
Fieldwork Protocol

Summer 2015

SCAN Project

<http://www.scanproject.org/>

6 June 2015

Contents

1	Cognition	3
1.1	Mental Rotation	3
1.2	Corsi Blocks	4
1.3	Rod and Frame	4
2	Mobility	4
2.1	Daily mobility	4
2.2	Annual mobility	5
2.3	Lifetime range	6
3	Navigation	6
3.1	Pointing task	6
3.2	Imaginary pointing task	6
3.3	Out of camp pointing task	7
3.4	Cue preference: Map Drawing	7
3.5	Cue preference: Directions	7
4	Additional Questionnaires	7
4.1	Spatial Anxiety	7
4.2	Harm Avoidance	8

1 Cognition

1.1 Mental Rotation

- Open “Practice” application.
- Select screen resolution of “1366 X 768” and “Good” graphics quality.
- “Your task is to decide if the body on the top matches either this body [*point to left*] or this body [*point to right*]. They match if the same arm on the top and bottom body is pointed out in the same direction. For example [*point to screen*], this body on top matches this body [*point to left or right depending on answer*] but not this one [*point to other body*]. [*Press the correct answer and get the tone feedback*][*Tap the screen to go to the next trial*]. The body may be rotated, so you need to think about the body rotating back to upright to decide about the match. For example, to decide which body this matches [*point to top*], you would think about it rotating like this [*press the correct response so that they see it rotating*] and then you decide that it matches this one [*point to correct response*][*Tap the screen to go to the next trial*].”

“Now, you try it [*this should be the 3rd practice trial*]. Here is a rotated body. Decide whether it matches this one [*point to left*] or this one [*point to right*]. When you have decided, press that body. [*When they press, they will see the rotating target and will have feedback on whether it is correct or not. Explain that the correct tone is high pitch and the incorrect tone is low pitch*]. Lets try it again [*go on to 4th trial*]. Decide whether it matches this one [*point to left*] or this one [*point to right*][*Participant responds*]. [*This would complete the first 4 trials, and then move on to the next 4, for testing for criterion*].”

“Here are a few more to practice on. As soon as you decide which one the top body matches, touch the answer. Remember that it is important to touch your answer as quickly as you can, as soon as you have made the decision. [*Have them complete this on their own*], with the feedback from the rotation. If they get 3 out of 4 correct, move on to the actual trials. If not, restart the practice file until they perform to criterion (3 out of 4).”

- Open “Trial” application.
- Select screen resolution of “1366 X 768” and “Good” graphics quality.
- Enter subject ID, Date, Age, Sex, and “1” for the number of blocks.
- “Now you will do this task a few more times. This time you will not see the top body rotate after you make a decision. Still try to decide which one matches to the top body. Press the cross when you are reading to go on to the next one. Remember to try to respond as quickly as you can. Press the body that is your answer as soon as you decide.”

- When the participant indicates he/she is ready. Touch the screen to begin the trial.

1.2 Corsi Blocks

[Needs to be adapted for the forthcoming version.]

- “You will see some blue squares on the computer screen that will look like this [*Point to the squares on the screen*]. The squares will turn yellow one at a time in an order. I would like you to remember the order that they turned yellow. When they are finished turning yellow you will need to touch each square in the same order they turned yellow. Here is an example [*Press down arrow*]. [*Note: This is a pdf file made to look like the experiment, so you need to control it by hand by pressing the down arrow to move on to another page.*]”

“Do you see how this one is now yellow? Different squares will turn yellow each time. Do your best to remember which squares turned yellow and the order that they turned yellow. [*Press down arrow and squares will be blue again.*] Please practice touching the square that turned yellow. [*Tell them if they are right or wrong. The squares will not turn yellow as they press them in this practice, although they will in the real experiment.*]”

“Now more than 1 square will turn yellow. Try to remember which squares turn yellow and the order that they turn in. [*Press down 3 times slowly to show the different squares turning yellow.*] Please touch the squares that turned yellow in the order that they turned in. [*Tell them if they were right or wrong. If they seem to understand move on to the experiment*]”

1.3 Rod and Frame

To be added.

