



Multiple Errands Test Home Version (MET-Home)[©]

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Updated by Suzanne Burns (2023)

Introduction

The Multiple Errands Test (MET) was first developed by Shallice and Burgess (1991) and several context specific versions have been created and tested across the globe over the past three decades. The Multiple Errands Test Home Version (MET-Home) was created in 2016 to assess of how executive dysfunction manifests during daily activities in the home environment.

The MET-Home was created to support the assessment of executive function in the context of the community. Specifically, it can be difficult to assess executive function in the home environment because the space is familiar and evaluators may rely on skilled observation of typical everyday performance. This approach may contribute to the assessment of procedural memory instead of tapping into the objective assessment of how executive function manifests in the “real-world.”

How to Use the MET-Home

The MET-Home may be particularly useful for the following practice contexts/situations:

- Home health care
- Inpatient hospital/rehabilitation settings where therapists are afforded the opportunity to conduct home assessments

- Outpatient rehabilitation settings where therapists are afforded the opportunity to conduct home assessments
- Virtually with caregivers or family members video recording and sending recordings to the family (research on feasibility of this is currently under way)

The MET-Home shows evidence of initial reliability and validity among adults with stroke. An alternate version has been modified and preliminary testing has been conducted adults with traumatic brain injury (Dawson, Rotenberg, & Ghatala, 2018). Validation among aging adults is currently being tested.

As it stands, the MET-Home is not an outcome measure. It can be used to identify performance problems, self-generated strategy use, and the influence of environment on performance. All of these findings can be used to support intervention development.

We have updated this manual to support the utility of the MET-Home in practice. The website (MET-Home.com) contains videos, links to MET-Home research, and other important MET articles/resources. We have also developed a Q&A board if you should have any questions regarding the use of the MET-Home.

Research on the MET-Home

The MET-Home has evidence of initial reliability and validity in adults with stroke. The results of our ongoing research have been published in *Neuropsychological Rehabilitation* and the *American Journal of Occupational Therapy*. The articles have been uploaded to our website for your review. If you have any questions, please contact the lead author, Suzanne Burns, via the website contact form. Here is a list of articles that have been published so far:

1. Burns, S. P., Dawson, D. R., Perea, J. D., Vas, A., Pickens, N. D., & Neville, M. (2019). Development, reliability, and validity of the multiple errands test home version (MET-Home) in adults with stroke. *American Journal of Occupational Therapy*, 73(3), 7303205030p1-7303205030p10. DOI: 10.5014/ajot.2019.027755
2. Burns, S. P., Pickens, N. D., Dawson, D. R., Perea, J. D., Vas, A. K., Marquez de la Plata, C., & Neville, M. (2020). In-home contextual reality: a qualitative analysis using the Multiple Errands Test Home Version (MET-Home). *Neuropsychological Rehabilitation*, 30(5), 787-801. DOI: 10.1080/09602011.2018.1431134
3. Burns, S. P., Dawson, D. R., Perea, J. D., Vas, A. K., Pickens, N. D., Marquez de la Plata, C., & Neville, M. (2019). Associations between self-generated strategy use and MET-Home performance in adults with stroke. *Neuropsychological Rehabilitation*, 1-15. DOI: 10.1080/09602011.2019.1601112

Administration Preparation

Prior to administering the MET-Home, make sure to familiarize yourself with the assessment. It is also a good idea practice administering the assessment prior to conducting the assessment with your clients which will help you become familiar with the procedure and scoring.

The MET-Home should take no longer than 30 minutes to administer. Additional time is needed for scoring and interpretation of the assessment results. Make sure to locate the Excel document where you can input scores and produce a visual depiction of your collected data which may help you communicate the results with your clients, families/care partners, and other stakeholders.

Prepare yourself with the following items prior to administering the assessment:

- *A printout of the instruction sheet for the client*
- *A clipboard where you can attach the instruction sheet is attached*
- *A pen*
- *Yarn or string to attach a pen to the clipboard*
- *A strap that can be attached to the clipboard for participants to carry over their shoulder or around their neck if needed.*
- *The examiner scoring sheet and a pen*
- *A stopwatch or timer*

Make sure to collect all of the items when you are done.

Examiner Instructions

- 1) Provide all of the items to the client that they will need to complete the assessment. This will include the clipboard with the instruction page and the attached pen and strap.
- 2) Review the instructions with the client by reading the following script and pointing the client's instruction sheet with your hand for sections that are described.

