

3.4.6 Physical Activity

MESA Typical Week Physical Activity Survey (MESA-TWPAS) Administration Guidelines

I. PURPOSE

The MESA Typical Week Physical Activity Survey (TWPAS) is designed to identify the time and frequency spent in various physical activities during a typical week in the past month. The rationale for the selected time frame of a typical week in the past month is the intention to capture typical activity patterns in one's daily life.

The survey has 28 questionnaire items in categories of household chores, lawn/yard/garden/farm, care of children/adults, transportation, walking (not at work), dancing and sport activities, conditioning activities, leisure activities, occupational and volunteer activities.

II. MATERIALS/EQUIPMENT

None.

III. DEFINITIONS

None.

IV. METHODS

1. General Instructions

1.1 Read the following instructions to the participant.

“Think about the types of activities you did in a typical week in the past month. For each activity, note which you did in a typical week by filling in the circle for ‘yes’ (Y) or ‘no’ (N). For each item that you mark as ‘yes,’ fill in the circle for the number of days in a typical week you did these activities and the average time per day in hours and minutes you did these activities.”

1.2 Define intensity levels for the participant.

“Most of the survey questions ask about light, moderate, and heavy intensity activities. Light intensity refers to activities that require little effort and are easy to do. Moderate intensity refers to an effort that is harder than light intensity but is not an all-out effort. Vigorous intensity is a very hard activity and requires all-out effort.”

- 1.3 Explain the example to the participant. To orient the him/her to the past month, you will identify that period for the participant. In the text below, if we assume, for instance, that the current date is March 15, the past month would start on Feb 15.

Questions people might ask about completing the TWPAS, and some sample responses:

- *What if every week in the past month was different?*
“**Think about the week that was most typical of your activity patterns for that activity in other times of the year and fill in the circle for the number of days and hours per day and or minutes per day.**”
- *What if the length of time is different each day?*
“**Think about the average in all the days that reflects your typical time for the activity in a typical week.**”
- *I was on vacation in the past month when I went on a 2 week bicycle trip. Should I include this in the estimates?*
“In this case, think about a typical week in the past couple of months that reflects your usual activity patterns. We are trying to identify the activity patterns you do on a usual basis, so if your vacation was not typical, do not include it.”

“Let me show you an example of how you will fill out the survey.”

- 1.4 Provide the example and review each step with the participant. Give him/her time to consider each step and to ask questions. Explain that, if the participant continued usual physical activities while on vacation (or during some other atypical period of time), he/she should report them as usual for a typical week. However, if usual activities were stopped during a vacation, or if the participant took up other activities *only during that period*, then he/she should not record them as typical activities.
- 1.5 Once you have reviewed the sample question with the participant and explained the difference between typical and atypical activities, ask if he/she has any questions.
- 1.6 It is possible that a person will spend more time doing activities on one day or another (e.g., weekends). If this is the case, ask him/her to estimate the usual time during each event in a typical week, averaging in the longer and shorter days.

For example, if the participant engages in an activity for 30 minutes/day 5 days/week and 2 hours/day 1 day/week, ask him/her to add about 15 minutes extra to each day, to take into account a single day that has a prolonged bout of activity compared to the usual.

- 1.7 At this point allow the participant to complete the form him-/herself, but be available to answer questions and provide clarification.

2. Specific Instructions

Items to be completed by the interviewer:

- For **date** enter date form was completed. For example, July 7, 2000 would be entered 07/07/2000.
- For **ID #** enter the participant's study identification number.

3. Item-by-Item Clarification

“In a typical week in the past month, did you do...”

Household chores

1. Light effort: These activities are light intensity, routine, usually daily activities that people do during the care and maintenance of a household. Examples include cooking and cleaning after cooking, straightening up the house, grocery and household shopping and putting things away, changing the bed, doing the laundry, ironing. Housecleaning in a structured, organized way should not be included here, as that would involve more moderate intensity chores
2. Moderate or Heavy Effort: These activities are more structured and might not occur on a daily basis. Examples include heavy cleaning (washing windows, moving furniture to clean), vacuuming, scrubbing the floors or walls, mopping—either standing up or on hands and knees—repairing home appliances or lawn and garden tools, washing the car.

Lawn/Yard/Garden/Farm

3. Moderate Effort: These activities refer to outside chores involved in caring for a house, farm, or ranch. They may involve yard work, cleaning out the garage, raking the leaves, sweeping the porch or sidewalk, or other moderate effort chores. Encourage the participant

to think of activities done in a typical week in the past month. This category may include seasonal activities; if so, the activities reported should be typical of the past month.

4. **Heavy Effort:** These activities require heavy effort and may be seasonal. Examples include digging dirt, shoveling snow or using a snow blower, chipping ice, tilling a garden, chopping and hauling wood, and removing trees.

Care of Children/Adults

5. **Light Effort:** These activities require physical movement by the respondent and include bathing, feeding, changing diapers, playing with a child, or other similar activities. Do not count time sitting with a child (as in babysitting) without active engagement in physical activities. Include only the time spent involved in physical activities.
6. **Moderate Effort:** These are intentional activities that require moderate effort to complete and may include activities of lifting and carrying dependent others, pushing a wheelchair or stroller. Include only the time spent moving.

Transportation

7. These are all light activities and do not include walking. Have the respondent include all time spent in transportation where they are sitting.

