**Participant Instruction**

Version 3, 17 June 2013

**Study Title: Neural Mechanisms of Decision Making and Cognitive Control**

Thank you very much for participating in our experiment. Before we start with the experiment in the MRI, just a short reminder training session about what we ask you to do in this experiment.

Firstly, we ask you just to experience the stable red environment for a few times. It is important to keep that environment in mind because it serves as a reference in the experiment. Pay particular attention to how much gold you collect there overall and how long (in terms of button presses) it takes. And remember: how good an environment is depends on the **frequency and on the magnitudes** of the rewards.

Moreover, the changing environment **drifts** over time. That means the frequency and magnitudes change in a systematic manner over time and get better or worse. This becomes only evident when considering both frequency and magnitudes of rewards together.

Secondly, we ask you to do a short training version of the actual experiment. In this “Prediction Training”, you will always start in a changing environment. After some time, we will ask you to make a “stay/leave decision”. Please decide so that you collect as much rewards as possible. In other words, we ask you to predict how good the changing environment will be after the decision and to compare that with how good you know that the red environment is. The question is: Will you gain more rewards if you spend the time period after the stay/leave decision in the changing, or in the red environment?

During the experiment, you will earn **Bonus Points**. These are equal to the sum of gold you earn *additional* to the points in the alternative environment that you did not choose. Collecting Bonus Points directly translates into how much money you receive for participating in this experiment. They depend entirely on the stay/leave decisions that you make.

Note that in the first part of this training version, you will receive feedback about the Bonus Points you received or missed after each trial. You will also experience the phase after the stay/leave decision after every decision. In the second part of the training, you will not get this performance feedback and you will not experience the phase after the decision every time. That is exactly how it will be in the MRI then. There, you will only experience the post-decision phase every now and then and you will not get performance feedback after every decision.

**Finally, there are a few things to keep in mind for the session in the MRI scanner.** First, when you do the task, please use the middle and index finger of your right hand. Please do not change this during the course of the experiment. Secondly, please keep in mind to keep your head still. This can be difficult, because you will press buttons most of the time to do the experiment. Just try to be calm and not to move your whole body or your head while doing the experiment in the scanner.

Any questions left? If you have any questions left, please ask! Otherwise, we can start the short reminder training now. Thanks you for taking part in this experiment.