

I. REGISTRATION

When should MetricWire (MW) should be administered?

At the end of the scan session (or, in some cases, 2 weeks prior to the behavioral session)

How long should MW be on the participants' phone?

2 weeks

What is the compensation?

\$5/day for all, \$3 for 5/7, \$2 for at least 1

\$10 for child downloading MW ESM

\$10 for parent doing MW (ESM and passive)

Up to \$90

When should I register the participant?

Sign in info:

username: moodlab.fmri@gmail.com

password: fmri2019ESM

1. Register the participant via the MW portal (<https://app.metricwire.com> -> **use new website**. <https://research.metricwire.com> -> old website) with username moodlab.fmri@gmail.com (PW only for those who will be registering participants)
 - a. Sache will slack or message the MW security for secure login.

2. Click on the ELST3 workspace

3. Click on "Studies"

4. Click on "Open Study"

5. Click on "Participant Activity"

6. Click on "Add Participants" and you'll see "Manually Add Participants"

7. Click on "Add Participants"

8. Type in:

First Name: ELS ID with "c" or "p" depending on child or parent participant (e.g., 010c for child and 010p for parent)

Last Name: All last names will be ELS-T3

Email Address: Pull from the ELS Scan Master Tracker which lists the email addresses.

****Use the next email that hasn't been taken in decreasing order. This is a "dummy" email address that is needed in order to register the participant (e.g., moodlab.fmri127c for child and moodlab.fmri127p for parent). **NOTE:** Do not use their ELS ID in their email ID #. ****

9. Click on "Invite Participants" and you should see the ID added to the list of participant activity.

- a. Username Color Code:

- i. Black: active participants

- ii. Purple: unenrolled participants

- iii. Blue: unregistered participant account on app (haven't created account yet on their phones)

- iv. Gray: disabled participants

How do I download the app on the participants' phone?

Please watch the participants respectfully to ensure the proper information is input into the app for seamless registration

1. Navigate to the App Store on the participants' phone and search for "metricwire inc."
2. Install the app and open it.
 - a. Make sure to click "**Allow**" when a prompt bubble appears asking for permissions to send **notifications**.
 - b. Make sure to click "**Do Not Allow**" when a prompt bubble appears asking participant to allow app to **access location**.
 - c. Make sure to click "Allow" when a prompt bubble appears asking for permissions to access Motion & Fitness.
3. Press "Register" NOT "Sign In."
4. You will need the participant's First and Last Name, and Email (needs to match *exactly* with the credentials you used to initially register them).
First Name: ELS ID with "c" or "p" depending on child or parent participant (e.g., 010c for child and 010p for parent)
Last Name: All last names will be ELS-T3 (including participants who are completing MW at T4. Please denote in all trackers that it is T4 and session type).
Email Address: This is a "dummy" email address that is needed in order to register the participant and is formatted "moodlab.fmri###p/c@gmail.com (e.g., moodlab.fmri127c for child and moodlab.fmri127p for parent). If this is not already recorded on the scan sheet, you can look it up on the ELS Scan Master Tracker, the MW_Subjects_T3.T4 text document in the MetricWire folder, or contact Sache or Jackie.
5. The participant will then be able to create their own password, which must contain at least 8 characters and 2 of the following: uppercase characters, lowercase characters, a symbol, or a number.
6. Click "Register."
7. Click on "Available Studies" and then "ELS Stanford Stress Study." Select "Join Study." If there is no option to join the study, there was a problem with entering the participant's information.
 - a. Allow app to have access to motion and fitness data and check in the general phone application settings that the app has access to send notifications and motion and fitness data.

II. INSTRUCTIONS FOR RAS TO EXPLAIN TO PARTICIPANTS

As it outlines in the consent form, we will ask you to answer questions regarding your emotions, events you are experiencing and sleep for 2 weeks. In the background, we will also be collecting sensor data that will tell us what kind of activity you're doing (walking, running, etc...), how many steps you've taken, the orientation of your phone, and the movement (acceleration) of your phone.

More specifically, for the Active/ESM Survey Component:

"You should expect a notification at 6:45am, 4pm, and 9pm for 2 weeks to complete a survey regarding your emotions. At each time point you'll fill out a survey regarding significant events since the last prompt and about your emotions and social interactions. In the morning you'll receive just 2 additional questions asking how you slept last night."

