

## Project MOBILE Ecological Momentary Assessment (EMA) Items

Question sequences will be prompted at a random time within each of the following time intervals ( 10am-12pm, 12-2pm, 2-4pm, 4-6pm, 6-8pm, 8-10pm) on Fri, Sat, Sun, and Mon. Also, there will be two versions of the protocol with different options for the first prompt: Early Version (first prompt between 6:30-6:45am) and Late Version (first prompt between 7:30-7:45am).

Item numbers 1-11, and 13-16 should occur in a randomly programmed 60% of prompting sequences. Item numbers 17-19 should occur in 40% of prompting sequences. Item number 12 should occur in 100% of prompting sequences. Item numbers 17-19 should occur in 40% of prompting sequences.

### *Beginning Message: "Time for a Survey"*

(1) How HAPPY were you feeling just before the beep went off?

Not at all  
A little  
Moderately  
Quite a bit  
Extremely

(2) How STRESSED were you feeling just before the beep went off?

Not at all  
A little  
Moderately  
Quite a bit  
Extremely

(3) How CHEERFUL were you feeling just before the beep went off?

Not at all  
A little  
Moderately  
Quite a bit  
Extremely

4) How FRUSTRATED or ANGRY were you feeling just before the beep went off?

Not at all  
A little  
Moderately  
Quite a bit  
Extremely

(5) How CALM or RELAXED were you feeling just before the beep went off?

- Not at all
- A little
- Moderately
- Quite a bit
- Extremely

6) How TENSE or ANXIOUS were you feeling just before the beep went off?

- Not at all
- A little
- Moderately
- Quite a bit
- Extremely

(7) How ENERGETIC or FULL OF PEP were you feeling just before the beep went off?

- Not at all
- A little
- Moderately
- Quite a bit
- Extremely

8) How SAD or DEPRESSED were you feeling just before the beep went off?

- Not at all
- A little
- Moderately
- Quite a bit
- Extremely

(9) How FATIGUED or TIRED were you feeling just before the beep went off?

- Not at all
- A little
- Moderately
- Quite a bit
- Extremely

(10) How much PHYSICAL PAIN were you feeling just before the beep went off?

- None at all
- A little
- Somewhat
- Quite a bit

Worst ever felt

(11) How PHYSICALLY ILL were you feeling just before the beep went off?

Not at all  
A little  
Moderately  
Quite a bit  
Extremely

(12) What were you DOING right before the beep went off? (Choose your main activity)

Reading/Computer  
Watching TV/Movies  
Eating/Drinking  
Physical Activity/Exercising  
Other

**If Physical Activity/Exercise**→ What type of PHYSICAL ACTIVITY/EXERCISE?

Running/jogging  
Walking  
Weightlifting/Strength training  
Using cardiovascular equipment  
Bicycling  
Other

**If Other**→ What was this OTHER activity?

Talking on the phone  
Cooking/Chores  
Riding in a car  
Childcare/Helping children  
Something else

**If Something else**→ Can you tell us what you were doing right before the beep went off? (please type in using the key pad)

**If Something else**→ Were you?

Sitting  
Standing  
Walking  
Jogging/Running

(13) How ENJOYABLE is this activity?

Not at all  
A little  
Somewhat  
Quite a bit  
Extremely

(14) WHERE were you just before the beep went off?

Home (Indoors)  
Home (Outdoors)  
Work (Indoors)  
Outdoors (not at home)  
Car/Van/Truck  
Other

**If Home (Indoors)→** WHERE were you AT HOME just before the beep went off?

Bedroom  
Living/family room  
Kitchen  
Garage  
Other

**If Home (Outdoors)→** WHERE were you outside your HOME just before the beep went off?

Pool  
Deck/patio/balcony  
Yard  
Driveway  
Someplace else

**If Work (Indoors)→** How FAR are you from your home right now?

Less than ½ mile away  
½ to 1 mile away  
More than 1 mile away

→ How did you get here?

Walked  
Biked  
Car/Van/Truck  
Bus/Subway/Train

**If Outdoors (not at home)→** WHERE were you OUTDOORS just before the beep went off?

Park or Trail  
Road  
Sidewalk

Parking Lot  
Other

→ How many TREES AND PLANTS are there in the area where you are right now?

No trees and plants  
A few trees and plants  
Some trees and plants  
A lot of trees and plants

→ How much SHADE FROM THE SUN is there in the area where you are standing right now?

No shade (very sunny)  
Partial shade

Completely shady (no sun)

→ How much TRAFFIC is on the closest street to where you are right now?

No traffic  
A little traffic  
Some traffic  
A lot of traffic

→ How SAFE do you feel where you are right now?

Very unsafe  
Somewhat unsafe  
Somewhat safe  
Very safe

→ How much LITTER OR GARBAGE is on the ground where you are now?