“During this exercise you will complete some tasks around your home. I have given you an instruction sheet on this clipboard with a pen. You can use the strap to help carry around the clipboard if desired.

During the exercise you will be asked to:

- a) complete eight household tasks,
- b) collect specific information about four items and write down what you find out,
- c) five minutes after you begin the assessment, ask someone what time it is, and
- d) tell me when you have completed the exercise.

Some of the tasks ask that you identify specific items in your home. Do not collect the items; instead you can simply identify their location by pointing or touching them.

Other items may ask you specific details or costs to identify; please use whatever resources are available to you to locate the precise information.

While some of the items listed on this page may not be tasks that you typically complete, they have been selected for this exercise to represent common household scenarios. While completing the list of tasks, you must follow the rules listed at the bottom of your instruction sheet. You must:

1. Complete all of the tasks but they may be performed in any order

2. Stay on your property
3. Complete these tasks as fast as you are able without rushing
4. Not go back to a room that you have already been in. You must only visit each room once. In other words, you must not return to a “home base” location [you may give example of returning to the same spot over and over again to fill out the form]. You can walk through the room to get to another room if it is the only route.
5. Not speak to the evaluator unless it is part of the task or if no one else is present in your home.
6. Not collect any items.

During this exercise, I will be observing you at a distance. Please do not speak to me unless it is part of the task.”

“Do you have any questions?” No _____ Yes _____

Clarify any questions by re-reading the instructions and/or the rules specific to the participant’s question. Do NOT tell the participant anything about the actual performance of the tasks.

“To ensure that you understand the instructions, please explain to me what you must do during this exercise.”

Clarify any misinterpretations and make sure that the client is clear on the instructions and rules to be followed.

“That’s right. You are going to complete these tasks and follow these rules. Take as much time as you need to look over the page. Please tell me when you are ready to begin.”

- 3) When the client is ready to begin, you will step back and follow the client around their home observing approaches, strategies, environmental and contextual factors, and any unusual behaviors. Record these findings on the scoring sheet.

Scoring and Interpretation

The MET-Home evaluates the impact executive function on everyday task performance in the home through a series of daily tasks. The assessment is loosely structured and includes a list of everyday tasks that are constrained by rules. The participant is observed performing the task-list and the scoring sheet can be used by the examiner during and immediately after the exercise to objectively measure performance, identify strategies used, and examine how environment and contextual factors may influence performance.

1) Scoring and interpreting the planning time and total time.

Planning time: The participant may not spend enough time planning, may perseverate with planning, or may use an adequate amount of time creating a plan. Sometimes the participant may plan during the exercise. While this cannot be scored as planning prior to exercise, it can be noted in the strategy section. Planning time begins after the examiner says, “Take as much time as you need to look over the page. Please tell me when you are ready to begin.” Planning time ends when the participant states that they are ready to begin or begin the assessment. It is possible that participants seem like they are planning but instead may have difficulty initiating the exercise. You may be able to interpret this with skilled observation, or you may choose to ask the client about how they planned after the assessment is completed.

Total time: Total time begins once the participant initiates the exercise and when the participant states that they are finished. Some participants with executive function impairments may demonstrate a reduced press or awareness of time when completing the exercise.

2) Scoring and interpreting completed tasks:

Tasks are categorized into three performance options: accurately completed, partially completed, or omitted. If the task is skipped or not addressed, it is therefore omitted and you will check the corresponding box. If the task is carried out in part, unsuccessfully, or inaccurately, it is considered partially completed and you will check the corresponding box. If the task is completed in full and is accurate, it is considered accurately completed and you will check the corresponding box. You can total the frequency of accurate, partial, and omitted tasks for the final score out of 14 possible points. A higher frequency of accurately completed task is indicative of stronger performance on this assessment. Higher frequencies of partially completed and omitted tasks indicate poorer performance and greater influence of executive dysfunction on task performance in everyday life. Total scores are recorded at the bottom of the page in the associated space.

3) Scoring and interpreting rule breaks:

Rule breaks are organized into four categories.

- (1) *Complete all tasks in any order.*
- (2) *Stay on the property.*
- (3) *Complete the task as fast as possible without rushing.*
- (4) *Visiting a room more than once.*
- (5) *Not speaking to the evaluator.*
- (6) *Not collecting items.*

You can use the space provided on the MET-Home scoring page to record the rule breaks. A description about what contributes to a broken rule appears next to the rule. This gives you a way to organize which rules were broken throughout the exercise.