2 Mobility

2.1 Daily mobility

- Label trackers.
- Build a tracker-tracker worksheet
 - Table 2.1 is an example worksheet for keeping track of tracker status.

- Each row represents a tracker, and uses the device’s label as an ID.
- The second column should be updated to indicate the tracker’s status (i.e. is it out with a participant? ready to leave?, currently charging? broken? lost?).
- The next three columns repeat for each additional participant to handle each device. The first participant is listed as PID1, then next as PID2 and so on...
- For each participant, we indicate their name of ID, the exact time and date they receive the device, and the exact time and date they return the device.
- It may also be advisable to include an additional column to make notes for each participant when necessary.

ID	Status	PID1	OUT1	IN1	PIDn	OUTn	INn
1	ready	v223	1015.25jun15	1535.28jun15			
2	chrg	t173	0720.20jun15	2000.27jun15	x095	1937.28jun15	
3	out	z515	0800.01jul15				

- Prepare tracker, show it to participant, then ask the participant to affix the device somewhere out of the way. Inform the participant that you would like them to carry it for N days.
- Recover tracker. Export entire track as a single .gpx and .csv file in the format POPULATION_EXPERIMENTER_DATEBGN_DATEEND_TRACKERID
ex: TWE_LJV_25jun15_28jun15_v223

2.2 Annual mobility

- “Which places away from home did you visit and stay the night at during the past year? Did you visit that place more than once? ” [*record all places*]
 - Once you have a list of locations move through the list starting with “Tell me about the most recent time you visited X,” then moving on to the enumerated questions below.
1. When did you go? (i.e. month/season)
 2. How did you get there? (mode of transport)
 3. Why did you go? Did you do anything else there?
 4. Who did you go with? (age/sex/relationship)

5. Who did you stay with? (age/sex/relationship)
6. Do you have any children there? (number/age)
7. Do you have a lover there? (only if appropriate)

2.3 Lifetime range

- Create a list of 50 locations in the broader region.
- For each location, ask the participant “Have you ever visited X”. If they respond affirmatively, ask “Have you visited X only once? a few times? or many times?” Indicate 0 for “never”, 1 for “once”, 2 for “a few times”, 3 for “many times”, and 4 if they state that the location was a previous residence.

3 Navigation

3.1 Pointing task

- Select 10 well-known locations spread throughout the local region. These locations should be at least 10km away, and make sure that the target and distance are balanced such that there is only one correct answer.

For each location ask participants:

- When they most recently visited that location
- to indicate the bearing to each location

3.2 Imaginary pointing task

- Select 5 pairs of well-known locations spread throughout the local region. These locations should be at least 10km away, and make sure that the target and distance are balanced such that there is only one correct answer.

For each pair of locations ask participants:

- When they most recently visited each location
- to indicate the bearing to location B while imagining that they are standing in location A.

3.3 Out of camp pointing task

- During focal follows, ask participants to point to home at random times.
- Record the indicated bearing, GPS position, and who is in the group.

3.4 Cue preference: Map Drawing

- “Draw a map of X village (ideally a very well-known village that is not the current location)”
- Ideally, record the participant drawing the map with a handheld camera.
- If a video camera is not available:
 - describe the order in which participants draw the map. (i.e. which features are drawn first?)
 - note all distal and proximal landmarks drawn
 - code accuracy of spatial relations and complexity (how?)

3.5 Cue preference: Directions

- Select three pairs of locations. These could be villages, major landmarks, market towns, or any other well-known places in the local region.
- For each pair of locations, ask participants: “Pretend I am in location A and would like to walk to location B. How would I get there?”
- Ideally, record the participant giving directions with a handheld camera. We are interested in both the cues used in their verbal description as well as any supporting body-language (e.g. pointing towards the goal)
- If a video camera is not available:
 - attempt to transcribe the participants’ directions (including notes of non-verbal communication)
 - note all distal and proximal landmarks used by the participants
 - code accuracy of spatial relations and complexity (how?)
- Alternatively. You could ask the participant to draw the directions from A to B with paper and pencil.

