

Running a PsychoPy experiment

(This document is for novice PsychoPy users who want to run an experiment but not want to build their own (yet). If you consider developing your experiment, see a more technical documentation on the [PsychoPy website](#).)

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To run a PsychoPy experiment, first you should install PsychoPy. Then, copy the file(s) of the experiment to your computer. Finally, you can run the experiment. Here is how to do this.

Installing PsychoPy

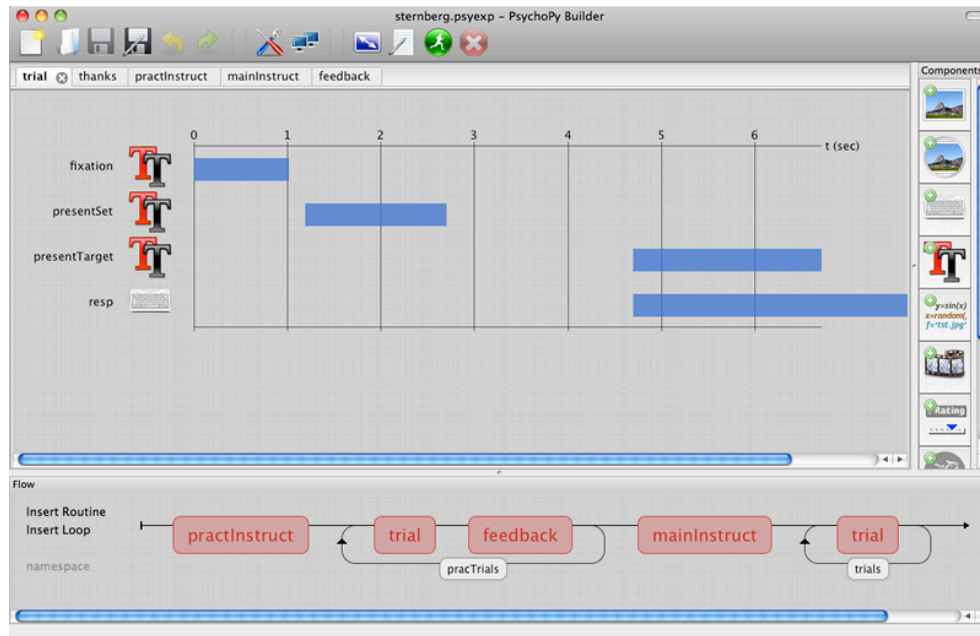
- If you use Windows or Mac, download the installer from here: <http://code.google.com/p/psychopy/>. On the left side of the page find Featured downloads. Choose the .exe file for Windows, or .dmg file for Mac. After downloading the file install it the usual way.
- If you use Linux, you can download and install it from the repository of your distribution. If you use Debian or Ubuntu Linux, then use the neurodebian repository for the latest version: <http://neuro.debian.net/>

Running PsychoPy

After a successful installation the PsychoPy icon is available in your start menu or dock with which you can start PsychoPy.

Two main windows of PsychoPy

PsychoPy has two main windows. The Builder window is appropriate to show the structure of an experiment graphically (see an example below).



In the Coder window you can see the experiment as a program code (see example below).

```

1  #!/usr/bin/env python
2  from psychopy import core, visual, event
3
4  #create a window to draw in
5  myWin = visual.Window([400,400.0], allowGUI=False)
6
7  #INITIALISE SOME STIMULI
8  gabor = visual.PatchStim(myWin, tex="sin", mask="gauss", texRes=256,
9  ..... size=[1.0, 1.0], sf=[4, 0], ori = 0, name='gabor1')
10 gabor.setAutoDraw(True)
11 message = visual.TextStim(myWin, pos=(0.0, -0.9), text='Hit Q to quit')
12 trialClock = core.Clock()
13
14 #repeat drawing for each frame
15 while trialClock.getTime() < 20:
16     gabor.setPhase(0.01, '+')
17     message.draw()
18     #handle key presses each frame
19     for keys in event.getKeys(timeStamped=True):
20         if keys[0] in ['escape', 'q']:
21             myWin.close()
22             core.quit()
23

```

The Output window at the bottom shows the message: "Welcome to PsychoPy2! v1.63.00"

Choosing the appropriate window

Some experiments (with the .psyexp extension at the end of the filename) can be opened from the Builder window, while some other experiments (with the .py extension at the end of the filename) can be opened from the Coder window.

- If you have .psyexp experiment, use the Builder view.
- If you have .py experiment, use the Coder view.

If only one of the windows is visible and you want to switch to the other window, use the *View > Open code view* command or the *View > Go to builder view* command.

Place your experiment on your computer

Copy the files of the experiment to a folder on your computer. If you have a compressed file (e.g. with .zip or .gz filename ending), then uncompress all files to a folder.