Participants are not scored if they choose to complete the tasks in the order in which the tasks are presented on their sheet; however, this may indirectly contribute to rule breaks such as entering a space more than once.

Total number of rules broken and total frequency of rule breaks are recorded in the total scores section on the score form.

4) Scoring and interpreting the number of passes:

Passes occur when the participant passes by an area where one of the tasks could be carried out (e.g., walks by the pantry or cabinet in the kitchen when task number three could have been carried out). Only one pass may be calculated for each task for ease of scoring. If the client uses technology (i.e., phone, computer, alarm clock), you may count a pass if the technology is used on two or more separate occasions. If a pass occurs, place a check mark in the corresponding box. It may be helpful to reflect on passes after the exercise once you've had an opportunity to identify where items are located in the home.

5) Scoring and interpreting inefficiencies:

Participants may be interrupted or distracted during the exercise. Examples of interruptions or distractions may include but are not limited to: taking a phone call, visiting with someone in the home, stopping for a snack, or feeding a pet. If the participant is distracted by a said interruption, this is considered an inefficiency. Tally inefficiencies while administering the assessment. You will record the total frequency of this after the assessment is completed. This will be recorded on the total scores section.

6) Scoring and interpreting strategies used:

Strategies are frequently used by adults with and without executive dysfunction. Observing and identifying the use of strategies can provide useful information about how the participant uses planning, self-monitoring, multi-tasking, and the environment to complete everyday tasks. You can check the corresponding box of strategies used and tally the frequency in the corresponding boxes. Some strategies will only occur once due to the nature of the strategy. It is okay to use a single tally in the corresponding boxes and will likely be the case in the planning section. Collecting and recording information about which strategies are used may facilitate intervention planning.

7) Qualitatively evaluating how the environment supports or hinders performance:

You are provided with space to comment on how the home environment is used and how you interpret the environment/context influenced performance. You may have noticed that resources (e.g., social supports, technology) are not being used or could be used to improve performance with everyday tasks. You may have also noticed that unique contextual influences in the home may have affected performance. For example, a participant could have noisy neighbors that created a distraction.

8) Self-assessment interview and Likert Scale:

In this section, the participant is given an opportunity to reflect on his or her experiences. You can use this information to understand self-awareness, if the participant is able to identify strengths and weaknesses, and if the participant is able to identify different methods or strategies that could have been implemented to improve performance. The Likert scale response can be compared to the examiners response to explore differences in perceived/observed performance.

Multiple Errands Test – Home Version- Revised

In this exercise you should complete the following:

A. You should do the following 8 tasks:

- Call a membership service provider (e.g., gym, club, community center etc.) and ask about the cost of a membership plan (can be daily, weekly + etc.).
- Locate a clean pair of socks.
- Find a food item that requires water for preparation.
- Locate a bandage or similar first aid item.
- Locate a hammer or similar tool (e.g., screwdriver, pliers)
- Set an alarm clock to go off in 3 minutes. When it sounds, locate an item you would use to get ready in the morning.
- Water an outdoor or an indoor plant.
- Locate one item you would use if the power went out in your home.

B. You should obtain the following information and write it down in the space below:

- What is the phone number of the pharmacy you most frequently use? _____
- What temperature is it inside of your home? _____
- What is the name and instructed dosage of one medication in your home? _____
- _____
- What is the exact cost of ordering some food to your home (inclusive of food costs; e.g., can be a takeaway, or food shopping etc)? _____

C. Find a person in the home 5 minutes after you have started this exercise and ask what time it is. If no one else is available, you may ask the examiner.

D. Tell the examiner when you have completed the assessment

Rules

While carrying out this exercise, you must:

1. Complete all of the tasks but they may be performed in any order.
2. Stay on your property.
3. Complete these tasks as fast as you are able without rushing.
4. Not go back to a room that you have already been in. You must only visit each room once. In other words, you must not return to a “home base” location. You can walk through a room to get to another room if it is the only route.
5. Not speak to the evaluator unless it is part of the task or if no one else is present in your home.
6. Not collect items.

Self-Assessment of Performance Interview

On a scale of 1-10, 1 being not well at all and 10 being extremely well: how well do you think you did on this exercise?