No litter  
A little litter  
Some litter  
A lot of litter

→ How FAMILIAR are you with where you are right now?

Not at all (never been here)  
A little (been here a few times)  
Somewhat (been here several times)  
Very much (come here all the time)

→ How FAR are you from your home right now?

Less than ½ mile away

½ to 1 mile away

More than 1 mile away

→ How did you get here?

Walked

Biked

Car/Van/Truck

Bus/Subway/Train

**If Other→**

WHERE was this OTHER place? (Next, go to 11a)

Restaurant

Store/mall

Someone else's house

Gym/health club

Someplace else

→ How FAR are you from your home right now?

Less than ½ mile away

½ to 1 mile away

More than 1 mile away

→ How did you get here?

Walked

Biked

Car/Van/Truck

Bus/Subway/Train

(15a) Were you ALONE just before the beep went off? (If YES, skip to 16)

Yes

No

(15b) Were you with your SPOUSE just before the beep went off?

Yes

No

(15c) Were you with your CHILD(REN) just before the beep went off?

Yes

No

(15d) Were you with OTHER FAMILY MEMBERS (COUSINS; SIBLINGS; AUNTS; UNCLES) just before the beep went off?

Yes

No

(15e) Were you with FRIENDS just before the beep went off?

Yes

No

(15f) Were you with your COWORKERS just before the beep went off?

Yes

No

(15g) Were you with OTHER TYPES OF ACQUAINTANCES just before the beep went off?

Yes

No

(15h) Were you with PEOPLE YOU DON'T KNOW just before the beep went off?

Yes

No

(15i) Were they doing the same thing as you?

Yes

No

(16) Were you with a PET (dog) just before the beep went off?

Yes

No

(17a) Doing 10+ min of activity in the next few hours would REDUCE MY TIME WITH MY FAMILY/FRIENDS.

Strongly Disagree

Somewhat Disagree

Neither Agree nor Disagree

Somewhat Agree

Strongly Agree

(17b) Doing 10+ min of activity in the next few hours would HELP ME FEEL LESS STRESSED.

Strongly Disagree  
Somewhat Disagree  
Neither Agree nor Disagree  
Somewhat Agree  
Strongly Agree

(17c) Doing 10+ min of activity in the next few hours would MAKE ME TOO TIRED TO DO MY DAILY WORK.

Strongly Disagree  
Somewhat Disagree  
Neither Agree nor Disagree  
Somewhat Agree  
Strongly Agree

(17d) Doing 10+ min of activity in the next few hours would HELP ME FEEL MORE ENERGETIC.

Strongly Disagree  
Somewhat Disagree  
Neither Agree nor Disagree  
Somewhat Agree  
Strongly Agree

(18a) Can you do 10+ min. of physical activity sometime within the next few hours, EVEN IF YOU GET BUSY?

I know I cannot  
I probably cannot  
Maybe I can  
I probably can  
I know I can

(18b) Can you do 10+ min. of physical activity sometime within the next few hours, EVEN IF YOU START TO FEEL TIRED?

I know I cannot  
I probably cannot  
Maybe I can  
I probably can  
I know I can

(19) I INTEND to be physically active for 10+ min. sometime within the next few hours.

Strongly Disagree



Somewhat Disagree  
Neither Agree nor Disagree  
Somewhat Agree  
Strongly Agree

Ending message: "Thanks, you just earned \$1"

## References:

### Items 1-9 (Positive and Negative Affect):

Dunton, G. F., Huh, J., Leventhal, A., Riggs, N., Hedeker, D., Spruijt-Metz, D., Pentz, M. Momentary assessment of affect, physical feeling states, and physical activity in children. *Health Psychology*, 2013 May 13. [Epub ahead of print]

### Item 12 (Main Activity):

Dunton, G. F., Liao, Y., Kawabata, K., Intille, S. Momentary assessment of adults' physical activity and sedentary behavior: Feasibility and validity. *Frontiers in Movement Science and Sport Psychology*, 3, 260, 2012.

### Items 14-15 (Physical and Social Contexts):

Dunton, G. F., Kawabata, K., Intille, S., Wolch, J., & Pentz, M. Assessing the social and physical contexts of children's leisure-time physical activity: An Ecological Momentary Assessment study. *American Journal of Health Promotion*, 26, 135-142, 2012.

Dunton, G. F., Intille, S., Wolch, J., & Pentz, M. Children's perceptions of physical activity environments captured through Ecological Momentary Assessment: A validation study. *Preventive Medicine*, 55, 119-121, 2012.

### Items 17-19 (Outcome Expectancies, Self-Efficacy, Intentions):

Pickering, T., Huh, J., Intille, S., Dunton, G. F. Relationships between physical activity and the mean and variability in repeatedly-measured behavioral cognition variable. 2013. Presented at: *34th Society of Behavioral Medicine Annual Meeting & Scientific Sessions*. March. San Francisco, CA/USA.