

**Work
simulation for
experimental
study in
social
psychology**



Study goals:

To develop and test a VR environment simulating an assembly line work.

The environment will be used to replicate some studies previously conducted through imagined scenarios suggesting some negative psychological consequences of repetitive and parcelled work (as opposed to work requiring autonomy), thus offering greater ecological validity and a higher level of participant immersion.

2 experimental conditions:

- In the first condition, participants will be asked to assemble a whole object (eg. A wood chair), and they can freely choose the steps to follow.
- In the second condition, participants will be asked to assemble only a part of the same object, repeatedly, as in an production line.
- The system must also simulate different weights of the objects to be assembled, using objects' physics



Experimental condition 1

The participant will see a workbench in first person view and will be asked to assemble a commercial object (e.g. a wooden chair) with no time limit.

The interface will present a short video tutorial of how a chair is assembled and the participant will have to reproduce the assembly by joining the pieces correctly on the workbench.



Experimental condition 2

The participant will see a workbench in first person view and will be asked to imagine being a worker employed on an assembly line. The interface should present a timer which every 30 seconds paces the production of a part.

Every 30 seconds the parts are presented on the workbench, the participant takes the two parts and joins them (e.g. a chair leg with the chair base). After 30 seconds, the system presents the same pieces again to be assembled.

NOTES

The assembly of a chair is purely indicative, the object to be assembled will be evaluated together with the development team

The scenario should emphasise the sense of presence in a real assembly line production factory.



ADMIN settings

The system should allow to set some parameters for the experimental condition 2:

- The pace time of the objects to be assembled
- The number of total repetitions