1 2 3 4 5 6 7 8 9 10

1. What was your overall impression of the exercise?

2. What was easy about the exercise?

3. What was challenging about the exercise?

4. Looking back, would you have done anything differently?

Name: _____ Date: _____

Planning time: _____ Start time: _____ End time: _____ Total time (not including planning): _____

Task #	Task Description	Accurately Completed	Partially Completed	Omitted	Pass (passing by a space where a task could be carried out, but was not completed)
1	Call for the cost of a membership plan				
2	Locate a clean pair of socks				
3	Find a food item that requires water for preparation				
4	Locate a bandage or first aid item				
5	Locate a hammer or similar tool				
6	Set an alarm clock <i>AND</i> collect an item				
7	Water an outdoor or indoor plant				
8	Locate an item to use if one lost power in home				
9	Writes down phone number of pharmacy				
10	Writes down temperature				
11	Writes name and dosage of a medication				
12	Locates cost for ordering food for delivery (*ok if not including delivery price or tax)				
13	Asks about time 5 minutes after beginning test				
14	Tell examiner when done				
Rules	Rule Break (circle one)			Frequency	
Complete all tasks in any order. <i>Rule is scored as broken if not all tasks are completed</i>	YES	NO			
Stay on property. <i>Rule is scored as broken if not staying on property</i>	YES	NO			
Complete tasks as fast as possible without rushing. <i>Rule is scored as broken if obvious rushing occurs</i>	YES	NO			
Not go back to a room that you have already been in. <i>Rule is scored as broken if returning to the same room more than once; Rule is not scored as broken if moving through room and it is the only route</i>	YES	NO			
Not speaking to the evaluator. <i>Rule is scored as broken if speaking to the evaluator</i>	YES	NO			
Not collecting items. <i>Rule is broken if items were collected instead of pointing/identifying location</i>	YES	NO			
Total Scores					
Accurately completed	____/14	Number of rules broken	____/6	Frequency of passes	____
Partially completed	____/14	Frequency of rule breaks	____	Frequency of inefficiencies (becoming distracted or inefficient)	____
Omitted	____/14				

Self-Generated Strategies (check if observed)	Frequency
Planning <ul style="list-style-type: none"> <input type="checkbox"/> Created plan with provided paper prior to starting the test <input type="checkbox"/> Read the task list and rule list for greater than 5 seconds prior to the start of the test <input type="checkbox"/> Configured route with provided paper prior to the start of the test 	
Self-Monitoring <ul style="list-style-type: none"> <input type="checkbox"/> Talked self through the steps <input type="checkbox"/> Checked the time with a watch or clock <input type="checkbox"/> Marked tasks on list as completed <input type="checkbox"/> Made notes or reminders 	
Multi-tasking <ul style="list-style-type: none"> <input type="checkbox"/> Completed more than one task at a time <input type="checkbox"/> Completed more than two tasks at a time <input type="checkbox"/> Completed more than three tasks at a time 	
Using the Environment <ul style="list-style-type: none"> <input type="checkbox"/> Asked examiner questions prior to beginning <input type="checkbox"/> Asked others in the home for assistance <input type="checkbox"/> Asked others outside of the home for assistance <input type="checkbox"/> Used technology (e.g., smartphone, computer, egg timer) <input type="checkbox"/> Created a short-cut to complete task <input type="checkbox"/> Used visual cues <input type="checkbox"/> Reduced distractions 	
Other	

Environment/Context
<p>Comment on how environmental and contextual factors may have positively and/or negatively influenced performance:</p>

MET-Home Version 1 (2017)

Multiple Errands Test – Home Version

In this exercise you should complete the following:

A. You should do the following 8 tasks:

- Call a plumber and ask about the cost of a one-hour service call.
- Locate a clean pair of socks.
- Find a food item that requires water for preparation.
- Locate a bandage or similar first aid item.
- Locate a hammer or similar tool (e.g. screwdriver, pliers)
- Set an alarm clock to go off in 3 minutes. When it sounds, locate an item you would use to get ready in the morning.
- Water an outdoor or an indoor plant.
- Locate one item you would use if the power went out in your home.

B. You should obtain the following information and write it down in the space below:

- What is the phone number of the pharmacy you most frequently use? _____
- What temperature is it inside of your home? _____
- What is the name and instructed dosage of one medication in your home? _____

- What is the exact cost of ordering a large, two-topping pizza for delivery to your home? _____

C. Find a person in the home 5 minutes after you have started this exercise and ask what time it is. If no one else is available, you may ask the examiner.