4 Additional Questionnaires

4.1 Spatial Anxiety

Wayfinding anxiety:

1. When you are someplace you don't know well, are you concerned about getting lost? Or are you not concerned about getting lost, even in a new place?
2. When going to a place you don't know, would you feel safer going with others or would you feel as comfortable going by yourself?
3. If you made a wrong turn when you were out alone and didn't recognize where you were, would you be concerned that you might not find your way home? Or would you be sure you would find?
4. Would you feel comfortable trying a new route that you thought would be shorter, even if no one had traveled it before? Or would you feel anxious to try it?
5. Should parents worry about their children becoming lost when they travel without supervision? Or is there nothing to worry about?

Travel anxiety:

1. Do you worry an animal could attack you while out in the bush? Or is that not a danger?
2. While traveling alone, if you see a stranger from a different tribe do you hide from them? Or do you go to greet the stranger?
3. If you become injured while alone in the bush there is nobody to help you. Does this worry you when you travel alone? Or does it not concern you?
4. Is it safer to stay company when you need to sleep in the bush, or is it no different than sleeping alone?
5. If you see the weather becoming worse after you begin a trip do you return home for shelter or do you continue on your trip?

4.2 Harm Avoidance

- “You will be presented with two scenarios. Both scenarios describe an unpleasant situation. I want you to choose which scenario you consider less unpleasant”

- The goal of this task is to measure participants' risk sensitivity by offering a guaranteed but less harmful event and an alternative that implies some probability of experiencing greater discomfort. These latter "risky" items are indicated in the example below by italics.

[Two items included as an example. These questions should be adapted for each fieldsite]

- (a) You are sick to the stomach for three days.
 - (b) *You must pass near a place you know a leopard keeps her cubs.*
- (a) *You find a cobra in your hut when you wake up in the morning.*
 - (b) You roll over while sleeping and burn your arm badly in the fire.
- (a) *While taking a boat across a deep river you find a hole in the bottom.*
 - (b) You must walk all day during the hottest time of year.
- (a) You begin to suffer from a very bad toothache.
 - (b) *Someone tells you there is a rabid dog roaming nearby your village.*
- (a) There are many stones in your bag of maize. It takes all morning to remove the inedible bits.
 - (b) *A drunkard is yelling insults at you and looks like he wants to start a fight.*
- (a) *You must wash your clothes in the river near where you saw a large crocodile the day before.*
 - (b) You sprain your ankle and cannot walk for two days.
- (a) You spend all morning helping build a garden fence for a person you do not like.
 - (b) *You are alone in the mountains at night and a stranger comes to your fire.*
- (a) *You must ride in an airplane.*
 - (b) You stub your toe on a rock while walking in the mountains.
- (a) Your back aches badly for one week.
 - (b) *You are riding a horse and it starts to run very fast without your control.*
- (a) *You must cross a thin trail high in the mountains and the stones are loose.*
 - (b) You are surprised by heavy rain while walking between villages and need to spend the night in a makeshift shelter.

11. (a) *You are riding in the bed of a truck and the driver is going too fast and passing everyone.*
(b) You must travel five kilometers when it is very cold and windy.
12. (a) You walk ten kilometers to collect food owed to you, but the people are gone when you arrive.
(b) *You cross a river after heavy rain. The water is shallow but quickly growing higher and faster.*
13. (a) Children knock over an entire calabash of your sour milk while you are away.
(b) *A big person threatens to fight you.*
14. (a) *You find leopard feces while walking in the mountains alone.*
(b) You find monkey feces near your garden.
15. (a) You spend all morning repairing your hut after a storm.
(b) *You chase a cobra and beat it to death with a stick.*