Walking (not at work)

8. Walking to get places. In general, walking is underreported in the time estimates. This would include walking for transportation, walking to and from work, walking to the store or from the car into the store and back, walking to get the mail, etc.
9. Walking for exercise, pleasure, social reasons, walking during work breaks, and walking the dog is classified as intentional walking. The walking may be for exercise or part of a daily routine that is done with family members, animals, or for personal reasons. Walking for transportation should be included in item 8.

Dancing/Sport Activities

10. Dancing in church, ceremonies, or for pleasure. Remind the participant to think of a typical week in the past month to estimate usual dancing behaviors. Some may dance only occasionally—a few

times a year. This would not be included as a “yes” response to this category unless it was typical of the past month. Ceremonial or religious dancing would need to be done regularly enough to represent a typical week in the past month.

11. Team sport. The purpose of including team sports activities is to group exercise activities that are done with others. These are probably seasonal activities that are done in leagues or other organized settings. Remind the participant to think of a typical week in the past month and to stay within that framework when responding.
12. Dual sports. These activities involve mostly racket sports or other one-on-one sports activities. They could include fencing, ping-pong, or other activities done with another person.
13. Individual activities. These may be sports activities, such as golf and bowling, or more individual relaxation/mediation activities, such as yoga or Tai Chi. Remind respondents to think of days and time spent during a typical week in the past month only.

Conditioning Activities.

14. Moderate Effort. Conditioning activities are those that can be done alone or with others. They are different from sports, because the intention is to gain an element of fitness rather than have a contest or win a game. Moderate effort activities are not for competition, nor are they all-out effort. Intensity of exercise should be moderate enough that respondents should be able to talk with others while they are performing the activities. Examples are low impact aerobics, recreational (slow) bicycling, rowing on a rowing machine or in a lake, swimming in a pool or lake, or using weight lifting or conditioning machines at a health club.
15. Heavy Effort. These are very intense activities done for maximum fitness levels and include high impact aerobics (e.g., Tai-bo, kick boxing), competitive or maximum effort running, bicycling, swimming, and work on health club machines. Exercise at this intensity would be very hard and the respondent would have difficulty carrying on a conversation during the performance.

Leisure Activities.

16. Watching TV. This is a sedentary, leisure-time pursuit. Do not include the time watching TV while doing other things. The question is to be used as a marker of sitting or reclining and watching TV as a single pursuit.

17. Read, knit, sew, visit, do nothing, non-work recreational computer. These are markers of sedentary activities that exclude watching TV. If people report knitting while watching TV, make sure they select one category or the other and avoid duplicate category reporting.

Occupational Activities.

18. **Do you work to earn money?**
If no, skip to question 24.
If yes, continue to question 19.
Respondents should report activities only if they work to earn money. Volunteer activities will be asked about next. Unpaid household activities and caring for others were included in questions 1–6.
19. Days/week and hours/day worked. If the respondent works at more than one job, record the total days worked per week in all jobs. To estimate the average hours worked per week, ask the respondent to consider the hours they work in the second job (or third, if applicable) and then add them to the average time they work per day. See the example about averaging time per day when activities are done longer on some days of the week than on others.

Respondent should fill in the circles for the time spent in each activity at work. The hours per day for all activities should equal the total hours per day worked. Recommend that the respondent keep a cumulative total of the hours recorded doing occupational activities, in order to avoid estimating more time in occupational tasks than time they work on an average day. They can also subtract the hours from the total time worked per day as they identify how the time is spent in different types of activities.

“At work, did you do....”

20. Light Effort/Sitting Activities. For most respondents, this will be the most hours in the work day.
21. Light Effort/Standing Activities. These are likely intermittent activities that would be done in a clerical setting (e.g., office work related to filing, using a copy machine) or sustained activities done in a labor setting (e.g., check-out clerk in a store, assembly line worker assembling parts, medical field examining patients). Teaching in a classroom falls into this category.
22. Moderate Effort/Standing or Walking Activities: For some occupations (office work, clerical, professional), these may be more

intermittent, as in walking down the hall, walking between office buildings, and delivering items. For labor settings, this could relate to jobs such as delivery person (overnight express delivery, food delivery, mail delivery) or jobs that require mostly walking and standing (nurse, custodian, physical education teacher, coach, firefighter, police officer, physical therapist).

23. Heavy Effort: These occupations require manual effort that involves substantial movement and labor. Types of activities may include digging ditches, ranch or farm labor, delivering furniture, loading and unloading trucks, seasonal farm work.

Volunteer Activities

24. **Did you work as a volunteer doing activities you have not yet mentioned on this survey?**

If no, skip to question 28.

If yes, continue to question 25.

This question is designed to identify time spent in unpaid, work-like activities outside the home.

“Did your volunteer work include....”

25. Light Effort. The respondent should identify light activities that required little effort and were done predominantly while sitting or standing (e.g., cooking at church banquet).
26. Moderate Effort: The respondent should identify activities that required moderate effort and were done predominantly while standing and walking (e.g., participating in a neighborhood clean-up project).
27. Heavy Effort. The respondent should identify activities that required heavy effort, such as pushing, lifting, carrying, and climbing (e.g., building a house for Habitat for Humanity).

Walking Pace

28. **When you walk outside of your home, what is your usual pace?**
Fill in appropriate circle. Ask respondent to estimate the usual pace he/she walks most of the time. Consider all walking activities (e.g., at work, on the way to work, for exercise, in walking with children or others, or when running errands).

Offer the following guidelines:

- 2 mph = 30 minutes per mile (slow or casual)

- 2-3 mph = 20-30 minutes per mile (typical or average)
- 4-5 mph = 12-15 minutes per mile (very fast or almost a slow jog)
- More than 5 mph = 10 minutes per mile (race-walking)