D. Tell the examiner when you have completed the assessment

Rules

While carrying out this exercise, you must:

1. Complete all of the tasks but they may be performed in any order.
2. Stay on your property.
3. Complete these tasks as fast as you are able without rushing.
4. Not go back to a room that you have already been in. You must only visit each room once. In other words, you must not return to a “home base” location. You can walk through a room to get to another room if it is the only route.
5. Not speak to the evaluator unless it is part of the task or if no one else is present in your home.
6. Not collect items.

Self-Assessment of Performance Interview

On a scale of 1-10, 1 being not well at all and 10 being extremely well: how well do you think you did on this exercise?

1 2 3 4 5 6 7 8 9 10

1. What was your overall impression of the exercise?

2. What was easy about the exercise?

3. What was challenging about the exercise?

4. Looking back, would you have done anything differently?

Name: _____ Date: _____

Planning time: _____ Start time: _____ End time: _____ Total time (not including planning): _____

Task #	Task Description	Accurately Completed	Partially Completed	Omitted	Pass (passing by a space where a task could be carried out, but was not completed)
1	Call a plumber and ask about cost of service call				
2	Locate a clean pair of socks				
3	Find a food item that requires water for preparation				
4	Locate a bandage or first aid item				
5	Locate a hammer or similar tool				
6	Set an alarm clock <i>AND</i> collect an item				
7	Water an outdoor or indoor plant				
8	Locate an item to use if one lost power in home				
9	Writes down phone number of pharmacy				
10	Writes down temperature				
11	Writes name and dosage of a medication				
12	Locates cost for ordering two-item pizza for delivery (*ok if not including delivery price or tax)				
13	Asks about time 5 minutes after beginning test				
14	Tell examiner when done				
Rules	Rule Break (circle one)			Frequency	
Complete all tasks in any order. <i>Rule is scored as broken if not all tasks are completed</i>	YES	NO			
Stay on property. <i>Rule is scored as broken if not staying on property</i>	YES	NO			
Complete tasks as fast as possible without rushing. <i>Rule is scored as broken if obvious rushing occurs</i>	YES	NO			
Not go back to a room that you have already been in. <i>Rule is scored as broken if returning to the same room more than once; Rule is not scored as broken if moving through room and it is the only route</i>	YES	NO			
Not speaking to the evaluator. <i>Rule is scored as broken if speaking to the evaluator</i>	YES	NO			
Not collecting items. <i>Rule is broken if items were collected instead of pointing/identifying location</i>	YES	NO			
Total Scores					
Accurately completed	____/14	Number of rules broken	____/6	Frequency of passes	____
Partially completed	____/14	Frequency of rule breaks	____	Frequency of inefficiencies (becoming distracted or inefficient)	____
Omitted	____/14				

Self-Generated Strategies (check if observed)	Frequency
Planning <ul style="list-style-type: none"> <input type="checkbox"/> Created plan with provided paper prior to starting the test <input type="checkbox"/> Read the task list and rule list for greater than 5 seconds prior to the start of the test <input type="checkbox"/> Configured route with provided paper prior to the start of the test 	
Self-Monitoring <ul style="list-style-type: none"> <input type="checkbox"/> Talked self through the steps <input type="checkbox"/> Checked the time with a watch or clock <input type="checkbox"/> Marked tasks on list as completed <input type="checkbox"/> Made notes or reminders 	
Multi-tasking <ul style="list-style-type: none"> <input type="checkbox"/> Completed more than one task at a time <input type="checkbox"/> Completed more than two tasks at a time <input type="checkbox"/> Completed more than three tasks at a time 	
Using the Environment <ul style="list-style-type: none"> <input type="checkbox"/> Asked examiner questions prior to beginning <input type="checkbox"/> Asked others in the home for assistance <input type="checkbox"/> Asked others outside of the home for assistance <input type="checkbox"/> Used technology (e.g., smartphone, computer, egg timer) <input type="checkbox"/> Created a short-cut to complete task <input type="checkbox"/> Used visual cues <input type="checkbox"/> Reduced distractions 	
Other	

Environment/Context
<p>Comment on how environmental and contextual factors may have positively and/or negatively influenced performance:</p>

