Had trouble staying awake, etc (-)	.08	.18
Constant attention to avoid mistakes (-)	.04	.14
Can chat with other workers while on job	.04	.10
Exposed to offensive noise (-)	.04	.10

**Global vs. Episodic:  
How Much Do People Enjoy  
Their Kids?**

## Direct Ratings

- Juster and colleagues, 1975 survey:
  - 28 activities rated from "dislike very much" (0) to "enjoy a great deal" (10).
- Activities with one's children top the list (ranks 1-4)
- Grocery shopping and cleaning the house at the bottom (ranks 27 & 28)
- But....

## Marital Satisfaction (4 studies)



## Top-down vs. Bottom-up

### Direct Ratings

How much do you enjoy ... (10 = pos)

Socializing	8.9
Taking care of your children	8.6
Eating	8.3
Watching TV	7.8
Grocery Shopping	5.4
Housework	4.7

### Momentary Affect

Positive minus negative

Note: Numbers not comparable!

Socializing	3.6
Eating	3.3
Watching TV	3.2
Preparing food	2.9
Grocery shopping	2.8
Taking care of your children	2.6
Housework	2.5

## Why?

- Global and episodic reports result in different rankings
- Likely key contributors:
  - Organization of memory
  - Memory bias
  - Social desirability

## Organization of Memory

- Activities are encoded and represented by their key goals and features
  - Cooking while the kids are present is still "cooking"
- What's recalled for "kids" are kid-focused activities
  - Reading stories, watching movies...
- Activities that are not kid-focused are missed
  - But make up most of the time spent with kids

## Salient Memories

- Global reports are based on memorable episodes
  - Memorable episodes are rarely typical –they are more extreme.
- The DRM's episodic reports are based on the specific episodes of yesterday
  - Avoids memory bias

## Social Desirability

- Negative global judgments are less acceptable than negative episodes
- Compare
  - “I don’t like being with my kids” (global)
  - “My kids were a pain last night” (specific episode)

## Conclusions

- Global and episodic reports paint different pictures
- Assessments should be based on specific and recent episodes
- DRM does so and combines affect reports with time use data, providing a rich characterization of people’s daily experience

## Event Reconstruction Method (ERM)

- Does not focus on yesterday
- Asks for the last instance of an activity
  - E.g., last time you went out for dinner
- Reproduces the DRM affect profiles
  - provided the episode is recent
- Does not provide time use information
  - Which can be taken from other sources
- Has lower respondent burden and can capture less frequent activities