Open and run your experiment

Opening the experiment

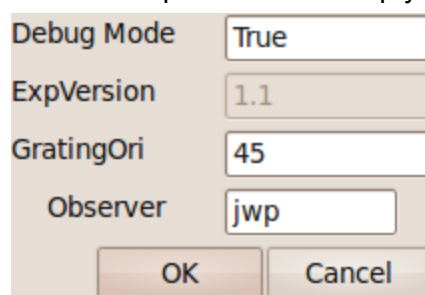
- Use File > Open command or Ctrl+O shortcut or the Open icon on the toolbar. Choose the appropriate file.
- You can also drag the appropriate file to the PsychoPy window.
- Double clicking on the .py file will **not** be opened by PsychoPy.

Running the experiment

Run the experiment with the Tools > Run command or with the Ctrl+R shortcut, or click on the green running man icon on the toolbar.

Setting some parameters

At the beginning of some experiments a window appears where you can set some parameters of the experiment. The description of the experiment can help you what these settings mean.



A screenshot of a PsychoPy parameter settings dialog box. It has a light beige background and a thin border. The dialog contains four labeled text input fields: 'Debug Mode' with the value 'True', 'ExpVersion' with the value '1.1', 'GratingOri' with the value '45', and 'Observer' with the value 'jwp'. At the bottom of the dialog are two buttons: 'OK' and 'Cancel'.

Debug Mode	True
ExpVersion	1.1
GratingOri	45
Observer	jwp

OK Cancel

Results of the experiment

Sometimes the experiment program might display your result on the screen either in text or in

graphs.

Sometimes (almost all the time) the results can be found in a separate file.

- The file is usually in your folder where the experiment file itself can be found. If the file is saved somewhere else, then the documentation of the experiment can tell you where it is.
- The file is usually a text file or a file that can be opened with a spreadsheet software (e.g. LibreOffice Calc, MS Excel, Google Spreadsheet, etc.), and it ends with .txt, .csv, .log or .xlsx. If the file uses a different format, then you can read about it in the experiment description.
- The filename usually contains the id or name of the participant.
- Usually the file includes all the trials: every row is a trial, and it includes many data of that trial (e.g., what stimuli were shown, what the participant's response was, what the reaction time was, etc.). The documentation of the experiment can tell you what information you will find in the result file.

Reporting errors

If you run into an error, you might ask for some help. In order to help you finding the source of an error the following three pieces of information is needed. Send these infos to someone who could help you with solving the problem.

- First, describe how the program stopped or what did it do wrong? What did you expect to happen and what did it happen instead? Try to be as specific as you can.
- Second, if you got an error message at the bottom part of the PsychoPy window, called Output pane, then copy the error message.
 - You will see something like this:
Problem compiling: [Errno 13] Permission denied:
'/usr/local/lib/python2.6/dist-packages/PsychoPy-1.62.00-py2.6.egg/psychopy/demos/coder/GUI.pyc'
Running:
/usr/local/lib/python2.6/dist-packages/PsychoPy-1.62.00-py2.6.egg/psychopy/demos/coder/GUI.py #####
 - Copy all the text that is the result of the run.
 - If you tried to run the experiment only once since you opened PsychoPy, then copy the whole content of the Output pane.
 - If you tried to run the experiment several times, then copy only the output text of the last run. This text usually starts with the "##### Running: " part.
- Finally, run a diagnosis script, which can be opened from Demos > Experiment control menu, and it is called sysInfo.py. After clicking on that menu command, a PsychoPy script will be opened, which can be run (Tools>Run or Ctrl+R or clicking on green running guy on the toolbar). After a couple of seconds a text message will be printed to the Output pane at the bottom of the PsychoPy window. Copy that text beginning with

the “System info” text.

- It will look something like this:

System info:

Linux-2.6.31-22-generic-x86_64-with-Ubuntu-9.10-karmic

Python info

/usr/bin/python

2.6.4 (r264:75706, Dec 7 2009, 18:43:55)

[GCC 4.4.1]

numpy 1.3.0

scipy 0.7.0

matplotlib 0.99.0

pyglet 1.1.2

PsychoPy 1.62.00

10-08-31 14:03 WARNING Creating new monitor...

OpenGL info:

vendor: ATI Technologies Inc.

rendering engine: ATI Mobility Radeon HD 3400 Series

OpenGL version: 2.1.9016

(Selected) Extensions:

True GL_ARB_multitexture

True GL_EXT_framebuffer_object

True GL_ARB_fragment_program

True GL_ARB_shader_objects

True GL_ARB_vertex_shader

True GL_ARB_texture_non_power_of_two

True GL_ARB_texture_float