# Supporting Online Material for

# Revealing the Nature of Self-Injurious Thoughts and Behaviors: A Real-Time Ecological Assessment Study

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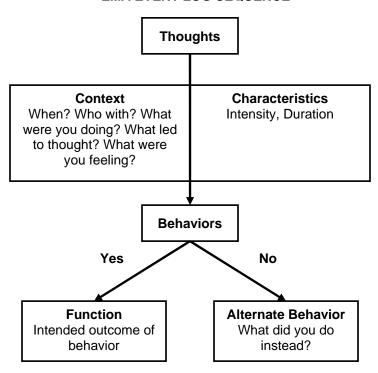
#### **Online Supplement**

**Overview.** This online supplement describes the ecological momentary assessment (EMA) instructions provided to participants in this study as well as the items, response options, and skip logic used during each observation.

System hardware and software. Data were collected using palmOne Zire<sup>™</sup> 31 handheld computers with touch-sensitive color screens running Palm OS<sup>®</sup> software v5.2 with an Intel 200MHz processor and 16 MB of memory. Questions were presented and data were recorded using SymTrend<sup>®</sup> Software (www.symtrend.com) designed specifically for this study.

**Procedure.** Before leaving the laboratory, each participant received 30 minutes of personal digital assistant (PDA) training by a research assistant, as well as an instruction manual that described how to complete entries in the PDA and upload them onto a secure server accessible via the Internet. There were two different versions of the EMA questionnaire presented on the PDA: an "Event Log," which assessed self-destructive thoughts and behaviors and was completed in response to twice daily auditory beeps (i.e., signal-contingent responding) and whenever the respondent experienced a self-destructive thought/behavior (event-contingent responding); and a "Bedtime Log," which assessed general aspects of the participants' day (e.g., daily mood rating) and was completed at the end of each day. Both types of log had a series of assessment items presented in a pre-specified sequence. When participants began each entry, they were asked to select the Event Log or the Bedtime Log. During either type of log, participants could click the right arrow to move forward or the left arrow to move backwards and if necessary, change their previous answers. This study presents data from the Event Logs (as described in the text of the accompanying paper), and so only the items presented in that log are described here. Details for the Bedtime Log are available upon request from the first author.

#### **EMA EVENT LOG SEQUENCE**



On the following pages are instructions from the actual Event Log manual given to each participant. The bolded headings indicate the different aspects (e.g., Context, Characteristics, Function) of self-destructive thoughts and behaviors assessed. Under the headings and positioned on the left hand side are brief instructions for the participant to follow, and positioned on the right hand side are screen shots of each EMA screen presented on the PDA. For the purposes of this supplement, we have included boxes of italicized descriptions of the EMA skip logic.

#### Presence of Self-Injurious/Self-Destructive Thought

- The first screen in this series asks if you thought about direct self-harm or attempting suicide. Direct self harm is harming yourself without wanting to die. Attempted suicide is harming yourself with the intention of dying. Select the behavior(s) you recently considered.
  - You can click none, one, or both of these choices.



- 2. The next screen lists other self-destructive behaviors. Select the behavior(s) from this group you recently considered.
  - If you thought of doing something that was self-destructive, but it isn't listed, click on "Other risky behavior" and another screen will appear for you to describe what you thought of in your own words.
  - You can click none, one, or more than one of these choices.



If no response is selected for items 1 and 2 - PDA skips to item 22

If none or only one response is selected for item 2 - PDA skips to item 4

- 3. Specify which self-injurious/self-destructive behavior was considered most seriously, that is, the behavior you thought about most. If you did one of these behaviors, typically this answer would be the behavior you did.
  - If you most seriously considered doing something that was selfdestructive, but it isn't listed, click on "Other risky behavior" and another screen will appear for you to describe what you most seriously considered in your own words.
  - You are only permitted a single response here.



From this point forward, the top line on the PDA screen labeled "Context" reappeared on each screen listing the highest risk thought/behavior currently being assessed to ensure the participant was consistently reporting on the correct thought/behavior. If multiple thoughts/behaviors were endorsed, the follow-up questions were asked about suicide attempts if endorsed, if not then about deliberate self-harm if endorsed, if not then about which other self-destructive behaviors the participant indicated was most seriously considered.

#### Context and Characteristics of Self-Injurious/Self-Destructive Thought

- 4. Indicate which activities you were doing while you were thinking about injuring yourself (in this case, by consuming alcohol)?
  - You can click on none, one, or more than one of these activities.



- 5. Indicate the person/people you were with while you were thinking about injuring yourself.
  - You can click on none, one, or more than one of these choices.

	rou with ?
Check any/many	☐ Mother
	☐ Father
	☐ Friends
	☐ Brothers/sisters
	☐ Peers/others
	☐ Strangers
	☐ Other relative
	☐ No one-alone

- 6. Indicate things going on just before (and while) you thought about hurting yourself.
  - If something led to the self-destructive thoughts, but it isn't listed, click on "Other" and another screen will appear for you to describe what it was in your own words.
  - You can click on none, one, or more than one of these choices.

Context: Alc	h. thoughts
What led to	the thought?
Check any/many	☐ Argument/conflict
	☐ Criticism/insult
	☐ Worry
	☐ Pressure
	☐ Memory
	☐ Saw reminder
	☐ Rejection
	☐ Other encouraged
(<) (>)	□ Other

- 7. Rate how intense the urge was to do the self-injurious/self-destructive behavior.
  - You are only permitted a single response here.



- 8. Indicate when you first had the thought.
  - This screen appears with the current time. If you are recording about thoughts you have now, this time is correct. If you are not recording about thoughts you have now, you will need to change this to the time when you first had the thought.
  - Highlight the hours and/or the minutes numbers and then use the up and down arrows to switch the values of the numbers.