"The morning survey will expire (become inactive) 3 hours after the initial notification; the afternoon and evening surveys will expire (become inactive) 2 hours after the initial notification. You'll be sent a reminder prompt one hour after the initial notification. In other words, the

morning survey will be active from **6:45am – 9:45am**, the **afternoon survey** will be active from **4-6pm**, and the **evening survey** will be active from **9-11pm.**"

Remind participants to look at the stem for each prompt. Read carefully the time frame for which you should be answering the question (e.g., "last night", "since the last prompt", "right now")

"One of the questions you'll be asked per day is about experiencing significant events. The event does not need to be a major event in order to be significant - it can be a day-to-day event that impacted you in any way, even if just a little bit. It can range from positive to negative events. For instance, an event that is positive and still might be stressful is a sports game that you played and won. "

We really try to emphasize to them to have a low threshold for noting a significant event.

More specifically, for the Passive Sensor Data Component:

Once installed, in Settings under the MetricWire App, please allow MW to access Motion & Fitness. You can just let it run in the background for the 2-week period.

Some Tips from Charles from MW:

- 1) Always try to have an internet connection available: Sensors work offline and it is fine to use them without an internet connection. However different devices, have different capabilities and capacities.
- 2) **Ensuring the app is always running in the background and not force closed.** For survey responses, the app could be force closed and the system will wake it up when triggers are scheduled to go out, however when running sensors, if the app is force closed, the system will forbid it from collecting sensor data. This is another limitation of the system we are working on by-passing.
- 3) Ensuring that "do not disturb mode" is turned **off**, notifications are enabled for MetricWire, and the phone is not on silent or in battery saver mode (which disables sending background notifications).

In the MetricWire folder, Sache uploaded MW troubleshooting guide. Please contact Sache or Jackie with any MetricWire problems!

III. END OF SESSION

What should I do at the end of the session?

Include in close out email the necessary information from that session:

1. Registration status of participant
 - a. Include reasons for unregistered participants (1=did not want to, 2=Doesn't have a Phone, 3=Other).
2. Any problems with registration
3. Include in session notes (behavioral Ras ask the following):
 - a. Any problems encountered while using MW either with the app or the process, very briefly give reason
 - b. Around how much they think they completed, and brief reason why.
 - i. Sache will check actual numbers, but knowing what went well, what didn't, and any problems is very useful feedback.

Just for Sache:

For every participant, record in the ELST3_MW_USE tracker and google doc:
If did not register, why? (1=did not want to, 2=Doesn't have a Phone, 3=Other)." If "Other", just very briefly give reason.

Please denote next to their ID any of the above information coordinators or Ras collect.
Generate and prepare payment (Johanna will send GC and update payment information)
Upon Participant Completion:

To unenroll once a participant has been paid, just "disable" the participant on the MW portal and update tracker.

Data Management (Sache and Jackie will monitor platform)

Run python script (MWclean.py) which will be mooddata/ELS_RDoC/MetricWire/Survey Monitoring

This will output daily completion (# surveys completed per day for each subject)

Input this number into the appropriate "Day" in the "ELST3_MW_USE" tracker

RAs can tell Sache who hasn't responded for 3 days. Sache will send an email to the participant reminding them of the bonus for completing 90% and offer troubleshooting help. This is **only** for complete non-responders.

4. ADDENDUM

New features from MW recently developed. Saché and Jackie spoke with Brian Stewart on Friday, December 13, 2019. Here are our notes:

- **New Participant profiles**
 - You can see what is live on the devices and see when it has been triggered
 - See how long the ratings have been on the device
 - upcoming for the day and missed surveys
 - Can see submissions for today
 - Can send follow up right from profile
- **New Study alerts**
 - Flag potential adverse events and bring it to attention in real time
 - Keys you in on these key events
 - Make sure participant is matched w appropriate resource
 - Can see alerts, timeline, stage, and created task
 - Can add notes --> developing surveys and triggers using notes can streamline workflow piece
 - Management piece:
 - Create operating procedures
 - Can trigger SMS message for someone not completing surveys
 - Variable manager

- Tracks their percent change from mean anxiety, can that be added to csv downloaded? --> currently just for tracking, but by new year can include in dataset and export (2020)
 - Can see listed alerts
- Ask them if they want to speak to someone right away so we would get a call notification right away -> PI can do further risk assessment and match w resource
- **New Instant messaging**
 - Live in study when we flip switch
 - Inbox in mobile application for specific study
 - Participant will notice if you turn switch on
 - No impact unless you turn it on
 - Engagement tab
 - Can reach out to participant without using phone numbers
 - Not collecting new data
 - Compliance solution -> no additional identifiers
 - Whole team is copied on the messages
 - When participant gets message it is coming from study team not individual
 - Team chat
 - Message is not included in notification
 - They will see push notification
 - Little badge on the app to show they have a message
 - We are notified through email
- If they have had no activity for 24-72 hours can ping them and get alerts (jan 2020)