#### Presence of Self-Injurious/Self-Destructive Behavior

If no response was selected for item 1 - PDA skips to item 10

- 9. The next screen you see varies with what thoughts you experienced. If you had thoughts of suicide, it asks if you attempted suicide. If you had thoughts of self-injury, it asks if you directly self-injured.
  - Click yes or no
  - You are only permitted a single response here.



- 10. In all cases, it asks if you did any of other self-destructive activities.
  - If you did something that was self-destructive, but it isn't listed, click on "Other risky behavior" and another screen will appear for you to describe what you did in your own words.
  - Click on none, one, or more than one of these behaviors.

Context: Alch.	thoughts 🚯
Did you?	
Check	☐ Use alcohol
any/many	☐ Use drug/pills
	☐ Spend impulsively
	☐ Binge eat
	☐ Purge
	☐ Unsafe sex
	☐ Other risky behavio
⊗	

If "No" was selected for item 9 (if applicable) and no response was selected for item 10 - PDA skips to item 12

- 11. Specifically describe what you did to hurt yourself.
  - Using the keyboard, describe what you did in your own words.



#### Context and Characteristics of Self-Injurious/Self-Destructive Behavior

- 12. Indicate how long you thought about doing the behavior you selected above. This is the time spent thinking about doing it since the time it first occurred to you until the time you did it or were able to think about other things.
  - Click on a time interval.
  - You are only permitted a single response here.



- 13. Indicate what you were feeling when you had the thought(s)/behavior(s) you selected above.
  - Click on none, one, or more than one of these feelings.



If "No" was selected for item 9 (if applicable) and no response was selected for item 10 - PDA skips to item 21

- 14. Indicate how long you spent doing the behavior you selected above.
  - Click on the time interval.
  - You are only permitted a single response here.



#### Functions of Self-Injurious/Self-Destructive Behavior

15. Indicate why you did the behavior.

- If the first four aren't right, click on "Other"
- Click on none, one, or more than one of these reasons.



If no response was selected in item 15 - PDA skips to item 22

If "To communicate" was not selected but other response(s) were selected in item 15 - PDA skips to item 17a

16a. Specify what you were trying to communicate or what impact you were trying to get when you did the behavior.

• Click on none, one, or more than one.



16b. Identify the people from whom you were trying get a response.

Click on none, one, or more than one.



16c. Report the results of your attempts to communicate by doing the behavior you did.

• Click on none, one, or more than one.



16d. Identify the people from whom you got a response to your behavior.

• Click on none, one, or more than one.



If "Rid of thought/feeling" was not selected but other response(s) were selected in item 15 - PDA skips to item 18a

- 17a. Indicate the feeling(s)/thought(s) you were trying to relieve by doing the behavior you did.
  - Click on none, one, or more than one.



- 17b. Indicate the feeling(s)/thought(s) that were relieved by doing the behavior you did.
  - Click on none, one, or more than one.



If "Feel something" was not selected but other response(s) were selected in item 15 - PDA skips to item 19a

18a. Indicate what you were trying to feel by doing the behavior you did.

• Click on none, one, or more than one.



18b. Indicate what you felt when you hurt yourself.

• Click on none, one, or more than one.



If "Escape task/people" was not selected but "Other" was selected in item 15 - PDA skips to item 20

19a. Indicate what you were trying to escape by doing the behavior you did.

• Click on none, one, or more than one.



19b. Indicate from whom you were trying to escape by doing the behavior you did.

• Click on none, one, or more than one.



19c. Specify what you escaped by doing the behavior you did.

• Click on none, one, or more than one.



19d. Specify from whom you escaped by doing the behavior you did.

• Click on none, one, or more than one.



If "Other" was not selected in 15 – PDA skips to item 22

- 20. If you said that the reason why you did the behavior was "Other", you are asked to type in the specifics of why you engaged in the self-injurious behavior. You should also explain what happened when you did. A page appears with blank lines.
  - Using the keyboard, describe why you did the behavior and what happened as a result in your own words.



#### **Alternative Behavior**

If response(s) were selected in item 15 (if applicable) - PDA skips to item 22

- 21. Identify the other activities you did instead of hurting yourself.
  - If you did something else instead, but it isn't listed, click on "Other" and another screen will appear for you to describe what you did in your own words.
  - Click none, one, or more than one of the choices offered.



### **Anything Else?**

- 22. At the end of the log we have given you an opportunity to tell us about something else that might have happened.
  - If you have something to add, click on Yes.
  - You are only permitted a single response here.



If "No" was selected in item 22 - PDA skips to item 24

- 23. Type in any other thoughts you had, things that happened to you, feelings you had, impressions, things you did, that will help you get relief and/or will help us understand you.
  - Using the keyboard, explain in your own words.



#### Safety Reminder

If no response or only "Direct self-harm" was selected in item 1 - PDA skips to item 25

If "Suicide attempt" was selected in item 1, "Not present," "Mild," or "Moderate" was selected in item 7, and "No" was selected in item 9 - PDA skips to item 25

24. If you had expressed serious suicidal thoughts and/or attempted to commit suicide, you will be reminded to get help. This study is not treating you; you need to get help elsewhere. In addition to this notice, we will be checking in on you the next day to make sure you let someone know how badly you feel.



## **End of Log**

- 25. Regardless of which path you take through the log, you will come to a "Thank you" screen and will be asked if you want to Review your data or to save.
  - Click on "Goodbye!" To save your responses.
  - Click on "Review" to go back to the beginning and check that you answered the items the way you preferred.

